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MONOGRAPH

FACTORS FOR ONE-SIDED TOLERANCE LIMITS AND FOR VARIABLES SAMPLING PLANS

by

D B Owen

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FACTORS FOR ONE-SIDED TOLERANCE LIMITS AND FOR VARIABLES SAMPLING PLANS

by

D. B. Owen

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ABSTRACT

Tables are given of a quantity k which is used to define single-sample variables sampling plans and one-sided tolerance limits for a normal distribution. The probability is γ that at least a proportion P of a normal population is below $\bar{x} + ks$, where $\bar{x}$ has a normal distribution with mean μ and variance σ^2/n and fs^2/σ^2 has a chi-square distribution with f degrees of freedom. The quantity k just described corresponds to a percentage point of the noncentral t-distribution and is extensively tabulated. Tabulations of other functions computed from the noncentral t-distribution and various expected values are also given. Many other applications are discussed and various approximations compared. One section gives the mathematical derivations and there is an extensive bibliography which has been cross referenced to several indices of mathematical and statistical literature.

The variables sampling plans given are to be preferred to most other such variables plans (including the MIL STD plans) in cases where the protection of the consumer is of primary interest and the costs of items are high. These plans may also be preferred in other circumstances but an analysis of costs of the alternative plans should precede any decision on which plan to use.

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FACTORS FOR ONE-SIDED TOLERANCE LIMITS
AND FOR VARIABLES SAMPLING PLANS

1. INTRODUCTION.

1.1 One-sided tolerance limits for a normal distribution.

For a normal random variable X with known mean μ and known standard deviation σ, it is possible to say that exactly a proportion P of the normal population is below $\mu + K_p\sigma$, where K_p is read from a table of the inverse normal probability distribution (e.g., see Reference [52], p. 12). For example, one can say that exactly 95% of the population is below $\mu + 1.64485\sigma$. The quantity $\mu + K_p\sigma$ is an upper tolerance limit.

In most cases, however, μ and σ are unknown and it is necessary to estimate both of them from a sample. Then a tolerance limit of the form $\bar{x} + ks$ may be used where $\bar{x}$ is an estimate of μ and s is an estimate of σ. Since $\bar{x}$ and s will be random variables, however, the tolerance limit statement can only be made with a given probability attached.

The problem then reduces to finding k such that the probability is γ that at least a proportion P of the population is below $\bar{x} + ks$. Tables of factors for one-sided tolerance limits for a normal distribution have been given in References [29], [37], [50], and [52] for the case where a sample $x_1, x_2, \ldots, x_n$ is taken and the sample mean,

$$\bar{x} = \frac{1}{n}\sum_{i=1}^{n} x_i,$$

and the sample standard deviation,

$$s = \sqrt{\frac{1}{n-1}\sum_{i=1}^{n}(x_i - \bar{x})^2},$$

are computed.

A value of k is given in the tables of Section 2 such that "at least a proportion P of the normal population is less than $\bar{x} + ks$ with probability equal to γ." The value $\bar{x} + ks$ is called an upper tolerance limit. For a lower tolerance limit $\bar{x} - ks$ is used and the statement is "at least a proportion P of the population is greater than $\bar{x} - ks$ with confidence γ." If a two-sided limit is desired the reader is referred to References [12], [35], [52], and [76].

If the normal distribution has mean μ and standard deviation σ and either of these are known, there are entries in the tables of Sections 3 and 4 which will give the required tolerance limit. When the mean is known, k may be read from the tables of Section 4 with $n = \infty$, i.e., the tables of Sections 4.1.15,

4.2.15, and 4.3.15. Similarly, if the standard deviation is known, k may be read from the tables of Section 4 with $f = \infty$, i.e., as the last entry for each table. The tables of Sections 3.1, 3.2 and 3.3 may be useful if $n = 1$ or ∞ or if $f = 1$ or ∞.

It is convenient to define the term degrees of freedom for $\bar{x}$ as that value of n which occurs in the statement $\bar{x}$ has mean μ and standard deviation $\sigma/\sqrt{n}$. Similarly, the degrees of freedom for s is that value of f which occurs in the statement fs^2/σ^2 has a chi-square distribution with f degrees of freedom.

In addition to giving more extensive tables of k than [29], [37], and [50], this report extends the tables of k to the cases where the degrees of freedom for s are not necessarily one less than the degrees of freedom for $\bar{x}$. The degrees of freedom for s will be designated by f, and the degrees of freedom for $\bar{x}$ will be designated by n. Values for n = 1, 2, 3 and 4 only are given in [52] for this case where $f \neq n - 1$. The present report can also be considered an extension of the work in References [35] and [76] which cover the two-sided tolerance limit problem with $\bar{x}$ based on n degrees of freedom and s based on f degrees of freedom, where again f is not necessarily equal to n - 1. The extension given here, of course, is from the two-sided case to the one-sided case.

The values of k given in Sections 2, 3.1, 3.2, 3.3, and 4 correspond to percentage points (divided by the square root of n) of the noncentral t-distribution. Specifically,

$$\Pr\left\{\text{noncentral } t \leq k\sqrt{n} \mid \delta = K_p\sqrt{n}\right\} = \gamma,$$

where the noncentral t has f degrees of freedom and K_p is such that $\Pr\left\{\text{a standardized normal variable} \leq K_p\right\} = P$.

1.2 Johnson and Welch type tables for computing k.

A discussion of the tables of Section 5 follows. Among other things these tables may be used whenever there is a combination of values of f, n, and P for which there is not an entry in the tables of Sections 2, 3 or 4 and for which interpolation in Sections 2, 3 or 4 would not be satisfactory. Note also that the values of γ which are available in Section 5 include $(1 - \gamma)$ for each γ listed since $\Pr\left\{\text{noncentral } t \leq t_o \mid \delta\right\} = 1 - \Pr\left\{\text{noncentral } t \leq -t_o \mid -\delta\right\}$ and both positive and negative values of t and δ appear in the tables.

Section 5 follows a procedure used by Johnson and Welch [32] and contains values of γ such that if

$$\eta = \frac{\delta}{\sqrt{2f}}\left(1 + \frac{\delta^2}{2f}\right)^{-\frac{1}{2}},$$

and

$$t_o = \frac{\delta + \lambda\left(1 + \frac{\delta^2}{2f} - \frac{\lambda^2}{2f}\right)^{\frac{1}{2}}}{\left(1 - \frac{\lambda^2}{2f}\right)},$$

then

$$\Pr\left\{\text{noncentral } t \le t_o \middle| \delta, f\right\} = \gamma,$$

where the noncentral t-distribution has the noncentrality parameter δ and has f degrees of freedom.

As an example of the use of the table of Section 5, suppose k is required for n = 10, f = 9, P = 0.975, and γ = 0.995. Then

$$\delta = K_p\sqrt{n} = 6.19795$$

$$\eta = \frac{\delta}{\sqrt{2f + \delta^2}} = 0.8253\cancel{38}19.$$

Now λ is read from the table in Section 5.[redacted]7:

$$\lambda = 2.415\cancel{00}374.$$

Hence,

$$k = \frac{K_p + \lambda\left(\frac{1}{n} + \frac{K_p^2}{2f} - \frac{\lambda^2}{2fn}\right)^{\frac{1}{2}}}{\left(1 - \frac{\lambda^2}{2f}\right)},$$

$$k = 4.79\cancel{6}0, \text{ the required value.}$$

1.3 <u>One-sided variables sampling plans based on the normal distribution.</u>

The term "variables sampling plan" as used here will be understood to mean a particular procedure for accepting or rejecting a lot of material based on a single measurement of a single variable (assumed to be normally distributed) on a random selection of items (called the sample) from the lot. Extensions to more complicated situations are discussed in Sections 9, 10, and 11. A one-sided variables sampling plan is one which guarantees that at least a proportion P of the population being measured is greater than a value L with a given probability γ, or which guarantees that at least a proportion P of the population measured is less than a value U with a given probability γ. Note that if the guarantee was that at least a proportion P is between U and L then a two-sided plan is needed. The reader is referred to Section 10.2 of Chapter 1 of [12] for a method for extending the one-sided plans considered in this report approximately to two-sided criteria. (See also [36] and [46].)

The quantities U and L referred to above are values of the variable being measured which are defined by the use specifications placed on the measurement. For example, if it were necessary to be 90% sure that at least 99% of a lot of batteries had output voltages greater than 6 volts, then the following quantities are defined by these conditions: γ = 0.90, P = 0.99, and L = 6. The procedure is to accept the lot if $\overline{x} - ks \ge L$, where k is read from the tables of Section 2 for n = size of sample chosen.

The size of the sample to take from the lot is not specified by the conditions imposed in this report. In most applications the sample size is imposed by economic conditions. One such condition may be on the manufacturer's risk of having a lot rejected and where sample sizes are given, this is often the condition imposed to obtain a sample size. See Section 1.4 below for a description of the compution of AQL, i.e., the proportion defective corrresponding to only a 5% chance of rejection of the lot. This computation may be done for several values of n until a specified AQL is found and then n, the sample size, is chosen to correspond to the specified value of AQL and to the specified value of $100(1 - P)$, which is usually referred to as the Lot Tolerance Per Cent Defective (LTPD) when $\gamma = 0.90$. That is, the LTPD corresponds to a probability of $(1 - \gamma) = 0.10$ of accepting a lot with per cent defective equal to the LTPD. In this report, tables are given of k where the probability of accepting a lot is equal to $1 - \gamma = 0.50$, 0.25, 0.10, 0.05, 0.025, 0.01, and 0.005 and the proportion defective corresponding to any of these probabilities is $1 - P = 0.25$, 0.10, 0.05, 0.025, 0.01, 0.001, 0.0001, and 0.00001. These tables are given in Section 2. Using the tables of Section 5, values for any other P may be computed.

The procedure is to compute $\overline{x}$ and s as in Section 1.1 and to accept the lot if $\overline{x} + ks \leq U$ for an upper limit (only) and reject otherwise. For a lower limit (only), accept the lot if $\overline{x} - ks \geq L$ and reject the lot otherwise. The values of k are read from the tables of Section 2. After using either of these procedures, one can say that he is $100\gamma\%$ confident that at least $100P\%$ of the lot is below U for an upper limit or is above L for a lower limit. Section 8.3 gives some additional details on the mathematics underlying this procedure.

The tables of Section 7 were developed explicitly for sampling plans and are all based on $\gamma = 0.90$ (or probability of acceptance of a lot of 0.10 with proportion defective = LTPD). The various quantities given in this section are defined as follows:

LTPD = Lot Tolerance Per Cent Defective (Percentage defective in the lot corresponding to a 0.10 chance of acceptance of the lot). The first number given is the proportion and the second is the normal deviate corresponding to that proportion.

n = Size of sample taken from the lot.

k = The constant to use in the acceptance criterion.

IQ = The Indifference Quality (Percentage defective in the lot corresponding to a 0.50 chance of accepting the lot). The first number given is the percentage and the second is the normal deviate corresponding to that percentage.

AQL = Acceptable Quality Level (Percentage defective in the lot corresponding to a 0.95 chance of accepting the lot). The first number given is the percentage and the second is the normal deviate corresponding to that percentage.

ML = Manufacturer's Level (Percentage defective in the lot corresponding to a 0.99 chance of accepting the lot). The first number given is the percentage and the second is the normal deviate corresponding to that percentage.

AOQL = Average Outgoing Quality Limit. If all rejected lots are 100% tested and all rejected items replaced with good items, then the average proportion defective in both the accepted and rejected lots is a function of the proportion defective in the lots before inspection. This function is known as the average outgoing quality or AOQ. The maximum value of the AOQ is the AOQL. The first number given is the AOQL expressed as a percentage; the second is the percentage defective in the original lots which correspond to the AOQL; and the third number is the normal deviate corresponding to the second number.

A buyer using the tables of Section 7 will want to choose an LTPD corresponding to the proportion defective that he is willing to accept 10% of the time. The manufacturer may wish to choose an ML corresponding to a level of defectiveness which he believes he will not exceed. This will guarantee that 99% or more of the time his lots will be accepted. If both a buyer and manufacturer ~~is~~ are to be satisfied at the same time then the user enters the table for the needed LTPD and scans down the ML column until the correct ML is attained or exceeded. This would determine the sample size. If the sample size so obtained should equal or exceed the lot size it just means that the entire lot~~s~~ must be inspected and there is no variables sampling plan which will satisfy both the requirements of the buyer and manufacturer.

In the tables of Section 7, the values of k were rounded off to three decimal places and printed. This rounded value of k was then used in the computation of the other quantities given in the tables of Section 7. For larger values of n this rounding of k has caused the correponding values of IQ, AQL, ML, and AOQL in the tables to have uneven differences. For example, Table 7.1 with LTPD = 0.30, the following entries are given:

n	k	IQ		AQL		ML		AOQL		
600	.581	28.071	-.581	25.676	-.653	24.715	-.683	24.600	25.181	-.669
610	.581	28.070	-.581	25.695	-.653	24.741	-.683	24.622	25.199	-.668
620	.580	28.104	-.580	25.746	-.651	24.800	-.681	24.676	25.247	-.667
630	.580	28.104	-.580	25.764	-.651	24.825	-.680	24.698	25.264	-.666
640	.579	28.137	-.579	25.815	-.649	24.882	-.678	24.751	25.312	-.665

Note how IQ decreases from 28.071% to 28.070% as n changes from 600 to 610, but from n = 610 to n = 620 IQ jumps from 28.070% to 28.104%. That is, IQ decreased from n = 600 to 610 and then increased from n = 610 to 620. This, of course, is because k is exactly 0.581 for both 600 and 610 but k becomes 0.580 when n = 620. For the AQL and these same n's the differences are positive and change from 0.019% to 0.051%; for the ML and these same n's the differences are positive and change from 0.026% to 0.059%; and for the AOQL and these same n's the differences are positive and change from 0.022% to 0.054%. This same pattern exists to a greater or lesser extent throughout the tables of Section 7. It is due solely to the rounding of k to three decimal places. The rounding makes for unevenness in the tables and decreases where increases would otherwise occur, but the rounding of k was considered to be the correct procedure to follow since the users of these tables will actually be taking k to three decimal places only when they use these plans.

Note that if the user of a sampling plan needs more than 90% assurance that the proportion defective is below a given level, he may use the values of k given in Section 2 for his sampling plan with

$100\gamma\%$ assurance. If he cannot find the correct proportion defective in Sections 2 or 7 for his problem, he can obtain any proportion defective he wishes by using the tables of Section ~~4~~ 5.

1.4 Johnson and Welch type tables for computing δ.

Section 6 also follows a procedure used by Johnson and Welch [32] and contains values of λ such that if

$$y = \left(1 + \frac{t^2}{2f}\right)^{-\frac{1}{2}}, \text{ and}$$

$$y' = \frac{t}{\sqrt{2f}}\left(1 + \frac{t^2}{2f}\right)^{-\frac{1}{2}},$$

values of λ may be read from the table. Then the noncentrality parameter may be computed from

$$\delta = t - \lambda\left(1 + \frac{t^2}{2f}\right)^{\frac{1}{2}}.$$

As an example of the use of the table of Section 6, suppose a sampling plan is chosen so that there is a 10% chance of accepting a lot with as much as 5% of the measured variable above U, i.e., the LTPD = ~~0.05,~~ 5%, based on a sample of size 20. Entering the tables of Section 2.5, with $\gamma = 0.90$, $P = 0.95$, and $n = 20$, the value of k for the sampling plan is 2.208. The rule for accepting the lot is then to accept if $\bar{x} + 2.208s \leq U$ where U is the upper specification limit for the measured characteristic and to reject the lot if $\bar{x} + 2.208s > U$.

Now suppose it is necessary to find out what percentage of the normal population above the value U will give us ~~95~~ 90% assurance of accepting the population. That is, it is necessary to solve the following equation for $\frac{U - \mu}{\sigma}$:

$$\Pr\left\{\frac{\bar{x} + \cancel{4.796}\,2.208s - \mu}{\sigma} \geq \frac{U - \mu}{\sigma}\right\} = \cancel{0.05.}\ 0.10$$

Once $\frac{U - \mu}{\sigma}$ is known then the percentage of the normal population above U can be found by looking up the quantity $\frac{U - \mu}{\sigma}$ in a table of the normal probability distribution. Since the form of the noncentral t-distribution is that of the sum of a normal variable with mean zero and variance one and a constant δ both divided by the square root of a chi-square over f variable, the problem may now be solved by taking

$$t = -2.208\sqrt{20},\ \gamma = \cancel{0.95,}\ 0.90,\ f = 19,$$

and solving for

$$\delta = -\frac{U - \mu}{\sigma}\sqrt{20}.$$

(The sign of both t and δ were changed in order to be able to use the table with $\gamma = \cancel{0.95.}\ 0.90$) That is, we are making use of the relationship: $\Pr\left\{\text{noncentral } t \leq t_o \,|\, \delta\right\} = 1 - \Pr\left\{\text{noncentral } t \leq -t_o \,|\, -\delta\right\}$.

In order to enter the tables of Section 6, it is necessary to compute

$$y = \left(1 + \frac{t^2}{2f}\right)^{-\frac{1}{2}} = 0.529558, \text{ and}$$

$$y' = \frac{t}{\sqrt{2f}}\left(1 + \frac{t^2}{2f}\right)^{-\frac{1}{2}} = -0.848274.$$

The tables give by interpolation on $144/f$ and y':

$$\lambda = 1.219409;$$

and hence

$$\delta = t - \lambda\left(1 + \frac{t^2}{2f}\right)^{\frac{1}{2}} = -12.177168,$$

$$\frac{U - \mu}{\sigma} = -\delta/\sqrt{20} = 2.722897.$$

This value may be looked up in a table of the normal distribution (e.g., Reference [52], pp. 3-10). The result is that if only 0.32% of the normal population is above U, then the probability is ~~0.95~~ 0.90 of accepting the population. Hence, if a manufacturer knew his product was going to be subjected to the acceptance test described he could be sure that at least ~~95%~~ 90 of his lots would be accepted if he manufactured the product so that no more than 0.32% of the product measured above U.

This method may be applied to give values of P corresponding to each of the probabilities of acceptance, 0.005, 0.01, 0.025, 0.05, 0.10, 0.25, 0.50, 0.75, 0.90, 0.95, 0.975, 0.99, and 0.995 and hence the Operating Characteristic of a sampling plan could be plotted. Note that for probabilities less than or equal to 0.5, no change in t and δ is needed, but for probabilities greater than 0.5, the relationship: $\Pr\left\{\text{noncentral } t \le t_o \mid \delta\right\} = 1 - \Pr\left\{\text{noncentral } t \le -t_o \mid -\delta\right\}$ will be needed. Note also that the probability of acceptance is $1 - \gamma$ in the tables.

The tables of Section 7 give several points on the operating characteristic for many LTPD's. See the end of Section 1.3 for a description of the entries in Section 7.

1.5 Confidence limits on a one-sided quantile of a normal distribution.

The problem discussed here is to find confidence limits on $\mu + \sigma K_p$ where $P = \Pr\left\{X \le \mu + \sigma K_p\right\}$ and X has a normal distribution with mean μ and standard deviation σ. The quantity K_p is then the standardized deviate corresponding to the probability P. That is, confidence limits will be given on the value of the quantile for which exactly a proportion P of the population is smaller than that quantile. The method will be extended to cases where the quantile is defined by $\mu - \sigma K_p$, i.e., on a quantile corresponding to $1 - P$ of the population smaller than the quantile. These confidence limits can be either one-sided or two-sided, but the quantile itself cannot be two-sided when applying the method given here. For example, it is not possible to get confidence intervals using the methods given here for a central quantile defined by

$$\Pr\left\{\mu - \sigma K_{\frac{1+p}{2}} \le X \le \mu + \sigma K_{\frac{1+p}{2}}\right\}.$$

An upper one-sided confidence limit on $\mu + K_p\sigma$ is given by $\bar{x} + ks$ where k is read from the tables by looking up the value of k corresponding to the values of P, γ, f, n where γ is the confidence wanted in the confidence limit. A lower one-sided confidence limit on $\mu + K_p\sigma$ is given by $\bar{x} + ks$ where values of P, $1 - \gamma$, f, n are looked up in the table.

Two-sided confidence limits on $\mu + K_p\sigma$ are given by $\bar{x} + k_{\frac{1-\gamma}{2}}s$ and $\bar{x} + k_{\frac{1+\gamma}{2}}s$ where $k_{\frac{1-\gamma}{2}}$ is found by looking under P, $\frac{1-\gamma}{2}$, f, n and $k_{\frac{1+\gamma}{2}}$ is found by looking under P, $\frac{1+\gamma}{2}$, f, n. That is,

$$\Pr\left\{\bar{x} + k_{\frac{1-\gamma}{2}}s \leq \mu + K_p\sigma \leq \bar{x} + k_{\frac{1+\gamma}{2}}s\right\} = \gamma.$$

To find confidence limits on $\mu - K_p\sigma$ we make use of the following relationship on noncentral t given in Section 8.1:

$$\Pr\left\{T_f \leq t \mid \delta\right\} = 1 - \Pr\left\{T_f \leq -t \mid -\delta\right\} .$$

Hence, an upper confidence limit on $\mu - K_p\sigma$ is given by $\bar{x} - ks$ where k is found under P, $1 - \gamma$, f, n. A lower confidence limit is given by $\bar{x} - ks$ where k is found under P, γ, f, n. Two-sided limits are set up analogously.

1.6 Confidence limits on a one-sided proportion P of a normal distribution.

Let X have a normal distribution with mean μ and standard deviation σ. Suppose a sample $x_1, x_2, \ldots, x_n$ is at hand and one would like to know a lower confidence limit on the proportion P, which is defined as $P = \Pr\{X \leq x^*\}$, where x^* is some constant. Define k^* by $x^* = \bar{x} + k^*s$. The problem is like the one-sided tolerance limit problem (see Section 8.2) except that instead of knowing P we are trying to find a value P_L which is a lower confidence limit on P.

By analogy with the tolerance limit problem then, we have to find $\delta = K_{p_L}\sqrt{n}$ given that $\Pr\left\{T_f \leq k^*\sqrt{n} \mid \delta = K_{p_L}\sqrt{n}\right\} = \gamma$. Hence the tables of Section 6 must be used to solve the problem. For example, in a sample of 20 items suppose $\bar{x} = 15$ and $s = 3$. We wish to know a lower confidence limit on the proportion less than $x^* = 21$. Then $t = k^*\sqrt{n} = \frac{x^* - \bar{x}}{s}\sqrt{n} = \frac{21 - 15}{3}\sqrt{20} = 8.944272$. Assume $\gamma = 0.95$, i.e., we want a 95-per cent lower confidence limit.

Now we will make use of the procedure set forth in Section 1.4:

$$y = \left(1 + \frac{(8.944272)^2}{38}\right)^{-\frac{1}{2}} = 0.567480$$

$$y' = \frac{8.944272}{\sqrt{38}}\, y = 0.823387$$

and $\lambda = 1.676894$ is read from the table of Section 6.4.

Then

$$\delta = 8.944272 - \lambda/y = 5.989290,$$

and

$$K_{p_L} = \frac{\delta}{\sqrt{n}} = \frac{5.989290}{\sqrt{20}} = 1.339246.$$

Now look up

$$P_L = \frac{1}{\sqrt{2\pi}} \int_{-\infty}^{K_{p_L}} \exp\left[-t^2/2\right] dt$$

in almost any book of tables having tables of the normal distribution. For example, in Reference [52], Table 1.1 gives P_1 as a function of K_{p_L}. For this example then

$$P_L = .90975$$

We are 95% sure that at least a proportion 0.91 of the population is below $x^* = 21$ for the example at hand.

Suppose now that an upper 95% limit on the proportion below $x^* = 21$ is needed, based on a sample of 20 items with $\overline{x} = 15$ and $s = 3$. The procedure is the same as for the lower limit given above except that t and δ are negative. That is (following the preceding example)

$$t = -8.944272$$

$$y = 0.567480$$

$$y' = -0.823387$$

and $\lambda = 1.5973\overset{61}{\cancel{29}}$ is read from the table of Section 6.4.

Then

$$-\delta = -8.944272 - \frac{\lambda}{y} = -11.759\overset{102}{\cancel{048}},$$

and

$$K_{p_U} = \frac{\delta}{\sqrt{n}} = \frac{11.759\overset{102}{\cancel{048}}}{\sqrt{20}} = +2.6294\overset{15}{\cancel{03}}.$$

We can say that we are 95% sure that at most a proportion $P_U = 0.99572$ is below $x^* = 21$.

This procedure may be extended in the obvious manner to give two-sided limits. If δ turns out negative, of course, then the limit is less than 0.5. It may not be extended to the case of central proportions or any other two-sided proportions. See Section 1.5 above where two-sided quantiles are defined. Precisely, the same cases may be treated under proportions as under quantiles and vice versa.

1.7 The distribution of the sample coefficient of variation.

The population coefficient of variation is defined as $\Theta = \frac{\sigma}{\mu}$, where σ is the standard deviation and μ is the mean of a distribution. Let $\overline{x}$ be the mean of a sample computed from n observations and s be a standard deviation of a sample based on f degrees of freedom where the observations come from a normal distribution. (In the simple single-sample problem $f = n - 1$, but the results are not limited to this case.) Then we are interested in the distribution of $v = s/\overline{x}$, the sample coefficient of variation. We have (for c a positive constant):

$$\Pr\left\{s/\overline{x} < c\right\} = \Pr\left\{T_f \geq \sqrt{n}/c \,|\, \delta = \mu\sqrt{n}/\sigma\right\} + \Pr\left\{T_f < 0 \,|\, \delta = \mu\sqrt{n}/\sigma\right\}$$

where T_f has the noncentral t-distribution. That is, to find $\Pr\{s/\overline{x} < c\}$ compute the probability that a noncentral t-distribution is greater than $t = \sqrt{n}/c$ with noncentrality parameter $\delta = \mu\sqrt{n}/\sigma$, and add the probability that noncentral t is negative. Note that [32] and [59] apparently have overlooked the term corresponding to the probability that noncentral t is negative in their discussions of the coefficient of variation and hence their tests of hypotheses and the fiducial limits they give are wrong.

The random variable v is largest when the random variable T_f is near zero. Therefore, the "tail" regions for the distribution of v are around zero for the random variable T_f. That is, for positive values of c:

$$\Pr\left\{s/\overline{x} > c\right\} = \Pr\left\{0 \leq T_f \leq \frac{\sqrt{n}}{c} \,|\, \delta = \mu\sqrt{n}/\sigma\right\},$$

$$\Pr\left\{s/\overline{x} < -c\right\} = \Pr\left\{-\frac{\sqrt{n}}{c} \leq T_f \leq 0 \,|\, \delta = \mu\sqrt{n}/\sigma\right\},$$

and

$$\Pr\left\{s/\overline{x} > -c\right\} = \Pr\left\{T_f \leq -\sqrt{n}/c \,|\, \delta = \mu\sqrt{n}/\sigma\right\} + \Pr\left\{T_f > 0 \,|\, \delta = \mu\sqrt{n}/\sigma\right\}.$$

For example, suppose $v = \frac{s}{\overline{x}} = 2.8$ for a sample for which $f = 16$ and $n = 17$. Then, following the method in Section 1.4, we compute

$$t = \frac{\sqrt{17}}{2.8} = 1.472538 \text{ and } t = -\frac{\sqrt{17}}{2.8} = -1.472538$$

$$y = \left(1 + \frac{t^2}{2f}\right)^{-\frac{1}{2}} = 0.967749$$

$$y' = 0.\overset{251915}{\cancel{260345}} \text{ and } y' = -0.\overset{251915}{\cancel{260345}}$$

Now each of the tables of Section 6 is entered with the above parameters to obtain λ as follows

γ	λ for $+y'$	λ for $-y'$
0.75	0.69~~7246~~ 6504	0.65~~0974~~ 1761
0.90	1.30~~3271~~ 2606	1.25~~8383~~ 9134
0.95	1.665~~743~~ 271	1.622~~101~~ 751
0.975	1.9~~80018~~ 79482	1.93~~7695~~ 8363
0.99	2.34~~5280~~ 4832	2.30~~4785~~ 5392
0.995	2.593~~000~~ 527	2.55~~4831~~ 5388

Next δ and $G(-\delta)$ are computed which give

	for $+y'$		for $-y'$	
γ	δ	$G(-\delta)$	δ	$G(-\delta)$
0.75	0.752~~056~~ 823	0.22~~6003~~ 5778	-2.14~~5206~~ 6019	0.~~015968~~ 984064
0.90	0.12~~5835~~ 6522	0.449~~931~~ 659	-2.77~~2858~~ 3633	0.~~002778~~ 997228
0.95	-0.248~~717~~ 229	0.598~~210~~ 021	-3.14~~8697~~ 9368	0.~~000820~~ 999182
0.975	-0.57~~3466~~ 2911	0.716~~835~~ 648	-3.47~~4808~~ 5498	0.~~000256~~ 999745
0.99	-0.950~~000~~ 437	0.829~~172~~ 055	-3.854~~132~~ 758	0.~~000058~~ 999942
0.995	-1.207~~814~~ 419	0.886~~441~~ 365	-4.11~~2511~~ 3085	0.~~000020~~ 999980

Therefore the following points on the noncentral t-distribution are obtained (the value for $\delta = 0$ was obtained from a table of the Student t-distribution):

δ	$\Pr\{T_{16} \leq 1.472538 \mid \delta\}$
4.11~~2511~~ 3085	0.005
3.854~~132~~ 758	0.01
3.47~~4808~~ 5498	0.025
3.14~~8697~~ 9368	0.05
2.77~~2858~~ 3633	0.10
2.14~~5206~~ 6019	0.25
0.752~~056~~ 823	0.75
0.12~~5835~~ 6522	0.90
0	0.91537
-0.248~~717~~ 229	0.95
-0.57~~3466~~ 2911	0.975
-0.950~~000~~ 437	0.99
-1.207~~814~~ 419	0.995

In setting up this distribution we have used the fact that $\Pr\left\{T_f \leq t \mid \delta\right\} = 1 - \Pr\left\{T_f \leq -t \mid -\delta\right\}$ in the obvious way.

Now since $\Pr\left\{T_f \le 0 \mid \delta\right\} = G(-\delta)$ and $\Theta = \sqrt{n}/\delta$ we obtain the following table by computing $\Pr\left\{v > 2.8\right\} = \Pr\left\{T_{16} \le 1.472538\right\} - G(-\delta)$:

$\Theta = \frac{\sqrt{n}}{\delta}$	$\Pr\left\{v > 2.8\right\}$
$-\infty$	0.91537-0.500000 = 0.41537
-16.~~5775~~ 61009	0.95 -0.598~~210~~ 021 = 0.351~~700~~ 979
- 7.1~~8080~~ 9676	0.975 -0.716~~835~~ 648 = 0.258~~165~~ 352
- 4.33~~600~~ 812	0.99 -0.829~~172~~ 055 = 0.160~~828~~ 945
- 3.41~~369~~ 481	0.995 -0.886~~441~~ 365 = 0.108~~559~~ 635
0	1.000 -1.000000 = 0
1.002~~58~~ 44	0.005 -0.000020 = 0.004980
1.069~~79~~ 61	0.01 -0.000058 = 0.009942
1.186~~57~~ 34	0.025 -0.00025~~6~~ 5 = 0.02474~~4~~ 5
1.309~~46~~ 19	0.05 -0.0008~~20~~ 18 = 0.04918~~0~~ 2
1.486~~95~~ 54	0.10 -0.00277~~8~~ 2 = 0.09722~~2~~ 8
1.92~~201~~ 128	0.25 -0.0159~~58~~ 36 = 0.2340~~32~~ 64
5.4~~8244~~ 7686	0.75 -0.22~~6009~~ 5778 = 0.52~~3991~~ 4222
32.~~7660~~ 58805	0.90 -0.449~~031~~ 659 = 0.450~~069~~ 341
∞	0.91537-0.500000 = 0.41537

Note that the probability is not a monotone function of Θ. In the example the probability starts at 0 for $\Theta = 0$ and increases to some point $\Theta \approx 2v = 5.6$ and then decreases to 0.41537 for $\Theta = \infty$, has the same value for $\Theta = -\infty$, and continues to decrease to zero for $\Theta = 0$.

Now suppose $\Theta = 2.8$ and we wish to know the probability distribution of $v = s/\bar{x}$ for samples with $f = 16$ and $n = 17$. Following the method in Section 1.2, we compute $\delta = \frac{\sqrt{17}}{2.8} = 1.472538$ and

$$\eta = \frac{\delta}{\sqrt{2f}}\left(1 + \frac{\delta^2}{2f}\right)^{-\frac{1}{2}} = 0.251915$$

and obtain from the tables of Section 5 the following values of λ:

γ	λ for $+\eta$	λ for $-\eta$
0.75	0.70674	0.66200
0.90	1.31805	1.27855
0.95	1.67958	1.64756
0.975	1.98886	1.96754
0.99	2.34141	2.33909
0.995	2.57587	2.59137

Next t is computed from

$$t = \frac{\delta + \lambda\left(1 + \frac{\delta^2}{2f} - \frac{\lambda^2}{2f}\right)^{\frac{1}{2}}}{\left(1 - \frac{\lambda^2}{2f}\right)}$$

where a negative value for δ is used for λ's computed from negative values of η. The result of this computation is:

γ	t for $+\eta$	t for $-\eta$
0.75	2.~~251276~~ 32317	-0.~~785504~~ 803887
0.90	2.96~~9560~~ 0141	-0.1~~81960~~ 93242
0.95	3.4~~19295~~ 37981	0.1~~60523~~ 75818
0.975	3.8~~22871~~ 85333	0.~~444017~~ 502757
0.99	4.~~309833~~ 452135	0.~~754042~~ 895692
0.995	4.~~653807~~ 872091	~~0.949982~~ 1.174055

Since $\Pr\left\{T_f \le t \mid \delta\right\} = 1 - \Pr\left\{T_f \le -t \mid -\delta\right\}$, the following distribution for noncentral t is obtained:

t	$\Pr\left\{T_f \le t \mid \delta = \frac{\sqrt{17}}{2.8}\right\}$
~~-0.949982~~ 1.174055	0.005
-0.~~754042~~ 895692	0.010
-0.~~444017~~ 502757	0.025
-0.1~~60523~~ 75818	0.050
0.1~~81960~~ 93242	0.100
0.~~785504~~ 803887	0.250
2.2~~51276~~ 32317	0.750
2.96~~9560~~ 0141	0.900
3.4~~19295~~ 37981	0.950
3.8~~22871~~ 85333	0.975
4.~~309833~~ 452135	0.990
4.~~653807~~ 872091	0.995

Next $G(-\delta) = G\left(-\frac{\sqrt{17}}{2.8}\right) = 0.070438$ is subtracted from each of the above probabilities and one is added for negative values of t. This gives the probability distribution for $v = s/\bar{x}$ when $\Theta = 2.8$ as follows:

$v = \frac{\sqrt{17}}{t}$	$\Pr\left\{\text{Sample Coefficient of Variation} > v \mid \Theta = 2.8\right\}$	$1 - G\left(\frac{v - \Theta}{\Theta\sqrt{\frac{1}{2f} + \frac{\Theta^2}{n}}}\right)$
2~~2.659409~~ 1.336488	0.029562	0.000000
5.~~248994~~ 128962	0.179562	0.1~~06308~~ 17946
1.8~~31453~~ 47007	0.679562	0.68~~8972~~ 6169
1.3~~88457~~ 92875	0.829562	0.763~~744~~ 051
1.~~205835~~ 199281	0.879562	0.79~~1416~~ 2372
1.0~~78537~~ 61197	0.904562	0.8~~09521~~ 11910
0.9~~56074~~ 26096	0.919562	0.82~~5917~~ 9886
0.8~~85964~~ 46270	0.924562	0.83~~5006~~ 9972
~~-4.340194~~ 3.511850	0.934562	0.999~~860~~ 341
~~-5.468006~~ 4.603263	0.939562	0.999~~87~~ 18
~~-9.285919~~ 8.200991	0.954562	1.000000
-2~~5.685453~~ 3.450987	0.979562	1.000000

The relationship $\Pr\left\{\text{Sample Coefficient of Variation} \geq v \mid v \text{ is negative}\right\} = 1 - \Pr\left\{\frac{\sqrt{n}}{v} \leq T_f \leq 0 \mid \delta\right\}$ has been used for negative values of v.

Hald [21], p. 301, gives as the approximate distribution of v for large values of f and small values of Θ, the normal distribution with mean Θ and variance $\Theta^2\left(\frac{1}{2f} + \frac{\Theta^2}{n}\right)$,

$$\Pr\left\{\text{Sample Coefficient of Variation} \leq v \mid \Theta\right\} = G\left(\frac{v - \Theta}{\Theta\sqrt{\frac{1}{2f} + \frac{\Theta^2}{n}}}\right).$$

For each value of v in the last table above, one minus this quantity has been computed for comparison with the exact probability. This approximation is clearly not very good, but it is shown to give some idea of how bad a direct application normal approximation may be. Hald [21, p. 302], also gives another approximation to the distribution of the coefficient of variation which is somewhat better than the one used here.

We mentioned above that the tests of hypotheses on Θ given by [59] and the fiducial limits on Θ given by [32] are wrong since both did not take into account negative values of $\bar{x}$ properly. At this time we have no procedure for these problems and, while we have no proof at the moment, we suspect that both problems are impossible to solve unless μ is bounded away from zero. On the other hand, it is straightforward and easy to find fiducial limits on $1/\Theta$ and tests of hypotheses about $1/\Theta$. In other words, $\bar{x}/s$ should be used as the statistic wherever possible rather than $s/\bar{x}$.

1.8 The power of Student's t-test.

The power of Student's t-test has been considered by many authors [10], [24], [38], [43], [44], [45], [52, Section 2], and [56]. In testing the hypothesis that $\mu = \mu_o$ (normal distribution) against the alternative hypothesis that $\mu > \mu_o$ the procedure is to reject the hypothesis $\mu = \mu_o$ if $\frac{\bar{x} - \mu_o}{s}\sqrt{n} > t_\alpha$ where t_α is defined by $\Pr\left\{T_f > t_\alpha \mid \delta = 0\right\} = \alpha$, i.e., t_α is a percentage point of the Student t-distribution and α is the significance level of the test. If the true mean is μ_1, say, instead of μ_o, then the power of the test is equal to

$$\Pr\left\{\text{Rejecting } \mu = \mu_o \mid \mu = \mu_1\right\} = \Pr\left\{T_f < t_\alpha \mid \delta = \frac{\mu_1 - \mu_o}{\sigma}\sqrt{n}\right\}.$$

If we wish to find δ such that the power is equal to β for the test, we first find t_α in a table of the Student t-distribution and then compute δ using the procedures given in Section 1.4 for the tables of Section 6.

For the test of the hypothesis given above, the values of δ were computed for $\alpha = 0.05$ and $\alpha = 0.01$, giving the results in Tables 1.8.1 and 1.8.2.

For the corresponding two-sided tests with $\alpha = 0.10$ and $\alpha = 0.02$ the values of δ are practically the same as those given in Table 1.8.1 for $\alpha = 0.10$ and Table 1.8.2 for $\alpha = 0.02$. The biggest discrepancy noted between the exact values of δ and the values in Tables 1.8.1 and 1.8.2 occurred for $n = 100$, $\alpha = 0.05$ (one-sided), and $\beta = 0.50$. For the one-sided test ($\alpha = 0.05$) $\delta = 1.65618$ and for the two-sided test ($\alpha = 0.10$) $\delta = 1.65491$. For smaller values of n the differences were smaller and for $\alpha = 0.01$ (one-sided) all the differences were smaller. See Neyman and Tokarska [45] for tables similar to 1.8.1 and 1.8.2.

TABLE 1.8.1

Values of δ Corresponding to Power Values of β for $\alpha = 0.05$ (One-Sided Test)

	β				
n = f + 1	0.01	0.05	0.10	0.20	0.50
2	16.46587	12.52898	10.51465	8.19226	4.31164
3	6.88232	5.51587	4.80923	3.97900	2.48800
4	5.46628	4.45635	3.92821	3.29945	2.13312
5	4.95462	4.06727	3.59994	3.03975	1.98651
6	4.69863	3.86994	3.43173	2.90458	1.90709
7	4.54672	3.75160	3.33014	2.82210	1.85745
8	4.44668	3.67301	3.26231	2.76664	1.82353
9	4.37596	3.61713	3.21389	2.72684	1.79892
10	4.32343	3.57538	3.17762	2.69691	1.78024
20	4.12393	3.41499	3.03726	2.58005	1.70598
30	4.06862	3.36989	2.99748	2.54661	1.68431
40	4.04273	3.34866	2.97871	2.53078	1.67398
50	4.02768	3.33631	2.96778	2.52154	1.66794
60	4.01787	3.32824	2.96063	2.51549	1.66397
70	4.01096	3.32255	2.95558	2.51122	1.66117
80	4.00584	3.31833	2.95183	2.50805	1.65908
90	4.00186	3.31507	2.94894	2.50560	1.65747
100	3.99872	3.31247	2.94663	2.50364	1.65618

TABLE 1.8.2

Values of δ Corresponding to Power Values of β for $\alpha = 0.01$ (One-Sided Test)

	β				
n = f + 1	0.01	0.05	0.10	0.20	0.50
2	82.00468	62.39786	52.36593	40.79976	21.47321
3	15.21723	12.25884	10.73647	8.95904	5.82985
4	9.33749	7.70737	6.86300	5.86825	4.06868
5	7.52026	6.28441	5.64011	4.87537	3.46641
6	6.68319	5.62334	5.06784	4.40494	3.16945
7	6.21266	5.24890	4.74177	4.13432	2.99393
8	5.91453	5.01007	4.53276	3.95957	2.87839
9	5.71000	4.84524	4.38793	3.83778	2.79671
10	5.56151	4.72495	4.28189	3.74818	2.73597
20	5.02704	4.28631	3.89204	3.41518	2.50466
30	4.88773	4.17000	3.78762	3.32484	2.44022
40	4.82392	4.11635	3.73929	3.28283	2.40998
50	4.78733	4.08550	3.71144	3.25857	2.39242
60	4.76364	4.06546	3.69333	3.24276	2.38096
70	4.74702	4.05139	3.68060	3.23165	2.37289
80	4.73473	4.04098	3.67118	3.22341	2.36689
90	4.72527	4.03296	3.66392	3.21706	2.36227
100	4.71777	4.02659	3.65815	3.21202	2.35859

1.9 Expected coverage tolerance limits.

Expected coverage tolerance limits are limits of the form $\bar{x} + ks$ such that the expected value of

$$\frac{1}{\sqrt{2\pi}\,\sigma}\int_{-\infty}^{\bar{x}+ks} \exp\left[-\frac{1}{2}\left(\frac{y-\mu}{\sigma}\right)^2\right] dy \text{ is } P.$$

For a normal distribution with mean μ and standard deviation σ the values of k to give this type of limit are given in the table of Section 3.4. The tolerance limit which corresponds to the expected value $1 - P$ is $\bar{x} - ks$ where k is read from the table of Section 3.4 as before. Note that there is no probability γ given for expected coverage tolerance limits. This is because the tolerance statement to be made is, "On the average the proportion P of the population is less than $\bar{x} + ks$." That is, "On the average," takes the place of "With confidence γ."

The formula for k as defined above and tabulated in Section 3.4 is

$$k = t_p\sqrt{\frac{n+1}{n}},$$

where $\Pr\left\{T_f \le t_p \mid \delta = 0\right\} = P$, i.e., t_p is a critical value of the Student t-distribution.

If μ is unknown and σ is known, then the formula for k is

$$k = K_p\sqrt{\frac{n+1}{n}},$$

and the average coverage tolerance limit is $\bar{x} + k\sigma$. This value is tabulated in Section 3.5.

If μ is known and σ is unknown, then the formula for k is

$$k = t_p$$

where t_p is defined above and the average coverage tolerance limit is $\mu + ks$.

Fraser and Guttman [15] give tables of $t_p\sqrt{(n+1)/n}$ and $K_p\sqrt{(n+1)/n}$ in their Table 1, page 174, and Table 2, page 175. Values of $t_p\sqrt{(n+1)/n}$ are also given by Proschan [58]. The reader is referred to Sections 8.11 and 8.12 below for more details on average coverage tolerance limits. The tables of Sections 3.6 give the mean and standard deviation of $\bar{x} + ks$ where k is obtained by taking the expected value of $\bar{x} + ks$ and setting this equal to $\mu + K_p\sigma$, i.e.,

$$k = \frac{\sqrt{f}}{\sqrt{2}}\,\frac{\Gamma\left(\frac{f}{2}\right)}{\Gamma\left(\frac{f+1}{2}\right)}\,K_p = \frac{f}{(f-1)\,c_{11}}\,K_p$$

where c_{11} is defined in Section 8.9 and the variance of $\bar{x} + ks$ is

$$\sigma^2\left[k^2 - K_p^2 + \frac{1}{n}\right].$$

These values of k and the standard deviations of $\overline{x} + ks$ are given in Section 3.6. The tables of Sections 3.7 and 3.8 give the mean and standard deviation of the noncentral $(t/\sqrt{n})$ -distribution and the noncentral t-distribution.

The reader wishing a broader mathematical coverage of the noncentral t-distribution and the methods of computing and checking the accompanying tables is referred to Section 8 for this information. Some special cases where n and f are not necessarily tied together as $f = n - 1$ are considered in Sections 9, 10 and 11. In Section 12 a comparison of four approximations to the exact values of k are given and at the end there is a bibliography and list of references to the noncentral t-distribution and its various applications.

2. TABLES OF VALUES OF k for f = n - 1.

Values of k are given which make the following probability statement true:

$$\Pr\left\{\Pr(X \leq \bar{x} + ks) \geq P\right\} = \gamma,$$

where $\bar{x}$ and s are both based on n observations. That is, at least a proportion P of a normal distribution is below $\bar{x} + ks$ with probability equal to γ.

The quantity k is defined equivalently in terms of the noncentral t-distribution by the equations appearing in the heading of each table.

2.1 Values of k for f = n - 1 and $\gamma = .995$

$$\Pr\left\{T_f \leq k\sqrt{n} \,\middle|\, K_p\sqrt{n}\right\} = \gamma$$

	P							
n	.75000	.90000	.95000	.97500	.99000	.99900	.99990	.99999
2	117.887	206.065	262.861	312.857	371.243	493.126	593.465	680.574
3	12.381	19.833	24.609	28.848	33.846	44.396	53.152	60.783
4	5.997	9.360	11.512	13.426	15.688	20.478	24.465	27.944
5	4.172	6.448	7.902	9.195	10.725	13.969	16.671	19.031
6	3.339	5.143	6.293	7.316	8.526	11.093	13.233	15.101
7	2.864	4.409	5.392	6.266	7.300	9.494	11.322	12.920
8	2.556	3.938	4.817	5.597	6.520	8.478	10.110	11.536
9	2.338	3.610	4.416	5.133	5.979	7.775	9.272	10.579
10	2.176	3.367	4.121	4.790	5.581	7.258	8.656	9.877
11	2.050	3.180	3.894	4.527	5.276	6.862	8.184	9.338
12	1.949	3.030	3.712	4.318	5.033	6.547	7.809	8.912
13	1.865	2.907	3.564	4.147	4.834	6.291	7.504	8.564
14	1.795	2.805	3.441	4.004	4.669	6.078	7.251	8.275
15	1.735	2.718	3.336	3.883	4.530	5.898	7.037	8.031
16	1.683	2.643	3.246	3.780	4.409	5.743	6.853	7.822
17	1.638	2.577	3.167	3.689	4.305	5.608	6.693	7.640
18	1.598	2.520	3.098	3.610	4.213	5.490	6.552	7.480
19	1.562	2.468	3.037	3.539	4.132	5.385	6.428	7.338
20	1.530	2.423	2.982	3.476	4.059	5.292	6.317	7.212
21	1.500	2.381	2.932	3.419	3.993	5.207	6.217	7.098
22	1.474	2.344	2.887	3.368	3.934	5.131	6.127	6.996
23	1.449	2.309	2.846	3.321	3.880	5.062	6.045	6.902
24	1.427	2.278	2.809	3.278	3.831	4.998	5.969	6.817
25	1.407	2.249	2.774	3.239	3.785	4.940	5.900	6.738
26	1.387	2.222	2.743	3.202	3.743	4.886	5.837	6.666
27	1.370	2.197	2.713	3.169	3.705	4.837	5.778	6.599
28	1.353	2.174	2.686	3.137	3.668	4.790	5.723	6.537
29	1.338	2.153	2.660	3.108	3.635	4.747	5.672	6.479
30	1.323	2.132	2.636	3.081	3.603	4.707	5.624	6.424
31	1.309	2.114	2.614	3.055	3.574	4.669	5.580	6.374
32	1.297	2.096	2.593	3.031	3.546	4.634	5.538	6.326
33	1.284	2.079	2.573	3.008	3.520	4.601	5.498	6.281
34	1.273	2.063	2.554	2.987	3.495	4.569	5.461	6.239
35	1.262	2.048	2.536	2.966	3.472	4.540	5.426	6.199
36	1.252	2.034	2.519	2.947	3.450	4.511	5.393	6.161
37	1.242	2.020	2.503	2.929	3.429	4.485	5.361	6.125
38	1.232	2.007	2.488	2.912	3.409	4.459	5.331	6.091
39	1.223	1.995	2.474	2.895	3.390	4.435	5.302	6.059
40	1.215	1.983	2.460	2.879	3.372	4.412	5.275	6.028
41	1.207	1.972	2.447	2.864	3.355	4.390	5.249	5.998
42	1.199	1.962	2.434	2.850	3.339	4.369	5.224	5.970
43	1.191	1.951	2.422	2.836	3.323	4.349	5.201	5.943
44	1.184	1.941	2.410	2.823	3.308	4.330	5.178	5.917
45	1.177	1.932	2.399	2.810	3.293	4.311	5.156	5.893

2.1 Values of k for f = n - 1 and γ = .995 (Continued)

$$\Pr\left\{T_f \leq k\sqrt{n} \,\middle|\, K_p\sqrt{n}\right\} = \gamma$$

	P							
n	.75000	.90000	.95000	.97500	.99000	.99900	.99990	.99999
46	1.170	1.923	2.389	2.798	3.279	4.294	5.135	5.869
47	1.164	1.914	2.378	2.787	3.266	4.277	5.115	5.846
48	1.158	1.906	2.368	2.775	3.253	4.260	5.096	5.824
49	1.152	1.898	2.359	2.764	3.241	4.244	5.077	5.803
50	1.146	1.890	2.350	2.754	3.229	4.229	5.059	5.782
51	1.141	1.882	2.341	2.744	3.217	4.215	5.042	5.763
52	1.135	1.875	2.332	2.734	3.206	4.200	5.025	5.744
53	1.130	1.868	2.324	2.725	3.196	4.187	5.009	5.726
54	1.125	1.861	2.316	2.716	3.185	4.174	4.993	5.708
55	1.120	1.855	2.308	2.707	3.175	4.161	4.978	5.691
56	1.115	1.848	2.301	2.699	3.165	4.148	4.964	5.674
57	1.111	1.842	2.294	2.690	3.156	4.137	4.950	5.658
58	1.106	1.836	2.287	2.682	3.147	4.125	4.936	5.643
59	1.102	1.830	2.280	2.675	3.138	4.114	4.923	5.628
60	1.098	1.825	2.273	2.667	3.129	4.103	4.910	5.613
61	1.094	1.819	2.267	2.660	3.121	4.092	4.897	5.599
62	1.090	1.814	2.260	2.653	3.113	4.082	4.885	5.585
63	1.086	1.809	2.254	2.646	3.105	4.072	4.873	5.572
64	1.082	1.804	2.249	2.639	3.097	4.062	4.862	5.559
65	1.078	1.799	2.243	2.633	3.090	4.053	4.851	5.546
66	1.075	1.794	2.237	2.626	3.083	4.043	4.840	5.534
67	1.071	1.789	2.232	2.620	3.076	4.035	4.829	5.522
68	1.068	1.785	2.226	2.614	3.069	4.026	4.819	5.510
69	1.065	1.781	2.221	2.608	3.062	4.017	4.809	5.499
70	1.061	1.776	2.216	2.603	3.056	4.009	4.799	5.488
71	1.058	1.772	2.211	2.597	3.049	4.001	4.790	5.477
72	1.055	1.768	2.206	2.592	3.043	3.993	4.780	5.466
73	1.052	1.764	2.202	2.586	3.037	3.985	4.771	5.456
74	1.049	1.760	2.197	2.581	3.031	3.978	4.762	5.446
75	1.046	1.756	2.193	2.576	3.025	3.970	4.754	5.436
76	1.043	1.752	2.188	2.571	3.020	3.963	4.745	5.426
77	1.041	1.749	2.184	2.566	3.014	3.956	4.737	5.417
78	1.038	1.745	2.180	2.561	3.009	3.949	4.729	5.408
79	1.035	1.742	2.176	2.557	3.003	3.943	4.721	5.399
80	1.033	1.738	2.172	2.552	2.998	3.936	4.713	5.390
81	1.030	1.735	2.168	2.548	2.993	3.930	4.706	5.381
82	1.028	1.732	2.164	2.543	2.988	3.923	4.698	5.373
83	1.025	1.728	2.160	2.539	2.983	3.917	4.691	5.365
84	1.023	1.725	2.157	2.535	2.979	3.911	4.684	5.357
85	1.021	1.722	2.153	2.531	2.974	3.905	4.677	5.349
86	1.018	1.719	2.149	2.527	2.969	3.900	4.670	5.341
87	1.016	1.716	2.146	2.523	2.965	3.894	4.663	5.334
88	1.014	1.713	2.143	2.519	2.961	3.888	4.657	5.326
89	1.012	1.710	2.139	2.515	2.956	3.883	4.650	5.319
90	1.010	1.708	2.136	2.512	2.952	3.878	4.644	5.312

2.1 Values of k for f = n - 1 and γ = .995 (Continued)

$$Pr\left\{T_f \leq k\sqrt{n} \mid K_p \sqrt{n}\right\} = \gamma$$

	P							
n	.75000	.90000	.95000	.97500	.99000	.99900	.99990	.99999
91	1.007	1.705	2.133	2.508	2.948	3.872	4.638	5.305
92	1.005	1.702	2.130	2.505	2.944	3.867	4.632	5.298
93	1.003	1.699	2.127	2.501	2.940	3.862	4.626	5.291
94	1.001	1.697	2.123	2.498	2.936	3.857	4.620	5.284
95	.999	1.694	2.121	2.494	2.932	3.852	4.614	5.278
96	.998	1.692	2.118	2.491	2.928	3.847	4.609	5.272
97	.996	1.689	2.115	2.488	2.925	3.843	4.603	5.265
98	.994	1.687	2.112	2.484	2.921	3.838	4.598	5.259
99	.992	1.684	2.109	2.481	2.917	3.834	4.592	5.253
100	.990	1.682	2.106	2.478	2.914	3.829	4.587	5.247
101	.988	1.680	2.104	2.475	2.910	3.825	4.582	5.241
102	.987	1.678	2.101	2.472	2.907	3.820	4.577	5.235
103	.985	1.675	2.098	2.469	2.904	3.816	4.572	5.230
104	.983	1.673	2.096	2.466	2.900	3.812	4.567	5.224
105	.982	1.671	2.093	2.463	2.897	3.808	4.562	5.219
106	.980	1.669	2.091	2.461	2.894	3.804	4.557	5.213
107	.979	1.667	2.088	2.458	2.891	3.800	4.553	5.208
108	.977	1.665	2.086	2.455	2.888	3.796	4.548	5.203
109	.975	1.663	2.084	2.453	2.885	3.792	4.543	5.198
110	.974	1.661	2.081	2.450	2.882	3.788	4.539	5.193
111	.972	1.659	2.079	2.447	2.879	3.785	4.535	5.188
112	.971	1.657	2.077	2.445	2.876	3.781	4.530	5.183
113	.969	1.655	2.075	2.442	2.873	3.777	4.526	5.178
114	.968	1.653	2.072	2.440	2.870	3.774	4.522	5.173
115	.967	1.651	2.070	2.437	2.867	3.770	4.518	5.168
116	.965	1.649	2.068	2.435	2.864	3.767	4.514	5.164
117	.964	1.647	2.066	2.433	2.862	3.763	4.510	5.159
118	.962	1.646	2.064	2.430	2.859	3.760	4.506	5.155
119	.961	1.644	2.062	2.428	2.856	3.757	4.502	5.150
120	.960	1.642	2.060	2.426	2.854	3.753	4.498	5.146
121	.958	1.640	2.058	2.423	2.851	3.750	4.494	5.142
122	.957	1.639	2.056	2.421	2.849	3.747	4.490	5.137
123	.956	1.637	2.054	2.419	2.846	3.744	4.487	5.133
124	.955	1.635	2.052	2.417	2.844	3.741	4.483	5.129
125	.953	1.634	2.050	2.415	2.841	3.738	4.479	5.125
126	.952	1.632	2.048	2.413	2.839	3.735	4.476	5.121
127	.951	1.631	2.046	2.411	2.837	3.732	4.472	5.117
128	.950	1.629	2.045	2.408	2.834	3.729	4.469	5.113
129	.949	1.628	2.043	2.406	2.832	3.726	4.465	5.109
130	.947	1.626	2.041	2.404	2.830	3.723	4.462	5.105
131	.946	1.625	2.039	2.403	2.828	3.720	4.459	5.102
132	.945	1.623	2.038	2.401	2.825	3.717	4.455	5.098
133	.944	1.622	2.036	2.399	2.823	3.715	4.452	5.094
134	.943	1.620	2.034	2.397	2.821	3.712	4.449	5.091
135	.942	1.619	2.033	2.395	2.819	3.709	4.446	5.087

2.1 Values of k for f = n - 1 and γ = .995 (Continued)

$$\Pr\left\{T_f \leq k\sqrt{n} \,\middle|\, K_p \sqrt{n}\right\} = \gamma$$

	P							
n	.75000	.90000	.95000	.97500	.99000	.99900	.99990	.99999
136	.941	1.617	2.031	2.393	2.817	3.707	4.443	5.083
137	.940	1.616	2.029	2.391	2.815	3.704	4.440	5.080
138	.939	1.615	2.028	2.389	2.813	3.701	4.437	5.076
139	.938	1.613	2.026	2.388	2.811	3.699	4.434	5.073
140	.937	1.612	2.025	2.386	2.809	3.696	4.431	5.070
141	.935	1.611	2.023	2.384	2.807	3.694	4.428	5.066
142	.934	1.609	2.022	2.382	2.805	3.691	4.425	5.063
143	.933	1.608	2.020	2.381	2.803	3.689	4.422	5.060
144	.932	1.607	2.019	2.379	2.801	3.686	4.419	5.057
145	.932	1.605	2.017	2.377	2.799	3.684	4.416	5.053
146	.931	1.604	2.016	2.376	2.797	3.682	4.413	5.050
147	.930	1.603	2.014	2.374	2.795	3.679	4.411	5.047
148	.929	1.602	2.013	2.373	2.793	3.677	4.408	5.044
149	.928	1.600	2.011	2.371	2.792	3.675	4.405	5.041
150	.927	1.599	2.010	2.369	2.790	3.672	4.403	5.038
151	.926	1.598	2.009	2.368	2.788	3.670	4.400	5.035
152	.925	1.597	2.007	2.366	2.786	3.668	4.397	5.032
153	.924	1.596	2.006	2.365	2.785	3.666	4.395	5.029
154	.923	1.595	2.005	2.363	2.783	3.664	4.392	5.026
155	.922	1.593	2.003	2.362	2.781	3.662	4.390	5.024
156	.921	1.592	2.002	2.360	2.780	3.659	4.387	5.021
157	.921	1.591	2.001	2.359	2.778	3.657	4.385	5.018
158	.920	1.590	1.999	2.357	2.776	3.655	4.382	5.015
159	.919	1.589	1.998	2.356	2.775	3.653	4.380	5.012
160	.918	1.588	1.997	2.355	2.773	3.651	4.378	5.010
161	.917	1.587	1.996	2.353	2.771	3.649	4.375	5.007
162	.916	1.586	1.994	2.352	2.770	3.647	4.373	5.004
163	.916	1.585	1.993	2.350	2.768	3.645	4.371	5.002
164	.915	1.584	1.992	2.349	2.767	3.643	4.368	4.999
165	.914	1.583	1.991	2.348	2.765	3.641	4.366	4.997
166	.913	1.582	1.990	2.346	2.764	3.640	4.364	4.994
167	.912	1.581	1.988	2.345	2.762	3.638	4.362	4.992
168	.912	1.580	1.987	2.344	2.761	3.636	4.359	4.989
169	.911	1.579	1.986	2.343	2.759	3.634	4.357	4.987
170	.910	1.578	1.985	2.341	2.758	3.632	4.355	4.984
171	.909	1.577	1.984	2.340	2.756	3.630	4.353	4.982
172	.909	1.576	1.983	2.339	2.755	3.628	4.351	4.979
173	.908	1.575	1.982	2.337	2.754	3.627	4.349	4.977
174	.907	1.574	1.981	2.336	2.752	3.625	4.347	4.975
175	.906	1.573	1.980	2.335	2.751	3.623	4.345	4.972
176	.906	1.572	1.978	2.334	2.749	3.621	4.343	4.970
177	.905	1.571	1.977	2.333	2.748	3.620	4.341	4.968
178	.904	1.570	1.976	2.331	2.747	3.618	4.339	4.966
179	.904	1.569	1.975	2.330	2.745	3.616	4.337	4.963
180	.903	1.568	1.974	2.329	2.744	3.615	4.335	4.961

2.1 Values of k for f = n - 1 and γ = .995 (Continued)

$$\Pr\left\{T_f \leq k\sqrt{n} \,\middle|\, K_p\sqrt{n}\right\} = \gamma$$

	P							
n	.75000	.90000	.95000	.97500	.99000	.99900	.99990	.99999
181	.902	1.568	1.973	2.328	2.743	3.613	4.333	4.959
182	.902	1.567	1.972	2.327	2.742	3.611	4.331	4.957
183	.901	1.566	1.971	2.326	2.740	3.610	4.329	4.955
184	.900	1.565	1.970	2.325	2.739	3.608	4.327	4.952
185	.900	1.564	1.969	2.323	2.738	3.607	4.325	4.950
186	.899	1.563	1.968	2.322	2.736	3.605	4.323	4.948
187	.898	1.562	1.967	2.321	2.735	3.603	4.321	4.946
188	.898	1.562	1.966	2.320	2.734	3.602	4.320	4.944
189	.897	1.561	1.965	2.319	2.733	3.600	4.318	4.942
190	.896	1.560	1.964	2.318	2.732	3.599	4.316	4.940
191	.896	1.559	1.963	2.317	2.730	3.597	4.314	4.938
192	.895	1.558	1.963	2.316	2.729	3.596	4.312	4.936
193	.895	1.558	1.962	2.315	2.728	3.594	4.311	4.934
194	.894	1.557	1.961	2.314	2.727	3.593	4.309	4.932
195	.893	1.556	1.960	2.313	2.726	3.591	4.307	4.930
196	.893	1.555	1.959	2.312	2.724	3.590	4.305	4.928
197	.892	1.554	1.958	2.311	2.723	3.589	4.304	4.926
198	.892	1.554	1.957	2.310	2.722	3.587	4.302	4.924
199	.891	1.553	1.956	2.309	2.721	3.586	4.300	4.922
200	.890	1.552	1.955	2.308	2.720	3.584	4.299	4.921
205	.887	1.549	1.951	2.303	2.715	3.577	4.291	4.911
210	.885	1.545	1.947	2.299	2.709	3.571	4.283	4.903
215	.882	1.542	1.943	2.294	2.704	3.565	4.276	4.894
220	.880	1.538	1.939	2.290	2.700	3.558	4.268	4.886
225	.877	1.535	1.936	2.286	2.695	3.553	4.262	4.878
230	.875	1.532	1.932	2.282	2.690	3.547	4.255	4.871
235	.872	1.529	1.929	2.278	2.686	3.541	4.248	4.863
240	.870	1.526	1.926	2.274	2.682	3.536	4.242	4.856
245	.868	1.524	1.922	2.271	2.678	3.531	4.236	4.850
250	.866	1.521	1.919	2.267	2.674	3.526	4.230	4.843
255	.864	1.518	1.916	2.264	2.670	3.521	4.225	4.837
260	.862	1.516	1.913	2.261	2.666	3.517	4.219	4.831
265	.860	1.513	1.911	2.258	2.663	3.512	4.214	4.825
270	.858	1.511	1.908	2.254	2.659	3.508	4.209	4.819
275	.857	1.509	1.905	2.252	2.656	3.504	4.204	4.813
280	.855	1.507	1.903	2.249	2.653	3.500	4.199	4.808
285	.853	1.504	1.900	2.246	2.650	3.496	4.194	4.802
290	.851	1.502	1.898	2.243	2.646	3.492	4.190	4.797
295	.850	1.500	1.895	2.240	2.643	3.488	4.185	4.792
300	.848	1.498	1.893	2.238	2.641	3.484	4.181	4.787
305	.847	1.496	1.891	2.235	2.638	3.481	4.177	4.783
310	.845	1.495	1.889	2.233	2.635	3.477	4.173	4.778
315	.844	1.493	1.887	2.231	2.632	3.474	4.169	4.773
320	.842	1.491	1.885	2.228	2.630	3.470	4.165	4.769
325	.841	1.489	1.883	2.226	2.627	3.467	4.161	4.765

2.1 Values of k for f = n - 1 and γ = .995 (Continued)

$$\Pr\left\{T_{-f} \leq k\sqrt{n} \,\middle|\, K_p\sqrt{n}\right\} = \gamma$$

	P							
n	.75000	.90000	.95000	.97500	.99000	.99900	.99990	.99999
330	.840	1.487	1.881	2.224	2.625	3.464	4.157	4.761
335	.838	1.486	1.879	2.222	2.622	3.461	4.154	4.756
340	.837	1.484	1.877	2.220	2.620	3.458	4.150	4.752
345	.836	1.483	1.875	2.217	2.617	3.455	4.147	4.749
350	.835	1.481	1.873	2.215	2.615	3.452	4.144	4.745
355	.834	1.480	1.871	2.214	2.613	3.449	4.140	4.741
360	.832	1.478	1.870	2.212	2.611	3.447	4.137	4.737
365	.831	1.477	1.868	2.210	2.609	3.444	4.134	4.734
370	.830	1.475	1.866	2.208	2.607	3.441	4.131	4.730
375	.829	1.474	1.865	2.206	2.604	3.439	4.128	4.727
380	.828	1.472	1.863	2.204	2.602	3.436	4.125	4.724
385	.827	1.471	1.862	2.203	2.601	3.434	4.122	4.720
390	.826	1.470	1.860	2.201	2.599	3.431	4.119	4.717
395	.825	1.468	1.859	2.199	2.597	3.429	4.116	4.714
400	.824	1.467	1.857	2.198	2.595	3.427	4.114	4.711
425	.819	1.461	1.851	2.190	2.586	3.416	4.101	4.696
450	.815	1.456	1.844	2.183	2.578	3.406	4.089	4.683
475	.811	1.451	1.839	2.177	2.571	3.397	4.079	4.671
500	.807	1.446	1.833	2.171	2.564	3.388	4.069	4.660
525	.804	1.442	1.829	2.165	2.558	3.381	4.060	4.650
550	.801	1.438	1.824	2.160	2.553	3.374	4.051	4.640
575	.798	1.435	1.820	2.156	2.547	3.367	4.043	4.631
600	.795	1.431	1.816	2.151	2.542	3.361	4.036	4.623
625	.793	1.428	1.812	2.147	2.538	3.355	4.029	4.615
650	.790	1.425	1.809	2.143	2.533	3.349	4.023	4.608
675	.788	1.422	1.806	2.140	2.529	3.344	4.017	4.601
700	.786	1.420	1.803	2.136	2.525	3.339	4.011	4.595
725	.784	1.417	1.800	2.133	2.522	3.335	4.006	4.589
750	.782	1.415	1.797	2.130	2.518	3.330	4.000	4.583
775	.780	1.412	1.794	2.127	2.515	3.326	3.996	4.577
800	.779	1.410	1.792	2.124	2.512	3.322	3.991	4.572
825	.777	1.408	1.789	2.121	2.509	3.318	3.987	4.567
850	.775	1.406	1.787	2.119	2.506	3.315	3.982	4.562
875	.774	1.404	1.785	2.117	2.503	3.311	3.978	4.558
900	.772	1.403	1.783	2.114	2.501	3.308	3.974	4.554
925	.771	1.401	1.781	2.112	2.498	3.305	3.971	4.549
950	.770	1.399	1.779	2.110	2.496	3.302	3.967	4.545
975	.768	1.398	1.777	2.108	2.493	3.299	3.964	4.542
1000	.767	1.396	1.776	2.106	2.491	3.296	3.961	4.538
1500	.750	1.374	1.751	2.078	2.460	3.257	3.914	4.485
2000	.740	1.362	1.736	2.062	2.441	3.234	3.887	4.455
3000	.727	1.347	1.719	2.042	2.419	3.206	3.855	4.419
5000	.715	1.332	1.702	2.023	2.398	3.180	3.824	4.383
10000	.703	1.317	1.685	2.005	2.377	3.153	3.793	4.348
∞	.674	1.282	1.645	1.960	2.326	3.090	3.719	4.265

2.2 Values of k for f = n - 1 and γ = .99

$$Pr\left\{T_f \leq k\sqrt{n} \,\middle|\, K_p \sqrt{n}\right\} = \gamma$$

	P							
n	.75000	.90000	.95000	.97500	.99000	.99900	.99990	.99999
2	58.939	103.029	131.426	156.424	185.617	246.558	296.727	340.280
3	8.728	13.995	17.370	20.365	23.896	31.348	37.533	42.922
4	4.715	7.380	9.083	10.598	12.387	16.176	19.327	22.078
5	3.454	5.362	6.578	7.660	8.939	11.649	13.906	15.877
6	2.848	4.411	5.406	6.290	7.335	9.550	11.396	13.007
7	2.491	3.859	4.728	5.500	6.412	8.346	9.957	11.364
8	2.253	3.497	4.285	4.985	5.812	7.564	9.024	10.299
9	2.083	3.240	3.972	4.622	5.389	7.014	8.368	9.551
10	1.954	3.048	3.738	4.351	5.074	6.605	7.881	8.995
11	1.853	2.898	3.556	4.140	4.829	6.288	7.503	8.564
12	1.771	2.777	3.410	3.971	4.633	6.035	7.201	8.220
13	1.703	2.677	3.290	3.832	4.472	5.827	6.954	7.938
14	1.645	2.593	3.189	3.716	4.337	5.652	6.747	7.702
15	1.595	2.521	3.102	3.616	4.222	5.504	6.571	7.502
16	1.552	2.459	3.028	3.531	4.123	5.377	6.419	7.329
17	1.514	2.405	2.963	3.456	4.037	5.265	6.287	7.178
18	1.481	2.357	2.905	3.390	3.960	5.167	6.170	7.046
19	1.450	2.314	2.854	3.331	3.892	5.079	6.066	6.928
20	1.423	2.276	2.808	3.278	3.832	5.001	5.974	6.822
21	1.399	2.241	2.766	3.230	3.777	4.931	5.890	6.727
22	1.376	2.209	2.729	3.187	3.727	4.867	5.814	6.641
23	1.355	2.180	2.694	3.148	3.681	4.808	5.745	6.562
24	1.336	2.154	2.662	3.111	3.640	4.755	5.681	6.490
25	1.319	2.129	2.633	3.078	3.601	4.706	5.623	6.423
26	1.303	2.106	2.606	3.047	3.566	4.660	5.569	6.362
27	1.287	2.085	2.581	3.018	3.533	4.618	5.519	6.305
28	1.273	2.065	2.558	2.992	3.502	4.579	5.473	6.253
29	1.260	2.047	2.536	2.967	3.473	4.542	5.429	6.203
30	1.247	2.030	2.515	2.943	3.447	4.508	5.389	6.157
31	1.236	2.014	2.496	2.922	3.421	4.476	5.351	6.114
32	1.225	1.998	2.478	2.901	3.398	4.445	5.315	6.073
33	1.214	1.984	2.461	2.881	3.375	4.417	5.281	6.035
34	1.204	1.970	2.445	2.863	3.354	4.390	5.249	5.999
35	1.195	1.957	2.430	2.846	3.334	4.364	5.219	5.965
36	1.186	1.945	2.415	2.829	3.315	4.340	5.191	5.932
37	1.177	1.934	2.402	2.814	3.297	4.317	5.164	5.901
38	1.169	1.922	2.389	2.799	3.280	4.296	5.138	5.872
39	1.161	1.912	2.376	2.784	3.264	4.275	5.113	5.844
40	1.154	1.902	2.364	2.771	3.249	4.255	5.090	5.818
41	1.147	1.892	2.353	2.758	3.234	4.236	5.068	5.792
42	1.140	1.883	2.342	2.746	3.220	4.218	5.046	5.768
43	1.133	1.874	2.331	2.734	3.206	4.201	5.026	5.745
44	1.127	1.865	2.321	2.722	3.193	4.184	5.006	5.722
45	1.121	1.857	2.312	2.711	3.180	4.168	4.987	5.701

2.2 Values of k for f = n - 1 and γ = .99 (Continued)

$$\Pr\left\{T_f \leq k\sqrt{n} \,\middle|\, K_p\sqrt{n}\right\} = \gamma$$

	P							
n	.75000	.90000	.95000	.97500	.99000	.99900	.99990	.99999
46	1.115	1.849	2.303	2.701	3.168	4.153	4.969	5.681
47	1.110	1.842	2.294	2.691	3.157	4.138	4.952	5.661
48	1.104	1.835	2.285	2.681	3.146	4.124	4.935	5.642
49	1.099	1.828	2.277	2.672	3.135	4.110	4.919	5.624
50	1.094	1.821	2.269	2.663	3.125	4.097	4.903	5.606
51	1.089	1.814	2.261	2.654	3.115	4.084	4.888	5.589
52	1.084	1.808	2.254	2.645	3.105	4.072	4.874	5.573
53	1.080	1.802	2.247	2.637	3.096	4.060	4.860	5.557
54	1.075	1.796	2.240	2.629	3.087	4.049	4.846	5.541
55	1.071	1.790	2.233	2.622	3.078	4.038	4.833	5.527
56	1.067	1.785	2.226	2.614	3.070	4.027	4.821	5.512
57	1.063	1.779	2.220	2.607	3.061	4.017	4.808	5.498
58	1.059	1.774	2.214	2.600	3.053	4.007	4.797	5.485
59	1.055	1.769	2.208	2.594	3.046	3.997	4.785	5.472
60	1.052	1.764	2.202	2.587	3.038	3.987	4.774	5.459
61	1.048	1.759	2.197	2.581	3.031	3.978	4.763	5.447
62	1.045	1.755	2.191	2.575	3.024	3.969	4.752	5.435
63	1.041	1.750	2.186	2.569	3.017	3.960	4.742	5.423
64	1.038	1.746	2.181	2.563	3.010	3.952	4.732	5.412
65	1.035	1.741	2.176	2.557	3.004	3.944	4.722	5.401
66	1.032	1.737	2.171	2.552	2.998	3.936	4.713	5.390
67	1.028	1.733	2.166	2.546	2.991	3.928	4.704	5.379
68	1.025	1.729	2.162	2.541	2.985	3.920	4.695	5.369
69	1.023	1.725	2.157	2.536	2.980	3.913	4.686	5.359
70	1.020	1.722	2.153	2.531	2.974	3.906	4.677	5.350
71	1.017	1.718	2.148	2.526	2.968	3.899	4.669	5.340
72	1.014	1.714	2.144	2.521	2.963	3.892	4.661	5.331
73	1.012	1.711	2.140	2.516	2.958	3.885	4.653	5.322
74	1.009	1.707	2.136	2.512	2.952	3.878	4.645	5.313
75	1.006	1.704	2.132	2.508	2.947	3.872	4.638	5.305
76	1.004	1.701	2.128	2.503	2.942	3.866	4.630	5.296
77	1.002	1.698	2.125	2.499	2.938	3.860	4.623	5.288
78	.999	1.694	2.121	2.495	2.933	3.854	4.616	5.280
79	.997	1.691	2.117	2.491	2.928	3.848	4.609	5.272
80	.995	1.688	2.114	2.487	2.924	3.842	4.602	5.265
81	.992	1.685	2.110	2.483	2.919	3.836	4.596	5.257
82	.990	1.682	2.107	2.479	2.915	3.831	4.589	5.250
83	.988	1.680	2.104	2.475	2.911	3.826	4.583	5.243
84	.986	1.677	2.100	2.472	2.907	3.820	4.577	5.235
85	.984	1.674	2.097	2.468	2.902	3.815	4.571	5.229
86	.982	1.672	2.094	2.465	2.898	3.810	4.565	5.222
87	.980	1.669	2.091	2.461	2.895	3.805	4.559	5.215
88	.978	1.666	2.088	2.458	2.891	3.800	4.553	5.209
89	.976	1.664	2.085	2.454	2.887	3.795	4.547	5.202
90	.974	1.661	2.082	2.451	2.883	3.791	4.542	5.196

2.2 Values of k for f = n - 1 and γ = .99 (Continued)

$$\Pr\left\{T_f \leq k\sqrt{n} \,\middle|\, K_p\sqrt{n}\right\} = \gamma$$

	P							
n	.75000	.90000	.95000	.97500	.99000	.99900	.99990	.99999
91	.972	1.659	2.080	2.448	2.880	3.786	4.537	5.190
92	.970	1.657	2.077	2.445	2.876	3.782	4.531	5.184
93	.969	1.654	2.074	2.442	2.872	3.777	4.526	5.178
94	.967	1.652	2.071	2.439	2.869	3.773	4.521	5.172
95	.965	1.650	2.069	2.436	2.866	3.769	4.516	5.166
96	.963	1.647	2.066	2.433	2.862	3.764	4.511	5.161
97	.962	1.645	2.064	2.430	2.859	3.760	4.506	5.155
98	.960	1.643	2.061	2.427	2.856	3.756	4.501	5.150
99	.959	1.641	2.059	2.424	2.853	3.752	4.497	5.145
100	.957	1.639	2.056	2.422	2.850	3.748	4.492	5.139
101	.955	1.637	2.054	2.419	2.847	3.744	4.487	5.134
102	.954	1.635	2.052	2.416	2.844	3.741	4.483	5.129
103	.952	1.633	2.049	2.414	2.841	3.737	4.478	5.124
104	.951	1.631	2.047	2.411	2.838	3.733	4.474	5.119
105	.949	1.629	2.045	2.409	2.835	3.730	4.470	5.114
106	.948	1.627	2.043	2.406	2.832	3.726	4.466	5.110
107	.947	1.625	2.040	2.404	2.829	3.723	4.462	5.105
108	.945	1.624	2.038	2.402	2.827	3.719	4.458	5.100
109	.944	1.622	2.036	2.399	2.824	3.716	4.454	5.096
110	.942	1.620	2.034	2.397	2.821	3.712	4.450	5.091
111	.941	1.618	2.032	2.395	2.819	3.709	4.446	5.087
112	.940	1.617	2.030	2.392	2.816	3.706	4.442	5.083
113	.939	1.615	2.028	2.390	2.814	3.703	4.438	5.078
114	.937	1.613	2.026	2.388	2.811	3.699	4.435	5.074
115	.936	1.612	2.024	2.386	2.809	3.696	4.431	5.070
116	.935	1.610	2.023	2.384	2.806	3.693	4.427	5.066
117	.934	1.608	2.021	2.382	2.804	3.690	4.424	5.062
118	.932	1.607	2.019	2.380	2.802	3.687	4.420	5.058
119	.931	1.605	2.017	2.377	2.799	3.684	4.417	5.054
120	.930	1.604	2.015	2.375	2.797	3.682	4.413	5.050
121	.929	1.602	2.014	2.374	2.795	3.679	4.410	5.047
122	.928	1.601	2.012	2.372	2.792	3.676	4.407	5.043
123	.927	1.599	2.010	2.370	2.790	3.673	4.403	5.039
124	.925	1.598	2.008	2.368	2.788	3.670	4.400	5.035
125	.924	1.596	2.007	2.366	2.786	3.668	4.397	5.032
126	.923	1.595	2.005	2.364	2.784	3.665	4.394	5.028
127	.922	1.594	2.004	2.362	2.782	3.662	4.391	5.025
128	.921	1.592	2.002	2.360	2.780	3.660	4.388	5.021
129	.920	1.591	2.000	2.359	2.778	3.657	4.385	5.018
130	.919	1.589	1.999	2.357	2.776	3.655	4.382	5.015
131	.918	1.588	1.997	2.355	2.774	3.652	4.379	5.011
132	.917	1.587	1.996	2.353	2.772	3.650	4.376	5.008
133	.916	1.586	1.994	2.352	2.770	3.647	4.373	5.005
134	.915	1.584	1.993	2.350	2.768	3.645	4.370	5.002
135	.914	1.583	1.991	2.348	2.766	3.643	4.368	4.998

2.2 Values of k for f = n - 1 and $\gamma = .99$ (Continued)

$$Pr\left\{T_f \leq k\sqrt{n} \,\middle|\, K_p \sqrt{n}\right\} = \gamma$$

	P							
n	.75000	.90000	.95000	.97500	.99000	.99900	.99990	.99999
136	.913	1.582	1.990	2.347	2.764	3.640	4.365	4.995
137	.912	1.581	1.988	2.345	2.762	3.638	4.362	4.992
138	.911	1.579	1.987	2.344	2.761	3.636	4.359	4.989
139	.910	1.578	1.986	2.342	2.759	3.633	4.357	4.986
140	.909	1.577	1.984	2.340	2.757	3.631	4.354	4.983
141	.908	1.576	1.983	2.339	2.755	3.629	4.352	4.980
142	.908	1.575	1.982	2.337	2.754	3.627	4.349	4.977
143	.907	1.573	1.980	2.336	2.752	3.625	4.346	4.974
144	.906	1.572	1.979	2.334	2.750	3.623	4.344	4.972
145	.905	1.571	1.978	2.333	2.749	3.620	4.341	4.969
146	.904	1.570	1.976	2.331	2.747	3.618	4.339	4.966
147	.903	1.569	1.975	2.330	2.745	3.616	4.337	4.963
148	.902	1.568	1.974	2.329	2.744	3.614	4.334	4.961
149	.902	1.567	1.973	2.327	2.742	3.612	4.332	4.958
150	.901	1.566	1.971	2.326	2.740	3.610	4.329	4.955
151	.900	1.565	1.970	2.324	2.739	3.608	4.327	4.953
152	.899	1.564	1.969	2.323	2.737	3.606	4.325	4.950
153	.898	1.563	1.968	2.322	2.736	3.604	4.323	4.947
154	.898	1.562	1.966	2.320	2.734	3.602	4.320	4.945
155	.897	1.561	1.965	2.319	2.733	3.601	4.318	4.942
156	.896	1.560	1.964	2.318	2.731	3.599	4.316	4.940
157	.895	1.559	1.963	2.317	2.730	3.597	4.314	4.937
158	.894	1.558	1.962	2.315	2.728	3.595	4.312	4.935
159	.894	1.557	1.961	2.314	2.727	3.593	4.309	4.933
160	.893	1.556	1.960	2.313	2.726	3.591	4.307	4.930
161	.892	1.555	1.959	2.312	2.724	3.590	4.305	4.928
162	.891	1.554	1.957	2.310	2.723	3.588	4.303	4.926
163	.891	1.553	1.956	2.309	2.721	3.586	4.301	4.923
164	.890	1.552	1.955	2.308	2.720	3.584	4.299	4.921
165	.889	1.551	1.954	2.307	2.719	3.583	4.297	4.919
166	.889	1.550	1.953	2.306	2.717	3.581	4.295	4.916
167	.888	1.549	1.952	2.304	2.716	3.579	4.293	4.914
168	.887	1.548	1.951	2.303	2.715	3.578	4.291	4.912
169	.887	1.548	1.950	2.302	2.713	3.576	4.289	4.910
170	.886	1.547	1.949	2.301	2.712	3.575	4.287	4.908
171	.885	1.546	1.948	2.300	2.711	3.573	4.286	4.906
172	.885	1.545	1.947	2.299	2.710	3.571	4.284	4.903
173	.884	1.544	1.946	2.298	2.708	3.570	4.282	4.901
174	.883	1.543	1.945	2.297	2.707	3.568	4.280	4.899
175	.883	1.542	1.944	2.295	2.706	3.567	4.278	4.897
176	.882	1.542	1.943	2.294	2.705	3.565	4.276	4.895
177	.881	1.541	1.942	2.293	2.704	3.564	4.275	4.893
178	.881	1.540	1.941	2.292	2.702	3.562	4.273	4.891
179	.880	1.539	1.941	2.291	2.701	3.561	4.271	4.889
180	.880	1.538	1.940	2.290	2.700	3.559	4.269	4.887

2.2 Values of k for f = n - 1 and γ = .99 (Continued)

$$Pr\left\{T_f \leq k\sqrt{n} \,\middle|\, K_p \sqrt{n}\right\} = \gamma$$

	P							
n	.75000	.90000	.95000	.97500	.99000	.99900	.99990	.99999
181	.879	1.538	1.939	2.289	2.699	3.558	4.268	4.885
182	.878	1.537	1.938	2.288	2.698	3.556	4.266	4.883
183	.878	1.536	1.937	2.287	2.697	3.555	4.264	4.881
184	.877	1.535	1.936	2.286	2.695	3.553	4.263	4.880
185	.877	1.535	1.935	2.285	2.694	3.552	4.261	4.878
186	.876	1.534	1.934	2.284	2.693	3.551	4.259	4.876
187	.875	1.533	1.933	2.283	2.692	3.549	4.258	4.874
188	.875	1.532	1.933	2.282	2.691	3.548	4.256	4.872
189	.874	1.532	1.932	2.281	2.690	3.546	4.254	4.870
190	.874	1.531	1.931	2.280	2.689	3.545	4.253	4.868
191	.873	1.530	1.930	2.279	2.688	3.544	4.251	4.867
192	.873	1.530	1.929	2.279	2.687	3.542	4.250	4.865
193	.872	1.529	1.928	2.278	2.686	3.541	4.248	4.863
194	.871	1.528	1.928	2.277	2.685	3.540	4.247	4.861
195	.871	1.527	1.927	2.276	2.684	3.539	4.245	4.860
196	.870	1.527	1.926	2.275	2.683	3.537	4.244	4.858
197	.870	1.526	1.925	2.274	2.682	3.536	4.242	4.856
198	.869	1.525	1.924	2.273	2.681	3.535	4.241	4.855
199	.869	1.525	1.924	2.272	2.680	3.533	4.239	4.853
200	.868	1.524	1.923	2.271	2.679	3.532	4.238	4.851
205	.866	1.521	1.919	2.267	2.674	3.526	4.230	4.843
210	.863	1.518	1.916	2.263	2.669	3.520	4.224	4.835
215	.861	1.515	1.912	2.259	2.665	3.515	4.217	4.828
220	.859	1.512	1.909	2.255	2.660	3.509	4.211	4.821
225	.856	1.509	1.905	2.252	2.656	3.504	4.205	4.814
230	.854	1.506	1.902	2.248	2.652	3.499	4.199	4.807
235	.852	1.504	1.899	2.245	2.648	3.494	4.193	4.801
240	.850	1.501	1.896	2.242	2.645	3.490	4.187	4.795
245	.848	1.499	1.894	2.238	2.641	3.485	4.182	4.788
250	.847	1.496	1.891	2.235	2.638	3.481	4.177	4.783
255	.845	1.494	1.888	2.232	2.634	3.476	4.172	4.777
260	.843	1.492	1.886	2.229	2.631	3.472	4.167	4.772
265	.841	1.490	1.883	2.227	2.628	3.468	4.162	4.766
270	.840	1.487	1.881	2.224	2.625	3.464	4.158	4.761
275	.838	1.485	1.878	2.221	2.622	3.461	4.153	4.756
280	.837	1.483	1.876	2.219	2.619	3.457	4.149	4.751
285	.835	1.482	1.874	2.216	2.616	3.453	4.145	4.746
290	.834	1.480	1.872	2.214	2.613	3.450	4.141	4.742
295	.832	1.478	1.870	2.211	2.611	3.447	4.137	4.737
300	.831	1.476	1.868	2.209	2.608	3.443	4.133	4.733
305	.829	1.474	1.866	2.207	2.606	3.440	4.129	4.729
310	.828	1.473	1.864	2.205	2.603	3.437	4.126	4.725
315	.827	1.471	1.862	2.203	2.601	3.434	4.122	4.721
320	.826	1.469	1.860	2.201	2.598	3.431	4.119	4.717
325	.824	1.468	1.858	2.199	2.596	3.428	4.115	4.713

2.2 Values of k for f = n - 1 and $\gamma = .99$ (Continued)

$$\Pr\left\{T_f \leq k\sqrt{n} \,\middle|\, K_p \sqrt{n}\right\} = \gamma$$

	P							
n	.75000	.90000	.95000	.97500	.99000	.99900	.99990	.99999
330	.823	1.466	1.856	2.197	2.594	3.425	4.112	4.709
335	.822	1.465	1.855	2.195	2.592	3.423	4.109	4.706
340	.821	1.463	1.853	2.193	2.590	3.420	4.106	4.702
345	.820	1.462	1.851	2.191	2.587	3.417	4.103	4.699
350	.819	1.461	1.850	2.189	2.585	3.415	4.100	4.695
355	.818	1.459	1.848	2.187	2.583	3.412	4.097	4.692
360	.816	1.458	1.847	2.186	2.581	3.410	4.094	4.689
365	.815	1.457	1.845	2.184	2.580	3.408	4.091	4.685
370	.814	1.455	1.844	2.182	2.578	3.405	4.088	4.682
375	.813	1.454	1.842	2.181	2.576	3.403	4.086	4.679
380	.812	1.453	1.841	2.179	2.574	3.401	4.083	4.676
385	.812	1.452	1.840	2.178	2.572	3.398	4.080	4.673
390	.811	1.451	1.838	2.176	2.571	3.396	4.078	4.671
395	.810	1.449	1.837	2.175	2.569	3.394	4.076	4.668
400	.809	1.448	1.836	2.173	2.567	3.392	4.073	4.665
425	.805	1.443	1.830	2.166	2.560	3.382	4.062	4.652
450	.801	1.438	1.824	2.160	2.553	3.374	4.051	4.640
475	.797	1.434	1.819	2.155	2.546	3.365	4.042	4.630
500	.794	1.430	1.814	2.149	2.540	3.358	4.033	4.620
525	.791	1.426	1.810	2.144	2.535	3.351	4.025	4.611
550	.788	1.422	1.806	2.140	2.530	3.345	4.017	4.602
575	.786	1.419	1.802	2.136	2.525	3.339	4.010	4.594
600	.783	1.416	1.799	2.132	2.520	3.333	4.004	4.587
625	.781	1.413	1.795	2.128	2.516	3.328	3.998	4.580
650	.779	1.411	1.792	2.125	2.512	3.323	3.992	4.573
675	.777	1.408	1.789	2.121	2.509	3.318	3.986	4.567
700	.775	1.406	1.787	2.118	2.505	3.314	3.981	4.561
725	.773	1.403	1.784	2.115	2.502	3.310	3.977	4.556
750	.771	1.401	1.782	2.113	2.499	3.306	3.972	4.551
775	.770	1.399	1.779	2.110	2.496	3.302	3.968	4.546
800	.768	1.397	1.777	2.108	2.493	3.299	3.963	4.541
825	.767	1.395	1.775	2.105	2.490	3.295	3.960	4.537
850	.765	1.394	1.773	2.103	2.488	3.292	3.956	4.532
875	.764	1.392	1.771	2.101	2.485	3.289	3.952	4.528
900	.763	1.390	1.769	2.099	2.483	3.286	3.949	4.524
925	.762	1.389	1.767	2.097	2.481	3.283	3.945	4.521
950	.760	1.387	1.766	2.095	2.479	3.281	3.942	4.517
975	.759	1.386	1.764	2.093	2.477	3.278	3.939	4.514
1000	.758	1.385	1.762	2.091	2.475	3.276	3.936	4.510
1500	.742	1.365	1.740	2.066	2.446	3.240	3.895	4.463
2000	.733	1.354	1.727	2.052	2.430	3.219	3.870	4.436
3000	.722	1.340	1.712	2.034	2.410	3.195	3.842	4.404
5000	.711	1.327	1.696	2.017	2.391	3.171	3.813	4.372
10000	.700	1.313	1.681	2.000	2.372	3.147	3.785	4.340
∞	.674	1.282	1.645	1.960	2.326	3.090	3.719	4.265

2.3 Values of k for f = n - 1 and γ = .975

$$\Pr\left\{T_f \leq k\sqrt{n} \,\middle|\, K_p\sqrt{n}\right\} = \gamma$$

	P							
n	.75000	.90000	.95000	.97500	.99000	.99900	.99990	.99999
2	23.565	41.201	52.559	62.558	74.234	98.607	118.672	136.091
3	5.469	8.797	10.927	12.816	15.043	19.741	23.639	27.036
4	3.398	5.354	6.602	7.710	9.018	11.785	14.087	16.094
5	2.660	4.166	5.124	5.975	6.980	9.107	10.877	12.422
6	2.279	3.568	4.385	5.111	5.967	7.781	9.291	10.609
7	2.044	3.206	3.940	4.592	5.361	6.989	8.344	9.527
8	1.883	2.960	3.640	4.243	4.954	6.460	7.712	8.806
9	1.764	2.783	3.424	3.992	4.662	6.079	7.259	8.288
10	1.673	2.647	3.259	3.801	4.440	5.791	6.916	7.897
11	1.600	2.540	3.129	3.650	4.265	5.565	6.646	7.590
12	1.540	2.452	3.023	3.528	4.124	5.382	6.428	7.341
13	1.490	2.379	2.936	3.427	4.006	5.230	6.248	7.136
14	1.447	2.317	2.861	3.342	3.907	5.103	6.096	6.963
15	1.410	2.264	2.797	3.268	3.822	4.993	5.966	6.815
16	1.378	2.218	2.742	3.204	3.749	4.898	5.853	6.686
17	1.349	2.177	2.693	3.148	3.684	4.815	5.754	6.574
18	1.324	2.141	2.650	3.099	3.627	4.741	5.667	6.474
19	1.301	2.108	2.611	3.054	3.575	4.675	5.588	6.385
20	1.280	2.079	2.576	3.014	3.529	4.616	5.518	6.305
21	1.261	2.053	2.544	2.978	3.487	4.562	5.454	6.233
22	1.243	2.028	2.515	2.945	3.449	4.513	5.397	6.167
23	1.227	2.006	2.489	2.914	3.414	4.469	5.344	6.107
24	1.213	1.985	2.465	2.887	3.382	4.428	5.295	6.051
25	1.199	1.966	2.442	2.861	3.353	4.390	5.250	6.000
26	1.186	1.949	2.421	2.837	3.325	4.355	5.209	5.953
27	1.174	1.932	2.402	2.815	3.300	4.322	5.170	5.909
28	1.163	1.917	2.384	2.794	3.276	4.292	5.134	5.868
29	1.153	1.903	2.367	2.775	3.254	4.263	5.101	5.830
30	1.143	1.889	2.351	2.757	3.233	4.237	5.069	5.794
31	1.134	1.877	2.336	2.740	3.213	4.212	5.039	5.761
32	1.125	1.865	2.322	2.723	3.195	4.188	5.011	5.729
33	1.116	1.853	2.308	2.708	3.178	4.166	4.985	5.699
34	1.109	1.843	2.296	2.694	3.161	4.145	4.960	5.671
35	1.101	1.833	2.284	2.680	3.145	4.125	4.937	5.644
36	1.094	1.823	2.272	2.667	3.131	4.106	4.914	5.619
37	1.087	1.814	2.262	2.655	3.116	4.088	4.893	5.595
38	1.081	1.805	2.251	2.643	3.103	4.071	4.873	5.572
39	1.075	1.797	2.241	2.632	3.090	4.054	4.853	5.550
40	1.069	1.789	2.232	2.621	3.078	4.039	4.835	5.529
41	1.063	1.781	2.223	2.611	3.066	4.024	4.817	5.509
42	1.058	1.774	2.214	2.601	3.055	4.010	4.801	5.490
43	1.052	1.767	2.206	2.592	3.044	3.996	4.784	5.471
44	1.047	1.760	2.198	2.583	3.034	3.983	4.769	5.454
45	1.042	1.753	2.190	2.574	3.024	3.970	4.754	5.437

2.3 Values of k for f = n - 1 and γ = .975 (Continued)

$$\Pr\left\{T_f \leq k\sqrt{n} \,\middle|\, K_p\sqrt{n}\right\} = \gamma$$

	P							
n	.75000	.90000	.95000	.97500	.99000	.99900	.99990	.99999
46	1.038	1.747	2.183	2.566	3.014	3.958	4.740	5.421
47	1.033	1.741	2.176	2.558	3.005	3.946	4.726	5.405
48	1.029	1.735	2.169	2.550	2.996	3.935	4.713	5.390
49	1.025	1.730	2.163	2.543	2.988	3.924	4.700	5.375
50	1.021	1.724	2.156	2.535	2.980	3.914	4.688	5.361
51	1.017	1.719	2.150	2.529	2.972	3.904	4.676	5.348
52	1.013	1.714	2.144	2.522	2.964	3.894	4.664	5.335
53	1.009	1.709	2.139	2.515	2.957	3.885	4.653	5.322
54	1.006	1.704	2.133	2.509	2.950	3.875	4.642	5.310
55	1.002	1.700	2.128	2.503	2.943	3.867	4.632	5.298
56	.999	1.695	2.123	2.497	2.936	3.858	4.622	5.287
57	.996	1.691	2.117	2.491	2.929	3.850	4.612	5.276
58	.993	1.687	2.113	2.486	2.923	3.842	4.602	5.265
59	.989	1.683	2.108	2.480	2.917	3.834	4.593	5.254
60	.986	1.679	2.103	2.475	2.911	3.826	4.584	5.244
61	.984	1.675	2.099	2.470	2.905	3.819	4.576	5.234
62	.981	1.671	2.094	2.465	2.899	3.812	4.567	5.225
63	.978	1.668	2.090	2.460	2.894	3.805	4.559	5.215
64	.975	1.664	2.086	2.456	2.889	3.798	4.551	5.206
65	.973	1.661	2.082	2.451	2.883	3.791	4.543	5.198
66	.970	1.657	2.078	2.447	2.878	3.785	4.536	5.189
67	.968	1.654	2.074	2.442	2.873	3.779	4.528	5.181
68	.965	1.651	2.070	2.438	2.869	3.773	4.521	5.172
69	.963	1.648	2.067	2.434	2.864	3.767	4.514	5.164
70	.961	1.645	2.063	2.430	2.859	3.761	4.507	5.157
71	.958	1.642	2.060	2.426	2.855	3.755	4.500	5.149
72	.956	1.639	2.056	2.422	2.850	3.750	4.494	5.142
73	.954	1.636	2.053	2.418	2.846	3.744	4.487	5.134
74	.952	1.633	2.050	2.415	2.842	3.739	4.481	5.127
75	.950	1.630	2.047	2.411	2.838	3.734	4.475	5.121
76	.948	1.628	2.044	2.408	2.834	3.729	4.469	5.114
77	.946	1.625	2.041	2.404	2.830	3.724	4.463	5.107
78	.944	1.623	2.038	2.401	2.826	3.719	4.458	5.101
79	.942	1.620	2.035	2.398	2.822	3.714	4.452	5.094
80	.940	1.618	2.032	2.394	2.819	3.710	4.447	5.088
81	.938	1.615	2.029	2.391	2.815	3.705	4.441	5.082
82	.936	1.613	2.026	2.388	2.812	3.701	4.436	5.076
83	.935	1.611	2.024	2.385	2.808	3.696	4.431	5.070
84	.933	1.608	2.021	2.382	2.805	3.692	4.426	5.065
85	.931	1.606	2.019	2.379	2.802	3.688	4.421	5.059
86	.930	1.604	2.016	2.377	2.798	3.684	4.416	5.054
87	.928	1.602	2.014	2.374	2.795	3.680	4.412	5.048
88	.926	1.600	2.011	2.371	2.792	3.676	4.407	5.043
89	.925	1.598	2.009	2.368	2.789	3.672	4.402	5.038
90	.923	1.596	2.006	2.366	2.786	3.668	4.398	5.033

2.3 Values of k for f = n - 1 and $\gamma = .975$ (Continued)

$$\Pr\left\{T_f \leq k\sqrt{n} \,\middle|\, K_p \sqrt{n}\right\} = \gamma$$

	P							
n	.75000	.90000	.95000	.97500	.99000	.99900	.99990	.99999
91	.922	1.594	2.004	2.363	2.783	3.664	4.394	5.028
92	.920	1.592	2.002	2.361	2.780	3.661	4.389	5.023
93	.919	1.590	2.000	2.358	2.777	3.657	4.385	5.018
94	.918	1.588	1.998	2.356	2.775	3.654	4.381	5.014
95	.916	1.586	1.995	2.353	2.772	3.650	4.377	5.009
96	.915	1.585	1.993	2.351	2.769	3.647	4.373	5.004
97	.913	1.583	1.991	2.349	2.767	3.644	4.369	5.000
98	.912	1.581	1.989	2.346	2.764	3.640	4.365	4.996
99	.911	1.579	1.987	2.344	2.761	3.637	4.361	4.991
100	.909	1.578	1.985	2.342	2.759	3.634	4.357	4.987
101	.908	1.576	1.983	2.340	2.756	3.631	4.354	4.983
102	.907	1.574	1.981	2.338	2.754	3.628	4.350	4.979
103	.906	1.573	1.980	2.335	2.752	3.625	4.347	4.975
104	.904	1.571	1.978	2.333	2.749	3.622	4.343	4.971
105	.903	1.570	1.976	2.331	2.747	3.619	4.340	4.967
106	.902	1.568	1.974	2.329	2.745	3.616	4.336	4.963
107	.901	1.567	1.972	2.327	2.742	3.613	4.333	4.959
108	.900	1.565	1.971	2.325	2.740	3.610	4.330	4.956
109	.899	1.564	1.969	2.324	2.738	3.607	4.326	4.952
110	.898	1.562	1.967	2.322	2.736	3.605	4.323	4.948
111	.896	1.561	1.966	2.320	2.734	3.602	4.320	4.945
112	.895	1.559	1.964	2.318	2.732	3.599	4.317	4.941
113	.894	1.558	1.963	2.316	2.730	3.597	4.314	4.938
114	.893	1.557	1.961	2.314	2.728	3.594	4.311	4.934
115	.892	1.555	1.959	2.313	2.726	3.592	4.308	4.931
116	.891	1.554	1.958	2.311	2.724	3.589	4.305	4.928
117	.890	1.553	1.956	2.309	2.722	3.587	4.302	4.924
118	.889	1.551	1.955	2.308	2.720	3.584	4.299	4.921
119	.888	1.550	1.953	2.306	2.718	3.582	4.296	4.918
120	.887	1.549	1.952	2.304	2.716	3.580	4.294	4.915
121	.886	1.548	1.951	2.303	2.714	3.577	4.291	4.912
122	.885	1.546	1.949	2.301	2.712	3.575	4.288	4.909
123	.884	1.545	1.948	2.299	2.711	3.573	4.286	4.906
124	.884	1.544	1.946	2.298	2.709	3.571	4.283	4.903
125	.883	1.543	1.945	2.296	2.707	3.568	4.280	4.900
126	.882	1.542	1.944	2.295	2.705	3.566	4.278	4.897
127	.881	1.541	1.942	2.293	2.704	3.564	4.275	4.894
128	.880	1.539	1.941	2.292	2.702	3.562	4.273	4.891
129	.879	1.538	1.940	2.290	2.700	3.560	4.270	4.889
130	.878	1.537	1.938	2.289	2.699	3.558	4.268	4.886
131	.877	1.536	1.937	2.288	2.697	3.556	4.266	4.883
132	.877	1.535	1.936	2.286	2.696	3.554	4.263	4.880
133	.876	1.534	1.935	2.285	2.694	3.552	4.261	4.878
134	.875	1.533	1.934	2.283	2.692	3.550	4.259	4.875
135	.874	1.532	1.932	2.282	2.691	3.548	4.256	4.873

2.3 Values of k for f = n - 1 and γ = .975 (Continued)

$$\Pr\left\{T_f \leq k\sqrt{n} \,\middle|\, K_p\sqrt{n}\right\} = \gamma$$

	P							
n	.75000	.90000	.95000	.97500	.99000	.99900	.99990	.99999
136	.873	1.531	1.931	2.281	2.689	3.546	4.254	4.870
137	.873	1.530	1.930	2.279	2.688	3.544	4.252	4.868
138	.872	1.529	1.929	2.278	2.686	3.542	4.250	4.865
139	.871	1.528	1.928	2.277	2.685	3.541	4.248	4.863
140	.870	1.527	1.927	2.276	2.684	3.539	4.245	4.860
141	.870	1.526	1.925	2.274	2.682	3.537	4.243	4.858
142	.869	1.525	1.924	2.273	2.681	3.535	4.241	4.855
143	.868	1.524	1.923	2.272	2.679	3.533	4.239	4.853
144	.867	1.523	1.922	2.271	2.678	3.532	4.237	4.851
145	.867	1.522	1.921	2.270	2.677	3.530	4.235	4.848
146	.866	1.521	1.920	2.268	2.675	3.528	4.233	4.846
147	.865	1.520	1.919	2.267	2.674	3.527	4.231	4.844
148	.865	1.520	1.918	2.266	2.673	3.525	4.229	4.842
149	.864	1.519	1.917	2.265	2.671	3.523	4.227	4.840
150	.863	1.518	1.916	2.264	2.670	3.522	4.225	4.837
151	.863	1.517	1.915	2.263	2.669	3.520	4.223	4.835
152	.862	1.516	1.914	2.261	2.667	3.518	4.222	4.833
153	.861	1.515	1.913	2.260	2.666	3.517	4.220	4.831
154	.861	1.514	1.912	2.259	2.665	3.515	4.218	4.829
155	.860	1.514	1.911	2.258	2.664	3.514	4.216	4.827
156	.859	1.513	1.910	2.257	2.663	3.512	4.214	4.825
157	.859	1.512	1.909	2.256	2.661	3.511	4.212	4.823
158	.858	1.511	1.908	2.255	2.660	3.509	4.211	4.821
159	.857	1.510	1.907	2.254	2.659	3.508	4.209	4.819
160	.857	1.510	1.906	2.253	2.658	3.506	4.207	4.817
161	.856	1.509	1.906	2.252	2.657	3.505	4.206	4.815
162	.856	1.508	1.905	2.251	2.656	3.503	4.204	4.813
163	.855	1.507	1.904	2.250	2.654	3.502	4.202	4.811
164	.854	1.507	1.903	2.249	2.653	3.501	4.201	4.809
165	.854	1.506	1.902	2.248	2.652	3.499	4.199	4.808
166	.853	1.505	1.901	2.247	2.651	3.498	4.197	4.806
167	.853	1.504	1.900	2.246	2.650	3.496	4.196	4.804
168	.852	1.504	1.900	2.245	2.649	3.495	4.194	4.802
169	.852	1.503	1.899	2.244	2.648	3.494	4.192	4.800
170	.851	1.502	1.898	2.243	2.647	3.492	4.191	4.799
171	.850	1.501	1.897	2.242	2.646	3.491	4.189	4.797
172	.850	1.501	1.896	2.241	2.645	3.490	4.188	4.795
173	.849	1.500	1.895	2.241	2.644	3.488	4.186	4.793
174	.849	1.499	1.895	2.240	2.643	3.487	4.185	4.792
175	.848	1.499	1.894	2.239	2.642	3.486	4.183	4.790
176	.848	1.498	1.893	2.238	2.641	3.485	4.182	4.788
177	.847	1.497	1.892	2.237	2.640	3.483	4.180	4.787
178	.847	1.497	1.892	2.236	2.639	3.482	4.179	4.785
179	.846	1.496	1.891	2.235	2.638	3.481	4.178	4.783
180	.846	1.495	1.890	2.235	2.637	3.480	4.176	4.782

2.3 Values of k for f = n - 1 and γ = .975 (Continued)

$$Pr\left\{T_f \leq k\sqrt{n} \,\middle|\, K_p\sqrt{n}\right\} = \gamma$$

	P							
n	.75000	.90000	.95000	.97500	.99000	.99900	.99990	.99999
181	.845	1.495	1.889	2.234	2.636	3.479	4.175	4.780
182	.845	1.494	1.889	2.233	2.635	3.477	4.173	4.779
183	.844	1.494	1.888	2.232	2.634	3.476	4.172	4.777
184	.844	1.493	1.887	2.231	2.633	3.475	4.171	4.775
185	.843	1.492	1.886	2.230	2.632	3.474	4.169	4.774
186	.843	1.492	1.886	2.230	2.631	3.473	4.168	4.772
187	.842	1.491	1.885	2.229	2.630	3.472	4.167	4.771
188	.842	1.490	1.884	2.228	2.629	3.470	4.165	4.769
189	.841	1.490	1.884	2.227	2.629	3.469	4.164	4.768
190	.841	1.489	1.883	2.226	2.628	3.468	4.163	4.766
191	.840	1.489	1.882	2.226	2.627	3.467	4.161	4.765
192	.840	1.488	1.882	2.225	2.626	3.466	4.160	4.763
193	.839	1.487	1.881	2.224	2.625	3.465	4.159	4.762
194	.839	1.487	1.880	2.223	2.624	3.464	4.157	4.761
195	.839	1.486	1.880	2.223	2.623	3.463	4.156	4.759
196	.838	1.486	1.879	2.222	2.623	3.462	4.155	4.758
197	.838	1.485	1.878	2.221	2.622	3.461	4.154	4.756
198	.837	1.485	1.878	2.220	2.621	3.460	4.153	4.755
199	.837	1.484	1.877	2.220	2.620	3.459	4.151	4.754
200	.836	1.484	1.876	2.219	2.619	3.458	4.150	4.752
205	.834	1.481	1.873	2.216	2.615	3.453	4.144	4.746
210	.832	1.478	1.870	2.212	2.612	3.448	4.139	4.739
215	.830	1.476	1.867	2.209	2.608	3.443	4.133	4.733
220	.828	1.473	1.865	2.206	2.604	3.439	4.128	4.727
225	.827	1.471	1.862	2.203	2.601	3.435	4.123	4.722
230	.825	1.469	1.859	2.200	2.598	3.430	4.118	4.716
235	.823	1.467	1.857	2.197	2.595	3.426	4.113	4.711
240	.822	1.465	1.854	2.195	2.591	3.423	4.109	4.706
245	.820	1.463	1.852	2.192	2.589	3.419	4.105	4.701
250	.818	1.461	1.850	2.189	2.586	3.415	4.100	4.696
255	.817	1.459	1.848	2.187	2.583	3.412	4.096	4.691
260	.815	1.457	1.846	2.185	2.580	3.408	4.092	4.687
265	.814	1.455	1.844	2.182	2.578	3.405	4.088	4.682
270	.813	1.453	1.842	2.180	2.575	3.402	4.085	4.678
275	.811	1.452	1.840	2.178	2.573	3.399	4.081	4.674
280	.810	1.450	1.838	2.176	2.570	3.396	4.077	4.670
285	.809	1.449	1.836	2.174	2.568	3.393	4.074	4.666
290	.808	1.447	1.834	2.172	2.566	3.390	4.071	4.662
295	.806	1.445	1.832	2.170	2.563	3.387	4.067	4.659
300	.805	1.444	1.831	2.168	2.561	3.385	4.064	4.655
305	.804	1.443	1.829	2.166	2.559	3.382	4.061	4.652
310	.803	1.441	1.827	2.164	2.557	3.379	4.058	4.648
315	.802	1.440	1.826	2.162	2.555	3.377	4.055	4.645
320	.801	1.439	1.824	2.161	2.553	3.374	4.052	4.642
325	.800	1.437	1.823	2.159	2.551	3.372	4.050	4.639

2.3 Values of k for f = n - 1 and γ = .975 (Continued)

$$\Pr\left\{T_f \leq k\sqrt{n} \,\middle|\, K_p\sqrt{n}\right\} = \gamma$$

	P							
n	.75000	.90000	.95000	.97500	.99000	.99900	.99990	.99999
330	.799	1.436	1.821	2.157	2.549	3.370	4.047	4.635
335	.798	1.435	1.820	2.156	2.548	3.368	4.044	4.632
340	.797	1.434	1.819	2.154	2.546	3.365	4.042	4.630
345	.796	1.432	1.817	2.153	2.544	3.363	4.039	4.627
350	.795	1.431	1.816	2.151	2.543	3.361	4.037	4.624
355	.794	1.430	1.815	2.150	2.541	3.359	4.034	4.621
360	.793	1.429	1.813	2.148	2.539	3.357	4.032	4.618
365	.793	1.428	1.812	2.147	2.538	3.355	4.029	4.616
370	.792	1.427	1.811	2.146	2.536	3.353	4.027	4.613
375	.791	1.426	1.810	2.144	2.535	3.351	4.025	4.611
380	.790	1.425	1.809	2.143	2.533	3.349	4.023	4.608
385	.789	1.424	1.808	2.142	2.532	3.348	4.021	4.606
390	.789	1.423	1.806	2.141	2.530	3.346	4.019	4.604
395	.788	1.422	1.805	2.139	2.529	3.344	4.017	4.601
400	.787	1.421	1.804	2.138	2.528	3.342	4.015	4.599
425	.784	1.417	1.799	2.133	2.521	3.334	4.005	4.588
450	.780	1.413	1.795	2.127	2.515	3.327	3.997	4.579
475	.777	1.409	1.790	2.123	2.510	3.320	3.989	4.570
500	.775	1.406	1.787	2.118	2.505	3.314	3.981	4.561
525	.772	1.402	1.783	2.114	2.501	3.308	3.975	4.554
550	.770	1.400	1.780	2.110	2.496	3.303	3.968	4.547
575	.768	1.397	1.776	2.107	2.492	3.298	3.963	4.540
600	.766	1.394	1.774	2.104	2.489	3.293	3.957	4.534
625	.764	1.392	1.771	2.101	2.485	3.289	3.952	4.528
650	.762	1.390	1.768	2.098	2.482	3.285	3.947	4.523
675	.760	1.388	1.766	2.095	2.479	3.281	3.943	4.518
700	.759	1.386	1.764	2.093	2.476	3.278	3.939	4.513
725	.757	1.384	1.761	2.090	2.473	3.274	3.935	4.508
750	.756	1.382	1.759	2.088	2.471	3.271	3.931	4.504
775	.754	1.380	1.757	2.086	2.468	3.268	3.927	4.500
800	.753	1.379	1.756	2.084	2.466	3.265	3.924	4.496
825	.752	1.377	1.754	2.082	2.464	3.262	3.920	4.492
850	.751	1.376	1.752	2.080	2.462	3.259	3.917	4.489
875	.750	1.374	1.751	2.078	2.460	3.257	3.914	4.485
900	.749	1.373	1.749	2.076	2.458	3.254	3.911	4.482
925	.748	1.372	1.748	2.075	2.456	3.252	3.909	4.479
950	.747	1.370	1.746	2.073	2.454	3.250	3.906	4.476
975	.746	1.369	1.745	2.072	2.452	3.248	3.904	4.473
1000	.745	1.368	1.743	2.070	2.451	3.246	3.901	4.471
1500	.732	1.352	1.725	2.049	2.427	3.216	3.866	4.431
2000	.724	1.342	1.714	2.037	2.413	3.199	3.846	4.408
3000	.715	1.331	1.701	2.023	2.397	3.178	3.822	4.381
5000	.706	1.320	1.688	2.008	2.381	3.158	3.799	4.355
10000	.696	1.308	1.675	1.994	2.365	3.138	3.775	4.328
∞	.674	1.282	1.645	1.960	2.326	3.090	3.719	4.265

2.4 Values of k for f = n - 1 and $\gamma = .95$

$$\Pr\left\{T_f \leq k\sqrt{n} \,\middle|\, K_p\sqrt{n}\right\} = \gamma$$

	P							
n	.75000	.90000	.95000	.97500	.99000	.99900	.99990	.99999
2	11.763	20.581	26.260	31.257	37.094	49.276	59.304	68.010
3	3.806	6.155	7.656	8.986	10.553	13.857	16.598	18.986
4	2.618	4.162	5.144	6.015	7.042	9.214	11.019	12.593
5	2.150	3.407	4.203	4.909	5.741	7.502	8.966	10.243
6	1.895	3.006	3.708	4.329	5.062	6.612	7.901	9.025
7	1.732	2.755	3.399	3.970	4.642	6.063	7.244	8.275
8	1.618	2.582	3.187	3.723	4.354	5.688	6.796	7.763
9	1.532	2.454	3.031	3.542	4.143	5.413	6.469	7.390
10	1.465	2.355	2.911	3.402	3.981	5.203	6.219	7.105
11	1.411	2.275	2.815	3.292	3.852	5.036	6.020	6.878
12	1.366	2.210	2.736	3.201	3.747	4.900	5.858	6.694
13	1.328	2.155	2.671	3.125	3.659	4.787	5.723	6.540
14	1.296	2.109	2.614	3.060	3.585	4.690	5.609	6.409
15	1.268	2.068	2.566	3.005	3.520	4.607	5.510	6.297
16	1.243	2.033	2.524	2.956	3.464	4.535	5.424	6.199
17	1.220	2.002	2.486	2.913	3.414	4.471	5.348	6.113
18	1.201	1.974	2.453	2.875	3.370	4.415	5.281	6.037
19	1.183	1.949	2.423	2.841	3.331	4.364	5.221	5.968
20	1.166	1.926	2.396	2.810	3.295	4.318	5.167	5.906
21	1.152	1.905	2.371	2.781	3.263	4.277	5.118	5.850
22	1.138	1.886	2.349	2.756	3.233	4.239	5.073	5.799
23	1.125	1.869	2.328	2.732	3.206	4.204	5.031	5.752
24	1.114	1.853	2.309	2.710	3.181	4.172	4.994	5.709
25	1.103	1.838	2.292	2.690	3.158	4.142	4.959	5.670
26	1.093	1.824	2.275	2.672	3.136	4.115	4.926	5.633
27	1.083	1.811	2.260	2.654	3.116	4.089	4.896	5.598
28	1.075	1.799	2.246	2.638	3.098	4.066	4.868	5.566
29	1.066	1.788	2.232	2.623	3.080	4.043	4.841	5.536
30	1.058	1.777	2.220	2.608	3.064	4.022	4.816	5.508
31	1.051	1.767	2.208	2.595	3.048	4.002	4.793	5.481
32	1.044	1.758	2.197	2.582	3.034	3.984	4.771	5.456
33	1.037	1.749	2.186	2.570	3.020	3.966	4.750	5.433
34	1.031	1.740	2.176	2.559	3.007	3.950	4.730	5.410
35	1.025	1.732	2.167	2.548	2.995	3.934	4.712	5.389
36	1.019	1.725	2.158	2.538	2.983	3.919	4.694	5.369
37	1.014	1.717	2.149	2.528	2.972	3.904	4.677	5.350
38	1.009	1.710	2.141	2.518	2.961	3.891	4.661	5.332
39	1.004	1.704	2.133	2.510	2.951	3.878	4.646	5.314
40	.999	1.697	2.125	2.501	2.941	3.865	4.631	5.298
41	.994	1.691	2.118	2.493	2.932	3.854	4.617	5.282
42	.990	1.685	2.111	2.485	2.923	3.842	4.603	5.266
43	.986	1.680	2.105	2.478	2.914	3.831	4.591	5.252
44	.982	1.674	2.098	2.470	2.906	3.821	4.578	5.238
45	.978	1.669	2.092	2.463	2.898	3.811	4.566	5.224

2.4 Values of k for f = n - 1 and $\gamma = .95$ (Continued)

$$\Pr\left\{T_f \leq k\sqrt{n} \mid K_p \sqrt{n}\right\} = \gamma$$

	P							
n	.75000	.90000	.95000	.97500	.99000	.99900	.99990	.99999
46	.974	1.664	2.086	2.457	2.890	3.801	4.555	5.211
47	.971	1.659	2.081	2.450	2.883	3.792	4.544	5.199
48	.967	1.654	2.075	2.444	2.876	3.783	4.533	5.187
49	.964	1.650	2.070	2.438	2.869	3.774	4.523	5.175
50	.960	1.646	2.065	2.432	2.862	3.766	4.513	5.164
51	.957	1.641	2.060	2.427	2.856	3.758	4.504	5.153
52	.954	1.637	2.055	2.421	2.850	3.750	4.494	5.142
53	.951	1.633	2.051	2.416	2.844	3.742	4.485	5.132
54	.948	1.630	2.046	2.411	2.838	3.735	4.477	5.123
55	.945	1.626	2.042	2.406	2.833	3.728	4.468	5.113
56	.943	1.622	2.038	2.401	2.827	3.721	4.460	5.104
57	.940	1.619	2.034	2.397	2.822	3.714	4.452	5.095
58	.938	1.615	2.030	2.392	2.817	3.708	4.445	5.086
59	.935	1.612	2.026	2.388	2.812	3.701	4.437	5.078
60	.933	1.609	2.022	2.384	2.807	3.695	4.430	5.070
61	.930	1.606	2.019	2.380	2.802	3.689	4.423	5.062
62	.928	1.603	2.015	2.376	2.798	3.684	4.416	5.054
63	.926	1.600	2.012	2.372	2.793	3.678	4.410	5.047
64	.924	1.597	2.008	2.368	2.789	3.673	4.403	5.039
65	.921	1.594	2.005	2.364	2.785	3.667	4.397	5.032
66	.919	1.591	2.002	2.361	2.781	3.662	4.391	5.025
67	.917	1.589	1.999	2.357	2.777	3.657	4.385	5.018
68	.915	1.586	1.996	2.354	2.773	3.652	4.379	5.012
69	.913	1.584	1.993	2.351	2.769	3.647	4.373	5.005
70	.911	1.581	1.990	2.347	2.765	3.643	4.368	4.999
71	.910	1.579	1.987	2.344	2.762	3.638	4.362	4.993
72	.908	1.576	1.984	2.341	2.758	3.633	4.357	4.987
73	.906	1.574	1.982	2.338	2.755	3.629	4.352	4.981
74	.904	1.572	1.979	2.335	2.751	3.625	4.347	4.975
75	.903	1.570	1.976	2.332	2.748	3.621	4.342	4.970
76	.901	1.568	1.974	2.329	2.745	3.617	4.337	4.964
77	.899	1.565	1.971	2.327	2.742	3.613	4.333	4.959
78	.898	1.563	1.969	2.324	2.739	3.609	4.328	4.954
79	.896	1.561	1.967	2.321	2.736	3.605	4.323	4.949
80	.895	1.559	1.964	2.319	2.733	3.601	4.319	4.944
81	.893	1.557	1.962	2.316	2.730	3.597	4.315	4.939
82	.892	1.556	1.960	2.314	2.727	3.594	4.310	4.934
83	.890	1.554	1.958	2.311	2.724	3.590	4.306	4.929
84	.889	1.552	1.956	2.309	2.721	3.587	4.302	4.925
85	.888	1.550	1.954	2.306	2.719	3.583	4.298	4.920
86	.886	1.548	1.952	2.304	2.716	3.580	4.294	4.916
87	.885	1.547	1.950	2.302	2.714	3.577	4.291	4.911
88	.884	1.545	1.948	2.300	2.711	3.574	4.287	4.907
89	.882	1.543	1.946	2.297	2.709	3.571	4.283	4.903
90	.881	1.542	1.944	2.295	2.706	3.567	4.279	4.899

2.4 Values of k for f = n - 1 and γ = .95 (Continued)

$$\Pr\left\{T_f \leq k\sqrt{n} \,\middle|\, K_p\sqrt{n}\right\} = \gamma$$

	P							
n	.75000	.90000	.95000	.97500	.99000	.99900	.99990	.99999
91	.880	1.540	1.942	2.293	2.704	3.564	4.276	4.895
92	.879	1.538	1.940	2.291	2.701	3.561	4.272	4.891
93	.877	1.537	1.938	2.289	2.699	3.559	4.269	4.887
94	.876	1.535	1.937	2.287	2.697	3.556	4.266	4.883
95	.875	1.534	1.935	2.285	2.695	3.553	4.262	4.879
96	.874	1.532	1.933	2.283	2.692	3.550	4.259	4.876
97	.873	1.531	1.931	2.281	2.690	3.547	4.256	4.872
98	.872	1.530	1.930	2.279	2.688	3.545	4.253	4.869
99	.871	1.528	1.928	2.278	2.686	3.542	4.250	4.865
100	.870	1.527	1.927	2.276	2.684	3.539	4.247	4.862
101	.869	1.525	1.925	2.274	2.682	3.537	4.244	4.858
102	.868	1.524	1.923	2.272	2.680	3.534	4.241	4.855
103	.867	1.523	1.922	2.271	2.678	3.532	4.238	4.852
104	.866	1.521	1.920	2.269	2.676	3.530	4.235	4.848
105	.865	1.520	1.919	2.267	2.674	3.527	4.232	4.845
106	.864	1.519	1.917	2.266	2.672	3.525	4.229	4.842
107	.863	1.518	1.916	2.264	2.671	3.523	4.227	4.839
108	.862	1.517	1.915	2.262	2.669	3.520	4.224	4.836
109	.861	1.515	1.913	2.261	2.667	3.518	4.221	4.833
110	.860	1.514	1.912	2.259	2.665	3.516	4.219	4.830
111	.859	1.513	1.911	2.258	2.663	3.514	4.216	4.827
112	.858	1.512	1.909	2.256	2.662	3.511	4.214	4.824
113	.857	1.511	1.908	2.255	2.660	3.509	4.211	4.821
114	.856	1.510	1.907	2.253	2.658	3.507	4.209	4.819
115	.855	1.508	1.905	2.252	2.657	3.505	4.206	4.816
116	.855	1.507	1.904	2.251	2.655	3.503	4.204	4.813
117	.854	1.506	1.903	2.249	2.654	3.501	4.201	4.811
118	.853	1.505	1.902	2.248	2.652	3.499	4.199	4.808
119	.852	1.504	1.900	2.246	2.651	3.497	4.197	4.805
120	.851	1.503	1.899	2.245	2.649	3.495	4.195	4.803
121	.851	1.502	1.898	2.244	2.648	3.493	4.192	4.800
122	.850	1.501	1.897	2.242	2.646	3.492	4.190	4.798
123	.849	1.500	1.896	2.241	2.645	3.490	4.188	4.795
124	.848	1.499	1.895	2.240	2.643	3.488	4.186	4.793
125	.848	1.498	1.894	2.239	2.642	3.486	4.184	4.790
126	.847	1.497	1.893	2.237	2.640	3.484	4.182	4.788
127	.846	1.496	1.891	2.236	2.639	3.483	4.180	4.786
128	.845	1.496	1.890	2.235	2.638	3.481	4.178	4.784
129	.845	1.495	1.889	2.234	2.636	3.479	4.176	4.781
130	.844	1.494	1.888	2.233	2.635	3.478	4.174	4.779
131	.843	1.493	1.887	2.232	2.634	3.476	4.172	4.777
132	.843	1.492	1.886	2.230	2.632	3.474	4.170	4.775
133	.842	1.491	1.885	2.229	2.631	3.473	4.168	4.772
134	.841	1.490	1.884	2.228	2.630	3.471	4.166	4.770
135	.841	1.489	1.883	2.227	2.628	3.469	4.164	4.768

2.4 Values of k for f = n - 1 and γ = .95 (Continued)

$$\Pr\left\{T_f \leq k\sqrt{n} \,\middle|\, K_p \sqrt{n}\right\} = \gamma$$

	P							
n	.75000	.90000	.95000	.97500	.99000	.99900	.99990	.99999
136	.840	1.489	1.882	2.226	2.627	3.468	4.162	4.766
137	.839	1.488	1.881	2.225	2.626	3.466	4.160	4.764
138	.839	1.487	1.880	2.224	2.625	3.465	4.159	4.762
139	.838	1.486	1.879	2.223	2.624	3.463	4.157	4.760
140	.837	1.485	1.879	2.222	2.622	3.462	4.155	4.758
141	.837	1.485	1.878	2.221	2.621	3.460	4.153	4.756
142	.836	1.484	1.877	2.220	2.620	3.459	4.152	4.754
143	.836	1.483	1.876	2.219	2.619	3.457	4.150	4.752
144	.835	1.482	1.875	2.218	2.618	3.456	4.148	4.750
145	.834	1.481	1.874	2.217	2.617	3.455	4.147	4.748
146	.834	1.481	1.873	2.216	2.616	3.453	4.145	4.747
147	.833	1.480	1.872	2.215	2.615	3.452	4.143	4.745
148	.833	1.479	1.872	2.214	2.613	3.451	4.142	4.743
149	.832	1.479	1.871	2.213	2.612	3.449	4.140	4.741
150	.832	1.478	1.870	2.212	2.611	3.448	4.139	4.739
151	.831	1.477	1.869	2.211	2.610	3.447	4.137	4.738
152	.830	1.476	1.868	2.210	2.609	3.445	4.136	4.736
153	.830	1.476	1.867	2.209	2.608	3.444	4.134	4.734
154	.829	1.475	1.867	2.208	2.607	3.443	4.133	4.733
155	.829	1.474	1.866	2.207	2.606	3.441	4.131	4.731
156	.828	1.474	1.865	2.207	2.605	3.440	4.130	4.729
157	.828	1.473	1.864	2.206	2.604	3.439	4.128	4.728
158	.827	1.472	1.864	2.205	2.603	3.438	4.127	4.726
159	.827	1.472	1.863	2.204	2.602	3.436	4.125	4.724
160	.826	1.471	1.862	2.203	2.601	3.435	4.124	4.723
161	.826	1.470	1.861	2.202	2.600	3.434	4.122	4.721
162	.825	1.470	1.861	2.201	2.600	3.433	4.121	4.720
163	.825	1.469	1.860	2.201	2.599	3.432	4.120	4.718
164	.824	1.469	1.859	2.200	2.598	3.431	4.118	4.716
165	.824	1.468	1.858	2.199	2.597	3.429	4.117	4.715
166	.823	1.467	1.858	2.198	2.596	3.428	4.116	4.713
167	.823	1.467	1.857	2.198	2.595	3.427	4.114	4.712
168	.822	1.466	1.856	2.197	2.594	3.426	4.113	4.710
169	.822	1.466	1.856	2.196	2.593	3.425	4.112	4.709
170	.822	1.465	1.855	2.195	2.592	3.424	4.111	4.708
171	.821	1.464	1.854	2.194	2.592	3.423	4.109	4.706
172	.821	1.464	1.854	2.194	2.591	3.422	4.108	4.705
173	.820	1.463	1.853	2.193	2.590	3.421	4.107	4.703
174	.820	1.463	1.852	2.192	2.589	3.420	4.106	4.702
175	.819	1.462	1.852	2.192	2.588	3.419	4.104	4.701
176	.819	1.462	1.851	2.191	2.587	3.418	4.103	4.699
177	.818	1.461	1.850	2.190	2.587	3.417	4.102	4.698
178	.818	1.460	1.850	2.189	2.586	3.416	4.101	4.696
179	.818	1.460	1.849	2.189	2.585	3.415	4.100	4.695
180	.817	1.459	1.849	2.188	2.584	3.414	4.098	4.694

2.4 Values of k for f = n - 1 and $\gamma = .95$ (Continued)

$$\Pr\left\{T_f \leq k\sqrt{n} \,\middle|\, K_p\sqrt{n}\right\} = \gamma$$

	P							
n	.75000	.90000	.95000	.97500	.99000	.99900	.99990	.99999
181	.817	1.459	1.848	2.187	2.583	3.413	4.097	4.692
182	.816	1.458	1.847	2.187	2.583	3.412	4.096	4.691
183	.816	1.458	1.847	2.186	2.582	3.411	4.095	4.690
184	.815	1.457	1.846	2.185	2.581	3.410	4.094	4.689
185	.815	1.457	1.846	2.185	2.580	3.409	4.093	4.687
186	.815	1.456	1.845	2.184	2.580	3.408	4.092	4.686
187	.814	1.456	1.844	2.183	2.579	3.407	4.090	4.685
188	.814	1.455	1.844	2.183	2.578	3.406	4.089	4.684
189	.814	1.455	1.843	2.182	2.577	3.405	4.088	4.682
190	.813	1.454	1.843	2.181	2.577	3.404	4.087	4.681
191	.813	1.454	1.842	2.181	2.576	3.403	4.086	4.680
192	.812	1.453	1.842	2.180	2.575	3.402	4.085	4.679
193	.812	1.453	1.841	2.179	2.575	3.401	4.084	4.678
194	.812	1.452	1.840	2.179	2.574	3.401	4.083	4.676
195	.811	1.452	1.840	2.178	2.573	3.400	4.082	4.675
196	.811	1.451	1.839	2.178	2.572	3.399	4.081	4.674
197	.811	1.451	1.839	2.177	2.572	3.398	4.080	4.673
198	.810	1.450	1.838	2.176	2.571	3.397	4.079	4.672
199	.810	1.450	1.838	2.176	2.570	3.396	4.078	4.671
200	.809	1.450	1.837	2.175	2.570	3.395	4.077	4.670
205	.808	1.447	1.835	2.172	2.566	3.391	4.072	4.664
210	.806	1.445	1.832	2.170	2.563	3.387	4.068	4.659
215	.804	1.443	1.830	2.167	2.560	3.384	4.063	4.654
220	.803	1.441	1.828	2.164	2.557	3.380	4.059	4.649
225	.801	1.439	1.825	2.162	2.555	3.376	4.055	4.644
230	.800	1.437	1.823	2.160	2.552	3.373	4.051	4.640
235	.798	1.436	1.821	2.157	2.549	3.370	4.047	4.635
240	.797	1.434	1.819	2.155	2.547	3.367	4.043	4.631
245	.796	1.432	1.817	2.153	2.544	3.363	4.040	4.627
250	.795	1.431	1.815	2.151	2.542	3.361	4.036	4.623
255	.793	1.429	1.814	2.149	2.540	3.358	4.033	4.619
260	.792	1.428	1.812	2.147	2.537	3.355	4.029	4.616
265	.791	1.426	1.810	2.145	2.535	3.352	4.026	4.612
270	.790	1.425	1.809	2.143	2.533	3.349	4.023	4.609
275	.789	1.423	1.807	2.141	2.531	3.347	4.020	4.605
280	.788	1.422	1.805	2.140	2.529	3.344	4.017	4.602
285	.787	1.421	1.804	2.138	2.527	3.342	4.014	4.599
290	.786	1.419	1.802	2.136	2.525	3.340	4.012	4.596
295	.785	1.418	1.801	2.135	2.524	3.337	4.009	4.593
300	.784	1.417	1.800	2.133	2.522	3.335	4.006	4.590
305	.783	1.416	1.798	2.132	2.520	3.333	4.004	4.587
310	.782	1.415	1.797	2.130	2.518	3.331	4.001	4.584
315	.781	1.413	1.796	2.129	2.517	3.329	3.999	4.581
320	.780	1.412	1.794	2.127	2.515	3.327	3.996	4.579
325	.779	1.411	1.793	2.126	2.514	3.325	3.994	4.576

2.4 Values of k for f = n - 1 and $\gamma = .95$ (Continued)

$$\Pr\left\{T_f \leq k\sqrt{n} \,\middle|\, K_p\sqrt{n}\right\} = \gamma$$

	P							
n	.75000	.90000	.95000	.97500	.99000	.99900	.99990	.99999
330	.778	1.410	1.792	2.124	2.512	3.323	3.992	4.573
335	.778	1.409	1.791	2.123	2.511	3.321	3.990	4.571
340	.777	1.408	1.790	2.122	2.509	3.319	3.988	4.568
345	.776	1.407	1.789	2.121	2.508	3.318	3.986	4.566
350	.775	1.406	1.787	2.119	2.506	3.316	3.983	4.564
355	.775	1.405	1.786	2.118	2.505	3.314	3.981	4.562
360	.774	1.404	1.785	2.117	2.504	3.312	3.980	4.559
365	.773	1.404	1.784	2.116	2.502	3.311	3.978	4.557
370	.772	1.403	1.783	2.115	2.501	3.309	3.976	4.555
375	.772	1.402	1.782	2.114	2.500	3.308	3.974	4.553
380	.771	1.401	1.781	2.113	2.499	3.306	3.972	4.551
385	.770	1.400	1.780	2.112	2.498	3.305	3.970	4.549
390	.770	1.399	1.780	2.111	2.496	3.303	3.969	4.547
395	.769	1.399	1.779	2.109	2.495	3.302	3.967	4.545
400	.769	1.398	1.778	2.109	2.494	3.300	3.965	4.543
425	.766	1.394	1.774	2.104	2.489	3.294	3.957	4.534
450	.763	1.391	1.770	2.100	2.484	3.288	3.950	4.526
475	.761	1.388	1.766	2.096	2.480	3.282	3.944	4.519
500	.758	1.385	1.763	2.092	2.475	3.277	3.938	4.512
525	.756	1.382	1.760	2.089	2.472	3.272	3.932	4.506
550	.754	1.380	1.757	2.086	2.468	3.268	3.927	4.500
575	.752	1.378	1.755	2.083	2.465	3.264	3.922	4.495
600	.751	1.376	1.752	2.080	2.462	3.260	3.918	4.489
625	.749	1.374	1.750	2.077	2.459	3.256	3.913	4.485
650	.748	1.372	1.748	2.075	2.456	3.253	3.910	4.480
675	.746	1.370	1.746	2.073	2.454	3.250	3.906	4.476
700	.745	1.368	1.744	2.071	2.451	3.247	3.902	4.472
725	.744	1.367	1.742	2.069	2.449	3.244	3.899	4.468
750	.743	1.365	1.741	2.067	2.447	3.241	3.896	4.465
775	.741	1.364	1.739	2.065	2.445	3.238	3.893	4.461
800	.740	1.363	1.737	2.063	2.443	3.236	3.890	4.458
825	.739	1.361	1.736	2.062	2.441	3.234	3.887	4.455
850	.738	1.360	1.734	2.060	2.439	3.232	3.885	4.452
875	.737	1.359	1.733	2.059	2.438	3.229	3.882	4.449
900	.736	1.358	1.732	2.057	2.436	3.227	3.880	4.446
925	.736	1.357	1.731	2.056	2.434	3.225	3.877	4.444
950	.735	1.356	1.729	2.054	2.433	3.224	3.875	4.441
975	.734	1.355	1.728	2.053	2.432	3.222	3.873	4.439
1000	.733	1.354	1.727	2.052	2.430	3.220	3.871	4.437
1500	.722	1.340	1.712	2.035	2.411	3.196	3.842	4.404
2000	.716	1.332	1.703	2.024	2.399	3.181	3.825	4.385
3000	.708	1.323	1.692	2.012	2.385	3.164	3.806	4.363
5000	.701	1.313	1.681	2.000	2.372	3.147	3.786	4.340
10000	.693	1.304	1.670	1.988	2.358	3.130	3.766	4.318
∞	.674	1.282	1.645	1.960	2.326	3.090	3.719	4.265

2.5 Values of k for f = n - 1 and $\gamma = .90$

$$\Pr\left\{T_f \leq k\sqrt{n} \,\middle|\, K_p\sqrt{n}\right\} = \gamma$$

	P							
n	.75000	.90000	.95000	.97500	.99000	.99900	.99990	.99999
2	5.842	10.253	13.090	15.586	18.500	24.582	29.587	33.932
3	2.603	4.258	5.311	6.244	7.340	9.651	11.566	13.234
4	1.972	3.188	3.957	4.637	5.438	7.129	8.533	9.756
5	1.698	2.742	3.400	3.981	4.666	6.111	7.311	8.358
6	1.540	2.494	3.092	3.620	4.243	5.556	6.646	7.596
7	1.435	2.333	2.894	3.389	3.972	5.202	6.223	7.113
8	1.360	2.219	2.754	3.227	3.783	4.955	5.927	6.775
9	1.302	2.133	2.650	3.106	3.641	4.771	5.708	6.525
10	1.257	2.066	2.568	3.011	3.532	4.629	5.538	6.332
11	1.219	2.011	2.503	2.935	3.443	4.514	5.402	6.176
12	1.188	1.966	2.448	2.872	3.371	4.420	5.290	6.049
13	1.162	1.928	2.402	2.820	3.309	4.341	5.196	5.941
14	1.139	1.895	2.363	2.774	3.257	4.273	5.116	5.850
15	1.119	1.867	2.329	2.735	3.212	4.215	5.047	5.771
16	1.101	1.842	2.299	2.701	3.172	4.164	4.986	5.702
17	1.085	1.819	2.272	2.670	3.137	4.119	4.932	5.641
18	1.071	1.800	2.249	2.643	3.105	4.078	4.884	5.586
19	1.058	1.782	2.227	2.618	3.077	4.042	4.841	5.537
20	1.046	1.765	2.208	2.596	3.052	4.009	4.802	5.493
21	1.035	1.750	2.190	2.576	3.028	3.979	4.767	5.452
22	1.025	1.737	2.174	2.557	3.007	3.952	4.734	5.416
23	1.016	1.724	2.159	2.540	2.987	3.927	4.704	5.382
24	1.007	1.712	2.145	2.525	2.969	3.903	4.677	5.351
25	1.000	1.702	2.132	2.510	2.952	3.882	4.652	5.322
26	.992	1.691	2.120	2.496	2.937	3.862	4.628	5.295
27	.985	1.682	2.109	2.484	2.922	3.843	4.606	5.270
28	.979	1.673	2.099	2.472	2.909	3.826	4.585	5.246
29	.973	1.665	2.089	2.461	2.896	3.810	4.566	5.224
30	.967	1.657	2.080	2.450	2.884	3.794	4.548	5.204
31	.961	1.650	2.071	2.440	2.872	3.780	4.531	5.184
32	.956	1.643	2.063	2.431	2.862	3.766	4.514	5.166
33	.951	1.636	2.055	2.422	2.852	3.753	4.499	5.149
34	.947	1.630	2.048	2.414	2.842	3.741	4.485	5.132
35	.942	1.624	2.041	2.406	2.833	3.729	4.471	5.116
36	.938	1.618	2.034	2.398	2.824	3.718	4.458	5.102
37	.934	1.613	2.028	2.391	2.816	3.708	4.445	5.088
38	.930	1.608	2.022	2.384	2.808	3.698	4.434	5.074
39	.926	1.603	2.016	2.377	2.800	3.688	4.422	5.061
40	.923	1.598	2.010	2.371	2.793	3.679	4.411	5.049
41	.919	1.593	2.005	2.365	2.786	3.670	4.401	5.037
42	.916	1.589	2.000	2.359	2.780	3.662	4.391	5.026
43	.913	1.585	1.995	2.354	2.773	3.654	4.381	5.015
44	.910	1.581	1.990	2.348	2.767	3.646	4.372	5.004
45	.907	1.577	1.986	2.343	2.761	3.638	4.363	4.994

2.5 Values of k for f = n - 1 and γ = .90 (Continued)

$$\Pr\left\{T_f \leq k\sqrt{n} \,\middle|\, K_p\sqrt{n}\right\} = \gamma$$

	P							
n	.75000	.90000	.95000	.97500	.99000	.99900	.99990	.99999
46	.904	1.573	1.981	2.338	2.756	3.631	4.355	4.985
47	.901	1.570	1.977	2.333	2.750	3.624	4.347	4.976
48	.899	1.566	1.973	2.329	2.745	3.617	4.339	4.967
49	.896	1.563	1.969	2.324	2.740	3.611	4.331	4.958
50	.894	1.559	1.965	2.320	2.735	3.605	4.324	4.950
51	.891	1.556	1.962	2.316	2.730	3.599	4.317	4.942
52	.889	1.553	1.958	2.312	2.726	3.593	4.310	4.934
53	.887	1.550	1.955	2.308	2.721	3.587	4.303	4.926
54	.884	1.547	1.951	2.304	2.717	3.582	4.297	4.919
55	.882	1.545	1.948	2.301	2.713	3.577	4.291	4.912
56	.880	1.542	1.945	2.297	2.709	3.571	4.285	4.905
57	.878	1.539	1.942	2.294	2.705	3.566	4.279	4.898
58	.876	1.537	1.939	2.290	2.701	3.562	4.273	4.892
59	.875	1.534	1.936	2.287	2.697	3.557	4.267	4.885
60	.873	1.532	1.933	2.284	2.694	3.552	4.262	4.879
61	.871	1.530	1.931	2.281	2.690	3.548	4.257	4.873
62	.869	1.527	1.928	2.278	2.687	3.544	4.252	4.868
63	.868	1.525	1.925	2.275	2.683	3.539	4.247	4.862
64	.866	1.523	1.923	2.272	2.680	3.535	4.242	4.857
65	.864	1.521	1.920	2.269	2.677	3.531	4.237	4.851
66	.863	1.519	1.918	2.267	2.674	3.527	4.233	4.846
67	.861	1.517	1.916	2.264	2.671	3.524	4.228	4.841
68	.860	1.515	1.913	2.261	2.668	3.520	4.224	4.836
69	.858	1.513	1.911	2.259	2.665	3.516	4.219	4.831
70	.857	1.511	1.909	2.256	2.662	3.513	4.215	4.826
71	.855	1.509	1.907	2.254	2.660	3.509	4.211	4.822
72	.854	1.508	1.905	2.252	2.657	3.506	4.207	4.817
73	.853	1.506	1.903	2.249	2.654	3.503	4.203	4.813
74	.851	1.504	1.901	2.247	2.652	3.499	4.200	4.809
75	.850	1.503	1.899	2.245	2.649	3.496	4.196	4.804
76	.849	1.501	1.897	2.243	2.647	3.493	4.192	4.800
77	.848	1.499	1.895	2.241	2.644	3.490	4.189	4.796
78	.846	1.498	1.893	2.239	2.642	3.487	4.185	4.792
79	.845	1.496	1.892	2.237	2.640	3.484	4.182	4.789
80	.844	1.495	1.890	2.235	2.638	3.482	4.179	4.785
81	.843	1.493	1.888	2.233	2.635	3.479	4.175	4.781
82	.842	1.492	1.887	2.231	2.633	3.476	4.172	4.778
83	.841	1.490	1.885	2.229	2.631	3.473	4.169	4.774
84	.840	1.489	1.883	2.227	2.629	3.471	4.166	4.770
85	.839	1.488	1.882	2.226	2.627	3.468	4.163	4.767
86	.838	1.486	1.880	2.224	2.625	3.466	4.160	4.764
87	.837	1.485	1.879	2.222	2.623	3.463	4.157	4.760
88	.836	1.484	1.877	2.220	2.621	3.461	4.154	4.757
89	.835	1.483	1.876	2.219	2.619	3.459	4.151	4.754
90	.834	1.481	1.874	2.217	2.618	3.456	4.149	4.751

2.5 Values of k for f = n - 1 and γ = .90 (Continued)

$$\Pr\left\{T_f \leq k\sqrt{n} \,\middle|\, K_p\sqrt{n}\right\} = \gamma$$

	P							
n	.75000	.90000	.95000	.97500	.99000	.99900	.99990	.99999
91	.833	1.480	1.873	2.216	2.616	3.454	4.146	4.748
92	.832	1.479	1.871	2.214	2.614	3.452	4.143	4.745
93	.831	1.478	1.870	2.213	2.612	3.449	4.141	4.742
94	.830	1.477	1.869	2.211	2.611	3.447	4.138	4.739
95	.829	1.475	1.867	2.210	2.609	3.445	4.136	4.736
96	.828	1.474	1.866	2.208	2.607	3.443	4.133	4.734
97	.827	1.473	1.865	2.207	2.606	3.441	4.131	4.731
98	.827	1.472	1.864	2.205	2.604	3.439	4.129	4.728
99	.826	1.471	1.862	2.204	2.602	3.437	4.126	4.725
100	.825	1.470	1.861	2.203	2.601	3.435	4.124	4.723
101	.824	1.469	1.860	2.201	2.599	3.433	4.122	4.720
102	.823	1.468	1.859	2.200	2.598	3.431	4.119	4.718
103	.823	1.467	1.858	2.199	2.596	3.429	4.117	4.715
104	.822	1.466	1.857	2.197	2.595	3.428	4.115	4.713
105	.821	1.465	1.855	2.196	2.594	3.426	4.113	4.710
106	.820	1.464	1.854	2.195	2.592	3.424	4.111	4.708
107	.820	1.463	1.853	2.194	2.591	3.422	4.109	4.706
108	.819	1.462	1.852	2.192	2.589	3.420	4.107	4.703
109	.818	1.461	1.851	2.191	2.588	3.419	4.105	4.701
110	.818	1.460	1.850	2.190	2.587	3.417	4.103	4.699
111	.817	1.460	1.849	2.189	2.585	3.415	4.101	4.697
112	.816	1.459	1.848	2.188	2.584	3.414	4.099	4.695
113	.815	1.458	1.847	2.187	2.583	3.412	4.097	4.692
114	.815	1.457	1.846	2.186	2.582	3.411	4.095	4.690
115	.814	1.456	1.845	2.184	2.580	3.409	4.093	4.688
116	.814	1.455	1.844	2.183	2.579	3.408	4.092	4.686
117	.813	1.455	1.843	2.182	2.578	3.406	4.090	4.684
118	.812	1.454	1.842	2.181	2.577	3.405	4.088	4.682
119	.812	1.453	1.841	2.180	2.576	3.403	4.086	4.680
120	.811	1.452	1.841	2.179	2.574	3.402	4.085	4.678
121	.810	1.451	1.840	2.178	2.573	3.400	4.083	4.676
122	.810	1.451	1.839	2.177	2.572	3.399	4.081	4.675
123	.809	1.450	1.838	2.176	2.571	3.397	4.080	4.673
124	.809	1.449	1.837	2.175	2.570	3.396	4.078	4.671
125	.808	1.448	1.836	2.174	2.569	3.395	4.076	4.669
126	.808	1.448	1.835	2.173	2.568	3.393	4.075	4.667
127	.807	1.447	1.835	2.173	2.567	3.392	4.073	4.665
128	.806	1.446	1.834	2.172	2.566	3.391	4.072	4.664
129	.806	1.446	1.833	2.171	2.565	3.389	4.070	4.662
130	.805	1.445	1.832	2.170	2.564	3.388	4.069	4.660
131	.805	1.444	1.831	2.169	2.563	3.387	4.067	4.659
132	.804	1.444	1.831	2.168	2.562	3.386	4.066	4.657
133	.804	1.443	1.830	2.167	2.561	3.384	4.064	4.655
134	.803	1.442	1.829	2.166	2.560	3.383	4.063	4.654
135	.803	1.442	1.828	2.166	2.559	3.382	4.061	4.652

2.5 Values of k for f = n - 1 and γ = .90 (Continued)

$$\Pr\left\{T_f \leq k\sqrt{n} \,\middle|\, K_p \sqrt{n}\right\} = \gamma$$

	P							
n	.75000	.90000	.95000	.97500	.99000	.99900	.99990	.99999
136	.802	1.441	1.828	2.165	2.558	3.381	4.060	4.651
137	.802	1.440	1.827	2.164	2.557	3.380	4.059	4.649
138	.801	1.440	1.826	2.163	2.556	3.378	4.057	4.647
139	.801	1.439	1.826	2.162	2.555	3.377	4.056	4.646
140	.800	1.439	1.825	2.161	2.554	3.376	4.055	4.644
141	.800	1.438	1.824	2.161	2.553	3.375	4.053	4.643
142	.799	1.437	1.823	2.160	2.552	3.374	4.052	4.641
143	.799	1.437	1.823	2.159	2.552	3.373	4.051	4.640
144	.799	1.436	1.822	2.158	2.551	3.372	4.049	4.639
145	.798	1.436	1.821	2.158	2.550	3.371	4.048	4.637
146	.798	1.435	1.821	2.157	2.549	3.370	4.047	4.636
147	.797	1.434	1.820	2.156	2.548	3.369	4.046	4.634
148	.797	1.434	1.819	2.155	2.547	3.368	4.044	4.633
149	.796	1.433	1.819	2.155	2.547	3.367	4.043	4.632
150	.796	1.433	1.818	2.154	2.546	3.366	4.042	4.630
151	.795	1.432	1.818	2.153	2.545	3.365	4.041	4.629
152	.795	1.432	1.817	2.153	2.544	3.364	4.040	4.628
153	.795	1.431	1.816	2.152	2.543	3.363	4.039	4.626
154	.794	1.431	1.816	2.151	2.543	3.362	4.037	4.625
155	.794	1.430	1.815	2.151	2.542	3.361	4.036	4.624
156	.793	1.430	1.815	2.150	2.541	3.360	4.035	4.622
157	.793	1.429	1.814	2.149	2.540	3.359	4.034	4.621
158	.793	1.429	1.813	2.149	2.540	3.358	4.033	4.620
159	.792	1.428	1.813	2.148	2.539	3.357	4.032	4.619
160	.792	1.428	1.812	2.147	2.538	3.356	4.031	4.617
161	.791	1.427	1.812	2.147	2.538	3.355	4.030	4.616
162	.791	1.427	1.811	2.146	2.537	3.354	4.029	4.615
163	.791	1.426	1.811	2.145	2.536	3.353	4.028	4.614
164	.790	1.426	1.810	2.145	2.535	3.352	4.027	4.613
165	.790	1.425	1.809	2.144	2.535	3.352	4.026	4.612
166	.790	1.425	1.809	2.144	2.534	3.351	4.025	4.610
167	.789	1.424	1.808	2.143	2.533	3.350	4.024	4.609
168	.789	1.424	1.808	2.142	2.533	3.349	4.023	4.608
169	.789	1.423	1.807	2.142	2.532	3.348	4.022	4.607
170	.788	1.423	1.807	2.141	2.531	3.347	4.021	4.606
171	.788	1.423	1.806	2.141	2.531	3.347	4.020	4.605
172	.787	1.422	1.806	2.140	2.530	3.346	4.019	4.604
173	.787	1.422	1.805	2.140	2.529	3.345	4.018	4.603
174	.787	1.421	1.805	2.139	2.529	3.344	4.017	4.602
175	.786	1.421	1.804	2.138	2.528	3.343	4.016	4.601
176	.786	1.420	1.804	2.138	2.528	3.343	4.015	4.600
177	.786	1.420	1.803	2.137	2.527	3.342	4.014	4.599
178	.785	1.420	1.803	2.137	2.526	3.341	4.013	4.597
179	.785	1.419	1.802	2.136	2.526	3.340	4.012	4.596
180	.785	1.419	1.802	2.136	2.525	3.339	4.011	4.595

2.5 Values of k for f = n - 1 and γ = .90 (Continued)

$$\Pr\left\{T_f \leq k\sqrt{n} \,\middle|\, K_p \sqrt{n}\right\} = \gamma$$

	P							
n	.75000	.90000	.95000	.97500	.99000	.99900	.99990	.99999
181	.785	1.418	1.801	2.135	2.525	3.339	4.011	4.594
182	.784	1.418	1.801	2.135	2.524	3.338	4.010	4.593
183	.784	1.418	1.801	2.134	2.523	3.337	4.009	4.592
184	.784	1.417	1.800	2.134	2.523	3.336	4.008	4.592
185	.783	1.417	1.800	2.133	2.522	3.336	4.007	4.591
186	.783	1.416	1.799	2.133	2.522	3.335	4.006	4.590
187	.783	1.416	1.799	2.132	2.521	3.334	4.005	4.589
188	.782	1.416	1.798	2.132	2.520	3.334	4.005	4.588
189	.782	1.415	1.798	2.131	2.520	3.333	4.004	4.587
190	.782	1.415	1.797	2.131	2.519	3.332	4.003	4.586
191	.781	1.414	1.797	2.130	2.519	3.332	4.002	4.585
192	.781	1.414	1.797	2.130	2.518	3.331	4.001	4.584
193	.781	1.414	1.796	2.129	2.518	3.330	4.001	4.583
194	.781	1.413	1.796	2.129	2.517	3.330	4.000	4.582
195	.780	1.413	1.795	2.128	2.517	3.329	3.999	4.581
196	.780	1.413	1.795	2.128	2.516	3.328	3.998	4.580
197	.780	1.412	1.795	2.127	2.516	3.328	3.997	4.580
198	.779	1.412	1.794	2.127	2.515	3.327	3.997	4.579
199	.779	1.412	1.794	2.127	2.515	3.326	3.996	4.578
200	.779	1.411	1.793	2.126	2.514	3.326	3.995	4.577
205	.778	1.410	1.791	2.124	2.512	3.322	3.991	4.573
210	.776	1.408	1.789	2.122	2.509	3.319	3.988	4.569
215	.775	1.406	1.788	2.120	2.507	3.317	3.985	4.565
220	.774	1.405	1.786	2.118	2.505	3.314	3.981	4.561
225	.773	1.403	1.784	2.116	2.503	3.311	3.978	4.558
230	.772	1.402	1.783	2.114	2.501	3.308	3.975	4.554
235	.771	1.401	1.781	2.112	2.499	3.306	3.972	4.551
240	.769	1.399	1.780	2.111	2.497	3.304	3.969	4.548
245	.768	1.398	1.778	2.109	2.495	3.301	3.966	4.545
250	.767	1.397	1.777	2.107	2.493	3.299	3.964	4.542
255	.767	1.396	1.775	2.106	2.491	3.297	3.961	4.539
260	.766	1.394	1.774	2.104	2.489	3.295	3.959	4.536
265	.765	1.393	1.773	2.103	2.488	3.293	3.956	4.533
270	.764	1.392	1.771	2.101	2.486	3.290	3.954	4.530
275	.763	1.391	1.770	2.100	2.485	3.289	3.952	4.528
280	.762	1.390	1.769	2.099	2.483	3.287	3.949	4.525
285	.761	1.389	1.768	2.097	2.482	3.285	3.947	4.523
290	.761	1.388	1.767	2.096	2.480	3.283	3.945	4.520
295	.760	1.387	1.766	2.095	2.479	3.281	3.943	4.518
300	.759	1.386	1.765	2.094	2.477	3.280	3.941	4.516
305	.758	1.385	1.763	2.093	2.476	3.278	3.939	4.514
310	.758	1.384	1.762	2.091	2.475	3.276	3.937	4.511
315	.757	1.384	1.761	2.090	2.474	3.275	3.935	4.509
320	.756	1.383	1.761	2.089	2.472	3.273	3.933	4.507
325	.756	1.382	1.760	2.088	2.471	3.272	3.932	4.505

2.5 Values of k for f = n - 1 and γ = .90 (Continued)

$$\Pr\left\{T_f \leq k\sqrt{n} \,\middle|\, K_p\sqrt{n}\right\} = \gamma$$

	P							
n	.75000	.90000	.95000	.97500	.99000	.99900	.99990	.99999
330	.755	1.381	1.759	2.087	2.470	3.270	3.930	4.503
335	.754	1.380	1.758	2.086	2.469	3.269	3.928	4.501
340	.754	1.380	1.757	2.085	2.468	3.267	3.927	4.500
345	.753	1.379	1.756	2.084	2.467	3.266	3.925	4.498
350	.753	1.378	1.755	2.083	2.466	3.265	3.924	4.496
355	.752	1.377	1.754	2.082	2.465	3.263	3.922	4.494
360	.751	1.377	1.754	2.081	2.464	3.262	3.920	4.493
365	.751	1.376	1.753	2.081	2.463	3.261	3.919	4.491
370	.750	1.375	1.752	2.080	2.462	3.260	3.918	4.489
375	.750	1.375	1.751	2.079	2.461	3.258	3.916	4.488
380	.749	1.374	1.751	2.078	2.460	3.257	3.915	4.486
385	.749	1.373	1.750	2.077	2.459	3.256	3.913	4.485
390	.748	1.373	1.749	2.076	2.458	3.255	3.912	4.483
395	.748	1.372	1.748	2.076	2.457	3.254	3.911	4.482
400	.747	1.372	1.748	2.075	2.456	3.253	3.910	4.480
425	.745	1.369	1.745	2.071	2.452	3.248	3.904	4.473
450	.743	1.366	1.742	2.068	2.448	3.243	3.898	4.467
475	.741	1.364	1.739	2.065	2.445	3.239	3.893	4.462
500	.740	1.362	1.736	2.062	2.442	3.235	3.888	4.456
525	.738	1.360	1.734	2.060	2.439	3.231	3.884	4.451
550	.736	1.358	1.732	2.057	2.436	3.228	3.880	4.447
575	.735	1.356	1.730	2.055	2.434	3.225	3.876	4.443
600	.734	1.355	1.728	2.053	2.431	3.222	3.873	4.439
625	.733	1.353	1.726	2.051	2.429	3.219	3.870	4.435
650	.731	1.352	1.725	2.049	2.427	3.216	3.867	4.432
675	.730	1.350	1.723	2.047	2.425	3.214	3.864	4.428
700	.729	1.349	1.722	2.046	2.423	3.211	3.861	4.425
725	.728	1.348	1.720	2.044	2.421	3.209	3.858	4.422
750	.727	1.347	1.719	2.043	2.420	3.207	3.856	4.420
775	.726	1.345	1.718	2.041	2.418	3.205	3.854	4.417
800	.726	1.344	1.717	2.040	2.417	3.203	3.852	4.415
825	.725	1.343	1.715	2.039	2.415	3.201	3.849	4.412
850	.724	1.343	1.714	2.038	2.414	3.200	3.847	4.410
875	.723	1.342	1.713	2.036	2.413	3.198	3.845	4.408
900	.723	1.341	1.712	2.035	2.411	3.197	3.844	4.406
925	.722	1.340	1.711	2.034	2.410	3.195	3.842	4.404
950	.721	1.339	1.711	2.033	2.409	3.194	3.840	4.402
975	.721	1.338	1.710	2.032	2.408	3.192	3.839	4.400
1000	.720	1.338	1.709	2.031	2.407	3.191	3.837	4.398
1500	.712	1.327	1.697	2.018	2.392	3.172	3.815	4.373
2000	.707	1.321	1.690	2.010	2.383	3.161	3.802	4.358
3000	.701	1.314	1.681	2.001	2.372	3.148	3.786	4.341
5000	.695	1.306	1.673	1.991	2.362	3.135	3.771	4.324
10000	.689	1.299	1.665	1.982	2.351	3.121	3.756	4.306
∞	.674	1.282	1.645	1.960	2.326	3.090	3.719	4.265

2.6 Values of k for f = n - 1 and γ = .75

$$\Pr\left\{T_f \leq k\sqrt{n} \,\middle|\, K_p \sqrt{n}\right\} = \gamma$$

	P							
n	.75000	.90000	.95000	.97500	.99000	.99900	.99990	.99999
2	2.225	3.992	5.122	6.112	7.267	9.672	11.650	13.366
3	1.464	2.501	3.152	3.725	4.396	5.805	6.970	7.983
4	1.255	2.134	2.681	3.162	3.726	4.911	5.891	6.745
5	1.152	1.962	2.463	2.904	3.421	4.507	5.406	6.188
6	1.088	1.859	2.336	2.754	3.244	4.273	5.125	5.866
7	1.043	1.790	2.250	2.654	3.126	4.119	4.940	5.654
8	1.010	1.740	2.188	2.581	3.042	4.008	4.807	5.503
9	.985	1.701	2.141	2.526	2.977	3.924	4.707	5.388
10	.964	1.671	2.104	2.483	2.927	3.858	4.628	5.298
11	.947	1.645	2.073	2.447	2.885	3.804	4.564	5.225
12	.932	1.624	2.048	2.418	2.851	3.760	4.511	5.164
13	.920	1.606	2.026	2.393	2.822	3.722	4.466	5.113
14	.909	1.591	2.007	2.371	2.797	3.690	4.427	5.069
15	.899	1.577	1.991	2.352	2.775	3.661	4.394	5.031
16	.891	1.565	1.976	2.336	2.756	3.636	4.364	4.997
17	.883	1.554	1.963	2.321	2.739	3.614	4.338	4.967
18	.876	1.545	1.952	2.308	2.723	3.595	4.314	4.940
19	.870	1.536	1.941	2.296	2.710	3.577	4.293	4.916
20	.864	1.528	1.932	2.285	2.697	3.560	4.274	4.894
21	.859	1.521	1.923	2.275	2.685	3.546	4.256	4.874
22	.854	1.514	1.915	2.266	2.675	3.532	4.240	4.856
23	.849	1.508	1.908	2.257	2.665	3.520	4.225	4.839
24	.845	1.502	1.901	2.249	2.656	3.508	4.212	4.824
25	.841	1.497	1.895	2.242	2.648	3.497	4.199	4.809
26	.838	1.492	1.889	2.235	2.640	3.487	4.187	4.796
27	.834	1.487	1.883	2.229	2.633	3.478	4.176	4.783
28	.831	1.483	1.878	2.223	2.626	3.469	4.166	4.771
29	.828	1.478	1.873	2.218	2.620	3.461	4.156	4.760
30	.825	1.475	1.869	2.212	2.614	3.453	4.147	4.750
31	.822	1.471	1.864	2.207	2.608	3.446	4.138	4.740
32	.820	1.467	1.860	2.203	2.602	3.439	4.130	4.731
33	.817	1.464	1.856	2.198	2.597	3.433	4.122	4.722
34	.815	1.461	1.853	2.194	2.593	3.427	4.115	4.714
35	.813	1.458	1.849	2.190	2.588	3.421	4.108	4.706
36	.810	1.455	1.846	2.186	2.584	3.415	4.102	4.698
37	.808	1.452	1.842	2.183	2.579	3.410	4.095	4.691
38	.806	1.450	1.839	2.179	2.575	3.405	4.089	4.684
39	.805	1.447	1.836	2.176	2.572	3.400	4.083	4.678
40	.803	1.445	1.834	2.173	2.568	3.395	4.078	4.671
41	.801	1.443	1.831	2.169	2.564	3.391	4.073	4.665
42	.799	1.440	1.828	2.167	2.561	3.386	4.068	4.660
43	.798	1.438	1.826	2.164	2.558	3.382	4.063	4.654
44	.796	1.436	1.824	2.161	2.555	3.378	4.058	4.649
45	.795	1.434	1.821	2.158	2.552	3.375	4.054	4.644

2.6 Values of k for f = n - 1 and γ = .75 (Continued)

$$\Pr\left\{T_f \leq k\sqrt{n} \,\middle|\, K_p \sqrt{n}\right\} = \gamma$$

	P							
n	.75000	.90000	.95000	.97500	.99000	.99900	.99990	.99999
46	.793	1.432	1.819	2.156	2.549	3.371	4.049	4.639
47	.792	1.431	1.817	2.153	2.546	3.367	4.045	4.634
48	.791	1.429	1.815	2.151	2.543	3.364	4.041	4.630
49	.789	1.427	1.813	2.149	2.541	3.361	4.037	4.625
50	.788	1.425	1.811	2.147	2.538	3.357	4.033	4.621
51	.787	1.424	1.809	2.145	2.536	3.354	4.030	4.617
52	.786	1.422	1.807	2.143	2.534	3.351	4.026	4.613
53	.785	1.421	1.805	2.141	2.531	3.349	4.023	4.609
54	.783	1.419	1.804	2.139	2.529	3.346	4.020	4.605
55	.782	1.418	1.802	2.137	2.527	3.343	4.016	4.601
56	.781	1.417	1.801	2.135	2.525	3.340	4.013	4.598
57	.780	1.415	1.799	2.133	2.523	3.338	4.010	4.595
58	.779	1.414	1.797	2.131	2.521	3.335	4.007	4.591
59	.778	1.413	1.796	2.130	2.519	3.333	4.004	4.588
60	.777	1.411	1.795	2.128	2.517	3.331	4.002	4.585
61	.777	1.410	1.793	2.127	2.515	3.328	3.999	4.582
62	.776	1.409	1.792	2.125	2.514	3.326	3.996	4.579
63	.775	1.408	1.791	2.124	2.512	3.324	3.994	4.576
64	.774	1.407	1.789	2.122	2.510	3.322	3.991	4.573
65	.773	1.406	1.788	2.121	2.509	3.320	3.989	4.570
66	.772	1.405	1.787	2.119	2.507	3.318	3.987	4.568
67	.772	1.404	1.786	2.118	2.506	3.316	3.984	4.565
68	.771	1.403	1.784	2.117	2.504	3.314	3.982	4.563
69	.770	1.402	1.783	2.115	2.503	3.312	3.980	4.560
70	.769	1.401	1.782	2.114	2.501	3.310	3.978	4.558
71	.769	1.400	1.781	2.113	2.500	3.309	3.976	4.555
72	.768	1.399	1.780	2.112	2.498	3.307	3.974	4.553
73	.767	1.398	1.779	2.111	2.497	3.305	3.972	4.551
74	.767	1.397	1.778	2.109	2.496	3.303	3.970	4.549
75	.766	1.396	1.777	2.108	2.495	3.302	3.968	4.546
76	.765	1.396	1.776	2.107	2.493	3.300	3.966	4.544
77	.765	1.395	1.775	2.106	2.492	3.299	3.964	4.542
78	.764	1.394	1.774	2.105	2.491	3.297	3.962	4.540
79	.763	1.393	1.773	2.104	2.490	3.296	3.960	4.538
80	.763	1.392	1.772	2.103	2.489	3.294	3.959	4.536
81	.762	1.392	1.771	2.102	2.487	3.293	3.957	4.534
82	.762	1.391	1.771	2.101	2.486	3.291	3.955	4.532
83	.761	1.390	1.770	2.100	2.485	3.290	3.954	4.531
84	.761	1.390	1.769	2.099	2.484	3.289	3.952	4.529
85	.760	1.389	1.768	2.098	2.483	3.287	3.951	4.527
86	.759	1.388	1.767	2.097	2.482	3.286	3.949	4.525
87	.759	1.387	1.767	2.097	2.481	3.285	3.948	4.524
88	.758	1.387	1.766	2.096	2.480	3.284	3.946	4.522
89	.758	1.386	1.765	2.095	2.479	3.282	3.945	4.520
90	.757	1.386	1.764	2.094	2.478	3.281	3.943	4.519

2.6 Values of k for f = n - 1 and γ = .75 (Continued)

$$\Pr\left\{T_f \leq k\sqrt{n} \,\middle|\, K_p\sqrt{n}\right\} = \gamma$$

	P							
n	.75000	.90000	.95000	.97500	.99000	.99900	.99990	.99999
91	.757	1.385	1.764	2.093	2.477	3.280	3.942	4.517
92	.756	1.384	1.763	2.092	2.476	3.279	3.941	4.516
93	.756	1.384	1.762	2.092	2.475	3.278	3.939	4.514
94	.756	1.383	1.762	2.091	2.475	3.277	3.938	4.513
95	.755	1.383	1.761	2.090	2.474	3.276	3.937	4.511
96	.755	1.382	1.760	2.089	2.473	3.274	3.935	4.510
97	.754	1.381	1.760	2.089	2.472	3.273	3.934	4.508
98	.754	1.381	1.759	2.088	2.471	3.272	3.933	4.507
99	.753	1.380	1.758	2.087	2.470	3.271	3.932	4.506
100	.753	1.380	1.758	2.086	2.470	3.270	3.931	4.504
101	.753	1.379	1.757	2.086	2.469	3.269	3.929	4.503
102	.752	1.379	1.756	2.085	2.468	3.268	3.928	4.502
103	.752	1.378	1.756	2.084	2.467	3.267	3.927	4.500
104	.751	1.378	1.755	2.084	2.467	3.266	3.926	4.499
105	.751	1.377	1.755	2.083	2.466	3.265	3.925	4.498
106	.751	1.377	1.754	2.082	2.465	3.265	3.924	4.497
107	.750	1.376	1.754	2.082	2.464	3.264	3.923	4.495
108	.750	1.376	1.753	2.081	2.464	3.263	3.922	4.494
109	.749	1.375	1.752	2.081	2.463	3.262	3.921	4.493
110	.749	1.375	1.752	2.080	2.462	3.261	3.920	4.492
111	.749	1.374	1.751	2.079	2.462	3.260	3.919	4.491
112	.748	1.374	1.751	2.079	2.461	3.259	3.918	4.490
113	.748	1.373	1.750	2.078	2.460	3.258	3.917	4.488
114	.748	1.373	1.750	2.078	2.460	3.258	3.916	4.487
115	.747	1.373	1.749	2.077	2.459	3.257	3.915	4.486
116	.747	1.372	1.749	2.077	2.458	3.256	3.914	4.485
117	.747	1.372	1.748	2.076	2.458	3.255	3.913	4.484
118	.746	1.371	1.748	2.075	2.457	3.255	3.912	4.483
119	.746	1.371	1.747	2.075	2.457	3.254	3.911	4.482
120	.746	1.371	1.747	2.074	2.456	3.253	3.910	4.481
121	.745	1.370	1.747	2.074	2.455	3.252	3.909	4.480
122	.745	1.370	1.746	2.073	2.455	3.252	3.908	4.479
123	.745	1.369	1.746	2.073	2.454	3.251	3.908	4.478
124	.745	1.369	1.745	2.072	2.454	3.250	3.907	4.477
125	.744	1.369	1.745	2.072	2.453	3.249	3.906	4.476
126	.744	1.368	1.744	2.071	2.453	3.249	3.905	4.475
127	.744	1.368	1.744	2.071	2.452	3.248	3.904	4.474
128	.743	1.368	1.743	2.070	2.451	3.247	3.903	4.474
129	.743	1.367	1.743	2.070	2.451	3.247	3.903	4.473
130	.743	1.367	1.743	2.070	2.450	3.246	3.902	4.472
131	.743	1.366	1.742	2.069	2.450	3.245	3.901	4.471
132	.742	1.366	1.742	2.069	2.449	3.245	3.900	4.470
133	.742	1.366	1.741	2.068	2.449	3.244	3.900	4.469
134	.742	1.365	1.741	2.068	2.448	3.243	3.899	4.468
135	.742	1.365	1.741	2.067	2.448	3.243	3.898	4.468

2.6 Values of k for f = n - 1 and γ = .75 (Continued)

$$Pr\left\{T_f \leq k\sqrt{n} \,\middle|\, K_p\sqrt{n}\right\} = \gamma$$

	P							
n	.75000	.90000	.95000	.97500	.99000	.99900	.99990	.99999
136	.741	1.365	1.740	2.067	2.447	3.242	3.897	4.467
137	.741	1.364	1.740	2.066	2.447	3.242	3.897	4.466
138	.741	1.364	1.740	2.066	2.446	3.241	3.896	4.465
139	.740	1.364	1.739	2.066	2.446	3.240	3.895	4.464
140	.740	1.364	1.739	2.065	2.445	3.240	3.895	4.463
141	.740	1.363	1.738	2.065	2.445	3.239	3.894	4.463
142	.740	1.363	1.738	2.064	2.445	3.239	3.893	4.462
143	.740	1.363	1.738	2.064	2.444	3.238	3.893	4.461
144	.739	1.362	1.737	2.064	2.444	3.238	3.892	4.460
145	.739	1.362	1.737	2.063	2.443	3.237	3.891	4.460
146	.739	1.362	1.737	2.063	2.443	3.236	3.891	4.459
147	.739	1.361	1.736	2.062	2.442	3.236	3.890	4.458
148	.738	1.361	1.736	2.062	2.442	3.235	3.889	4.458
149	.738	1.361	1.736	2.062	2.442	3.235	3.889	4.457
150	.738	1.361	1.735	2.061	2.441	3.234	3.888	4.456
151	.738	1.360	1.735	2.061	2.441	3.234	3.887	4.455
152	.737	1.360	1.735	2.061	2.440	3.233	3.887	4.455
153	.737	1.360	1.734	2.060	2.440	3.233	3.886	4.454
154	.737	1.359	1.734	2.060	2.439	3.232	3.886	4.453
155	.737	1.359	1.734	2.060	2.439	3.232	3.885	4.453
156	.737	1.359	1.734	2.059	2.439	3.231	3.885	4.452
157	.736	1.359	1.733	2.059	2.438	3.231	3.884	4.451
158	.736	1.358	1.733	2.059	2.438	3.230	3.883	4.451
159	.736	1.358	1.733	2.058	2.438	3.230	3.883	4.450
160	.736	1.358	1.732	2.058	2.437	3.229	3.882	4.450
161	.736	1.358	1.732	2.058	2.437	3.229	3.882	4.449
162	.735	1.357	1.732	2.057	2.436	3.228	3.881	4.448
163	.735	1.357	1.731	2.057	2.436	3.228	3.881	4.448
164	.735	1.357	1.731	2.057	2.436	3.227	3.880	4.447
165	.735	1.357	1.731	2.056	2.435	3.227	3.880	4.446
166	.735	1.356	1.731	2.056	2.435	3.227	3.879	4.446
167	.734	1.356	1.730	2.056	2.435	3.226	3.878	4.445
168	.734	1.356	1.730	2.055	2.434	3.226	3.878	4.445
169	.734	1.356	1.730	2.055	2.434	3.225	3.877	4.444
170	.734	1.355	1.730	2.055	2.434	3.225	3.877	4.444
171	.734	1.355	1.729	2.054	2.433	3.224	3.876	4.443
172	.734	1.355	1.729	2.054	2.433	3.224	3.876	4.442
173	.733	1.355	1.729	2.054	2.433	3.224	3.875	4.442
174	.733	1.355	1.728	2.054	2.432	3.223	3.875	4.441
175	.733	1.354	1.728	2.053	2.432	3.223	3.874	4.441
176	.733	1.354	1.728	2.053	2.432	3.222	3.874	4.440
177	.733	1.354	1.728	2.053	2.431	3.222	3.874	4.440
178	.733	1.354	1.727	2.052	2.431	3.221	3.873	4.439
179	.732	1.353	1.727	2.052	2.431	3.221	3.873	4.439
180	.732	1.353	1.727	2.052	2.430	3.221	3.872	4.438

2.6 Values of k for f = n - 1 and γ = .75 (Continued)

$$\Pr\left\{T_f \leq k\sqrt{n} \,\middle|\, K_p\sqrt{n}\right\} = \gamma$$

	P							
n	.75000	.90000	.95000	.97500	.99000	.99900	.99990	.99999
181	.732	1.353	1.727	2.052	2.430	3.220	3.872	4.438
182	.732	1.353	1.726	2.051	2.430	3.220	3.871	4.437
183	.732	1.353	1.726	2.051	2.429	3.220	3.871	4.437
184	.732	1.352	1.726	2.051	2.429	3.219	3.870	4.436
185	.731	1.352	1.726	2.051	2.429	3.219	3.870	4.435
186	.731	1.352	1.726	2.050	2.429	3.218	3.869	4.435
187	.731	1.352	1.725	2.050	2.428	3.218	3.869	4.435
188	.731	1.352	1.725	2.050	2.428	3.218	3.869	4.434
189	.731	1.351	1.725	2.050	2.428	3.217	3.868	4.434
190	.731	1.351	1.725	2.049	2.427	3.217	3.868	4.433
191	.730	1.351	1.724	2.049	2.427	3.217	3.867	4.433
192	.730	1.351	1.724	2.049	2.427	3.216	3.867	4.432
193	.730	1.351	1.724	2.049	2.427	3.216	3.866	4.432
194	.730	1.350	1.724	2.048	2.426	3.216	3.866	4.431
195	.730	1.350	1.724	2.048	2.426	3.215	3.866	4.431
196	.730	1.350	1.723	2.048	2.426	3.215	3.865	4.430
197	.730	1.350	1.723	2.048	2.425	3.215	3.865	4.430
198	.729	1.350	1.723	2.047	2.425	3.214	3.864	4.429
199	.729	1.350	1.723	2.047	2.425	3.214	3.864	4.429
200	.729	1.349	1.723	2.047	2.425	3.213	3.864	4.428
205	.728	1.348	1.721	2.046	2.423	3.212	3.862	4.426
210	.728	1.348	1.721	2.045	2.422	3.210	3.860	4.424
215	.727	1.347	1.720	2.044	2.421	3.209	3.858	4.422
220	.726	1.346	1.719	2.043	2.420	3.207	3.856	4.420
225	.726	1.345	1.718	2.042	2.419	3.206	3.855	4.418
230	.725	1.345	1.717	2.041	2.418	3.205	3.853	4.417
235	.725	1.344	1.716	2.040	2.417	3.203	3.852	4.415
240	.724	1.343	1.715	2.039	2.415	3.202	3.850	4.413
245	.724	1.343	1.715	2.038	2.415	3.201	3.849	4.412
250	.723	1.342	1.714	2.037	2.414	3.200	3.847	4.410
255	.723	1.341	1.713	2.036	2.413	3.198	3.846	4.408
260	.722	1.341	1.712	2.036	2.412	3.197	3.845	4.407
265	.722	1.340	1.712	2.035	2.411	3.196	3.843	4.406
270	.721	1.339	1.711	2.034	2.410	3.195	3.842	4.404
275	.721	1.339	1.710	2.033	2.409	3.194	3.841	4.403
280	.720	1.338	1.710	2.033	2.408	3.193	3.840	4.401
285	.720	1.338	1.709	2.032	2.408	3.192	3.839	4.400
290	.720	1.337	1.709	2.031	2.407	3.191	3.838	4.399
295	.719	1.337	1.708	2.031	2.406	3.190	3.836	4.398
300	.719	1.336	1.708	2.030	2.406	3.189	3.835	4.397
305	.718	1.336	1.707	2.029	2.405	3.189	3.834	4.395
310	.718	1.335	1.706	2.029	2.404	3.188	3.833	4.394
315	.718	1.335	1.706	2.028	2.404	3.187	3.832	4.393
320	.717	1.335	1.705	2.028	2.403	3.186	3.832	4.392
325	.717	1.334	1.705	2.027	2.402	3.185	3.831	4.391

2.6 Values of k for f = n - 1 and γ = .75 (Continued)

$$\Pr\left\{T_f \leq k\sqrt{n} \,\middle|\, K_p\sqrt{n}\right\} = \gamma$$

	P							
N	.75000	.90000	.95000	.97500	.99000	.99900	.99990	.99999
330	.717	1.334	1.704	2.027	2.402	3.185	3.830	4.390
335	.716	1.333	1.704	2.026	2.401	3.184	3.829	4.389
340	.716	1.333	1.704	2.026	2.400	3.183	3.828	4.388
345	.716	1.333	1.703	2.025	2.400	3.182	3.827	4.387
350	.715	1.332	1.703	2.025	2.399	3.182	3.826	4.386
355	.715	1.332	1.702	2.024	2.399	3.181	3.825	4.385
360	.715	1.331	1.702	2.024	2.398	3.180	3.825	4.384
365	.715	1.331	1.701	2.023	2.398	3.180	3.824	4.384
370	.714	1.331	1.701	2.023	2.397	3.179	3.823	4.383
375	.714	1.330	1.701	2.022	2.397	3.178	3.822	4.382
380	.714	1.330	1.700	2.022	2.396	3.178	3.822	4.381
385	.713	1.330	1.700	2.021	2.396	3.177	3.821	4.380
390	.713	1.329	1.699	2.021	2.395	3.177	3.820	4.379
395	.713	1.329	1.699	2.021	2.395	3.176	3.820	4.379
400	.713	1.329	1.699	2.020	2.394	3.175	3.819	4.378
425	.712	1.327	1.697	2.018	2.392	3.173	3.816	4.374
450	.710	1.326	1.696	2.017	2.390	3.170	3.813	4.371
475	.710	1.325	1.694	2.015	2.389	3.168	3.810	4.368
500	.709	1.324	1.693	2.014	2.387	3.166	3.808	4.365
525	.708	1.323	1.692	2.012	2.385	3.164	3.806	4.363
550	.707	1.322	1.691	2.011	2.384	3.162	3.804	4.360
575	.706	1.321	1.690	2.010	2.383	3.161	3.802	4.358
600	.706	1.320	1.689	2.009	2.381	3.159	3.800	4.356
625	.705	1.319	1.688	2.008	2.380	3.158	3.798	4.354
650	.704	1.318	1.687	2.007	2.379	3.156	3.797	4.353
675	.704	1.318	1.686	2.006	2.378	3.155	3.795	4.351
700	.703	1.317	1.685	2.005	2.377	3.154	3.794	4.349
725	.703	1.316	1.684	2.004	2.376	3.153	3.792	4.348
750	.702	1.316	1.684	2.003	2.375	3.152	3.791	4.346
775	.702	1.315	1.683	2.003	2.375	3.151	3.790	4.345
800	.701	1.315	1.683	2.002	2.374	3.150	3.789	4.344
825	.701	1.314	1.682	2.001	2.373	3.149	3.788	4.342
850	.701	1.314	1.681	2.001	2.372	3.148	3.786	4.341
875	.700	1.313	1.681	2.000	2.372	3.147	3.785	4.340
900	.700	1.313	1.680	2.000	2.371	3.146	3.784	4.339
925	.699	1.312	1.680	1.999	2.370	3.145	3.784	4.338
950	.699	1.312	1.679	1.998	2.370	3.145	3.783	4.337
975	.699	1.311	1.679	1.998	2.369	3.144	3.782	4.336
1000	.698	1.311	1.678	1.997	2.369	3.143	3.781	4.335
1500	.694	1.306	1.672	1.990	2.361	3.133	3.770	4.322
2000	.691	1.302	1.669	1.986	2.356	3.127	3.763	4.314
3000	.688	1.298	1.664	1.981	2.351	3.121	3.755	4.305
5000	.685	1.295	1.660	1.977	2.345	3.114	3.747	4.296
10000	.682	1.291	1.655	1.972	2.340	3.107	3.738	4.287
∞	.674	1.282	1.645	1.960	2.326	3.090	3.719	4.265

2.7 Values of k for f = n - 1 and γ = .50

$$\Pr\left\{T_f \leq k\sqrt{n} \,\middle|\, K_p\sqrt{n}\right\} = \gamma$$

	P							
n	.75000	.90000	.95000	.97500	.99000	.99900	.99990	.99999
2	.887	1.784	2.339	2.820	3.376	4.527	5.468	6.283
3	.773	1.498	1.938	2.321	2.764	3.688	4.447	5.105
4	.738	1.419	1.830	2.186	2.601	3.465	4.175	4.791
5	.722	1.382	1.779	2.124	2.526	3.362	4.050	4.647
6	.712	1.360	1.750	2.089	2.483	3.304	3.979	4.565
7	.705	1.347	1.732	2.066	2.455	3.266	3.933	4.512
8	.701	1.337	1.719	2.050	2.436	3.239	3.900	4.474
9	.698	1.330	1.709	2.038	2.421	3.220	3.877	4.447
10	.695	1.324	1.702	2.029	2.410	3.205	3.858	4.426
11	.693	1.320	1.696	2.022	2.402	3.193	3.844	4.409
12	.691	1.316	1.691	2.016	2.395	3.183	3.832	4.396
13	.690	1.313	1.687	2.011	2.389	3.175	3.822	4.384
14	.689	1.311	1.684	2.007	2.384	3.168	3.814	4.375
15	.687	1.309	1.681	2.004	2.379	3.163	3.807	4.367
16	.687	1.307	1.678	2.001	2.376	3.158	3.801	4.360
17	.686	1.305	1.676	1.998	2.373	3.153	3.796	4.354
18	.685	1.304	1.674	1.996	2.370	3.150	3.791	4.348
19	.685	1.302	1.673	1.994	2.367	3.146	3.787	4.344
20	.684	1.301	1.671	1.992	2.365	3.143	3.784	4.339
21	.684	1.300	1.670	1.990	2.363	3.141	3.780	4.336
22	.683	1.299	1.669	1.989	2.361	3.138	3.777	4.332
23	.683	1.299	1.668	1.988	2.360	3.136	3.775	4.329
24	.682	1.298	1.667	1.986	2.358	3.134	3.772	4.326
25	.682	1.297	1.666	1.985	2.357	3.132	3.770	4.324
26	.682	1.297	1.665	1.984	2.356	3.130	3.768	4.321
27	.681	1.296	1.664	1.983	2.355	3.129	3.766	4.319
28	.681	1.295	1.663	1.982	2.354	3.127	3.764	4.317
29	.681	1.295	1.663	1.982	2.353	3.126	3.763	4.315
30	.681	1.294	1.662	1.981	2.352	3.125	3.761	4.313
31	.681	1.294	1.661	1.980	2.351	3.124	3.760	4.312
32	.680	1.294	1.661	1.979	2.350	3.122	3.758	4.310
33	.680	1.293	1.660	1.979	2.349	3.121	3.757	4.309
34	.680	1.293	1.660	1.978	2.349	3.120	3.756	4.307
35	.680	1.293	1.659	1.978	2.348	3.120	3.755	4.306
36	.680	1.292	1.659	1.977	2.347	3.119	3.754	4.305
37	.679	1.292	1.659	1.977	2.347	3.118	3.753	4.304
38	.679	1.292	1.658	1.976	2.346	3.117	3.752	4.303
39	.679	1.291	1.658	1.976	2.346	3.116	3.751	4.302
40	.679	1.291	1.658	1.975	2.345	3.116	3.750	4.301
41	.679	1.291	1.657	1.975	2.345	3.115	3.749	4.300
42	.679	1.291	1.657	1.975	2.344	3.115	3.749	4.299
43	.679	1.290	1.657	1.974	2.344	3.114	3.748	4.298
44	.679	1.290	1.656	1.974	2.343	3.113	3.747	4.297
45	.679	1.290	1.656	1.974	2.343	3.113	3.747	4.297

2.7 Values of k for f = n - 1 and γ = .50 (Continued)

$$Pr\left\{T_f \leq k\sqrt{n} \,\middle|\, K_p \sqrt{n}\right\} = \gamma$$

	P							
n	.75000	.90000	.95000	.97500	.99000	.99900	.99990	.99999
46	.678	1.290	1.656	1.973	2.343	3.112	3.746	4.296
47	.678	1.290	1.656	1.973	2.342	3.112	3.745	4.295
48	.678	1.289	1.655	1.973	2.342	3.111	3.745	4.295
49	.678	1.289	1.655	1.973	2.342	3.111	3.744	4.294
50	.678	1.289	1.655	1.972	2.341	3.111	3.744	4.293
51	.678	1.289	1.655	1.972	2.341	3.110	3.743	4.293
52	.678	1.289	1.655	1.972	2.341	3.110	3.743	4.292
53	.678	1.289	1.654	1.972	2.340	3.109	3.742	4.292
54	.678	1.289	1.654	1.971	2.340	3.109	3.742	4.291
55	.678	1.288	1.654	1.971	2.340	3.109	3.741	4.291
56	.678	1.288	1.654	1.971	2.340	3.108	3.741	4.290
57	.678	1.288	1.654	1.971	2.339	3.108	3.741	4.290
58	.678	1.288	1.654	1.971	2.339	3.108	3.740	4.289
59	.678	1.288	1.653	1.970	2.339	3.107	3.740	4.289
60	.678	1.288	1.653	1.970	2.339	3.107	3.740	4.289
61	.677	1.288	1.653	1.970	2.338	3.107	3.739	4.288
62	.677	1.288	1.653	1.970	2.338	3.106	3.739	4.288
63	.677	1.288	1.653	1.970	2.338	3.106	3.739	4.287
64	.677	1.287	1.653	1.970	2.338	3.106	3.738	4.287
65	.677	1.287	1.653	1.969	2.338	3.106	3.738	4.287
66	.677	1.287	1.652	1.969	2.338	3.105	3.738	4.286
67	.677	1.287	1.652	1.969	2.337	3.105	3.737	4.286
68	.677	1.287	1.652	1.969	2.337	3.105	3.737	4.286
69	.677	1.287	1.652	1.969	2.337	3.105	3.737	4.285
70	.677	1.287	1.652	1.969	2.337	3.105	3.737	4.285
71	.677	1.287	1.652	1.969	2.337	3.104	3.736	4.285
72	.677	1.287	1.652	1.968	2.337	3.104	3.736	4.285
73	.677	1.287	1.652	1.968	2.336	3.104	3.736	4.284
74	.677	1.287	1.652	1.968	2.336	3.104	3.736	4.284
75	.677	1.287	1.652	1.968	2.336	3.104	3.735	4.284
76	.677	1.286	1.651	1.968	2.336	3.103	3.735	4.283
77	.677	1.286	1.651	1.968	2.336	3.103	3.735	4.283
78	.677	1.286	1.651	1.968	2.336	3.103	3.735	4.283
79	.677	1.286	1.651	1.968	2.336	3.103	3.734	4.283
80	.677	1.286	1.651	1.968	2.336	3.103	3.734	4.283
81	.677	1.286	1.651	1.967	2.335	3.103	3.734	4.282
82	.677	1.286	1.651	1.967	2.335	3.102	3.734	4.282
83	.677	1.286	1.651	1.967	2.335	3.102	3.734	4.282
84	.677	1.286	1.651	1.967	2.335	3.102	3.734	4.282
85	.677	1.286	1.651	1.967	2.335	3.102	3.733	4.281
86	.677	1.286	1.651	1.967	2.335	3.102	3.733	4.281
87	.677	1.286	1.651	1.967	2.335	3.102	3.733	4.281
88	.677	1.286	1.651	1.967	2.335	3.102	3.733	4.281
89	.677	1.286	1.650	1.967	2.335	3.101	3.733	4.281
90	.677	1.286	1.650	1.967	2.335	3.101	3.733	4.281

2.7 Values of k for f = n - 1 and γ = .50 (Continued)

$$Pr\left\{T_f \leq k\sqrt{n} \,\middle|\, K_p \sqrt{n}\right\} = \gamma$$

	P							
n	.75000	.90000	.95000	.97500	.99000	.99900	.99990	.99999
91	.676	1.286	1.650	1.967	2.334	3.101	3.732	4.280
92	.676	1.286	1.650	1.967	2.334	3.101	3.732	4.280
93	.676	1.286	1.650	1.966	2.334	3.101	3.732	4.280
94	.676	1.286	1.650	1.966	2.334	3.101	3.732	4.280
95	.676	1.285	1.650	1.966	2.334	3.101	3.732	4.280
96	.676	1.285	1.650	1.966	2.334	3.101	3.732	4.280
97	.676	1.285	1.650	1.966	2.334	3.101	3.732	4.279
98	.676	1.285	1.650	1.966	2.334	3.100	3.731	4.279
99	.676	1.285	1.650	1.966	2.334	3.100	3.731	4.279
100	.676	1.285	1.650	1.966	2.334	3.100	3.731	4.279
101	.676	1.285	1.650	1.966	2.334	3.100	3.731	4.279
102	.676	1.285	1.650	1.966	2.334	3.100	3.731	4.279
103	.676	1.285	1.650	1.966	2.333	3.100	3.731	4.279
104	.676	1.285	1.650	1.966	2.333	3.100	3.731	4.278
105	.676	1.285	1.650	1.966	2.333	3.100	3.731	4.278
106	.676	1.285	1.650	1.966	2.333	3.100	3.730	4.278
107	.676	1.285	1.649	1.966	2.333	3.100	3.730	4.278
108	.676	1.285	1.649	1.966	2.333	3.099	3.730	4.278
109	.676	1.285	1.649	1.966	2.333	3.099	3.730	4.278
110	.676	1.285	1.649	1.965	2.333	3.099	3.730	4.278
111	.676	1.285	1.649	1.965	2.333	3.099	3.730	4.278
112	.676	1.285	1.649	1.965	2.333	3.099	3.730	4.277
113	.676	1.285	1.649	1.965	2.333	3.099	3.730	4.277
114	.676	1.285	1.649	1.965	2.333	3.099	3.730	4.277
115	.676	1.285	1.649	1.965	2.333	3.099	3.730	4.277
116	.676	1.285	1.649	1.965	2.333	3.099	3.729	4.277
117	.676	1.285	1.649	1.965	2.333	3.099	3.729	4.277
118	.676	1.285	1.649	1.965	2.333	3.099	3.729	4.277
119	.676	1.285	1.649	1.965	2.332	3.099	3.729	4.277
120	.676	1.285	1.649	1.965	2.332	3.099	3.729	4.277
121	.676	1.285	1.649	1.965	2.332	3.098	3.729	4.276
122	.676	1.285	1.649	1.965	2.332	3.098	3.729	4.276
123	.676	1.285	1.649	1.965	2.332	3.098	3.729	4.276
124	.676	1.285	1.649	1.965	2.332	3.098	3.729	4.276
125	.676	1.285	1.649	1.965	2.332	3.098	3.729	4.276
126	.676	1.285	1.649	1.965	2.332	3.098	3.729	4.276
127	.676	1.284	1.649	1.965	2.332	3.098	3.729	4.276
128	.676	1.284	1.649	1.965	2.332	3.098	3.728	4.276
129	.676	1.284	1.649	1.965	2.332	3.098	3.728	4.276
130	.676	1.284	1.649	1.965	2.332	3.098	3.728	4.276
131	.676	1.284	1.649	1.965	2.332	3.098	3.728	4.276
132	.676	1.284	1.649	1.965	2.332	3.098	3.728	4.276
133	.676	1.284	1.649	1.965	2.332	3.098	3.728	4.275
134	.676	1.284	1.649	1.964	2.332	3.098	3.728	4.275
135	.676	1.284	1.649	1.964	2.332	3.098	3.728	4.275

2.7 Values of k for f = n - 1 and γ = .50 (Continued)

$$\Pr\left\{T_f \leq k\sqrt{n} \,\middle|\, K_p\sqrt{n}\right\} = \gamma$$

	P							
n	.75000	.90000	.95000	.97500	.99000	.99900	.99990	.99999
136	.676	1.284	1.648	1.964	2.332	3.098	3.728	4.275
137	.676	1.284	1.648	1.964	2.332	3.097	3.728	4.275
138	.676	1.284	1.648	1.964	2.332	3.097	3.728	4.275
139	.676	1.284	1.648	1.964	2.332	3.097	3.728	4.275
140	.676	1.284	1.648	1.964	2.332	3.097	3.728	4.275
141	.676	1.284	1.648	1.964	2.332	3.097	3.728	4.275
142	.676	1.284	1.648	1.964	2.331	3.097	3.728	4.275
143	.676	1.284	1.648	1.964	2.331	3.097	3.727	4.275
144	.676	1.284	1.648	1.964	2.331	3.097	3.727	4.275
145	.676	1.284	1.648	1.964	2.331	3.097	3.727	4.275
146	.676	1.284	1.648	1.964	2.331	3.097	3.727	4.274
147	.676	1.284	1.648	1.964	2.331	3.097	3.727	4.274
148	.676	1.284	1.648	1.964	2.331	3.097	3.727	4.274
149	.676	1.284	1.648	1.964	2.331	3.097	3.727	4.274
150	.676	1.284	1.648	1.964	2.331	3.097	3.727	4.274
151	.676	1.284	1.648	1.964	2.331	3.097	3.727	4.274
152	.676	1.284	1.648	1.964	2.331	3.097	3.727	4.274
153	.676	1.284	1.648	1.964	2.331	3.097	3.727	4.274
154	.676	1.284	1.648	1.964	2.331	3.097	3.727	4.274
155	.676	1.284	1.648	1.964	2.331	3.097	3.727	4.274
156	.676	1.284	1.648	1.964	2.331	3.097	3.727	4.274
157	.676	1.284	1.648	1.964	2.331	3.097	3.727	4.274
158	.676	1.284	1.648	1.964	2.331	3.097	3.727	4.274
159	.676	1.284	1.648	1.964	2.331	3.096	3.727	4.274
160	.676	1.284	1.648	1.964	2.331	3.096	3.727	4.274
161	.676	1.284	1.648	1.964	2.331	3.096	3.727	4.274
162	.676	1.284	1.648	1.964	2.331	3.096	3.726	4.274
163	.676	1.284	1.648	1.964	2.331	3.096	3.726	4.273
164	.676	1.284	1.648	1.964	2.331	3.096	3.726	4.273
165	.676	1.284	1.648	1.964	2.331	3.096	3.726	4.273
166	.676	1.284	1.648	1.964	2.331	3.096	3.726	4.273
167	.676	1.284	1.648	1.964	2.331	3.096	3.726	4.273
168	.676	1.284	1.648	1.964	2.331	3.096	3.726	4.273
169	.676	1.284	1.648	1.964	2.331	3.096	3.726	4.273
170	.676	1.284	1.648	1.964	2.331	3.096	3.726	4.273
171	.676	1.284	1.648	1.963	2.331	3.096	3.726	4.273
172	.676	1.284	1.648	1.963	2.331	3.096	3.726	4.273
173	.676	1.284	1.648	1.963	2.331	3.096	3.726	4.273
174	.676	1.284	1.648	1.963	2.331	3.096	3.726	4.273
175	.676	1.284	1.648	1.963	2.331	3.096	3.726	4.273
176	.676	1.284	1.648	1.963	2.330	3.096	3.726	4.273
177	.676	1.284	1.648	1.963	2.330	3.096	3.726	4.273
178	.676	1.284	1.648	1.963	2.330	3.096	3.726	4.273
179	.675	1.284	1.648	1.963	2.330	3.096	3.726	4.273
180	.675	1.284	1.648	1.963	2.330	3.096	3.726	4.273

2.7 Values of k for f = n - 1 and γ = .50 (Continued)

$$\Pr\left\{T_f \leq k\sqrt{n} \,\middle|\, K_p\sqrt{n}\right\} = \gamma$$

	P							
n	.75000	.90000	.95000	.97500	.99000	.99900	.99990	.99999
181	.675	1.284	1.648	1.963	2.330	3.096	3.726	4.273
182	.675	1.284	1.648	1.963	2.330	3.096	3.726	4.273
183	.675	1.284	1.648	1.963	2.330	3.096	3.726	4.273
184	.675	1.284	1.648	1.963	2.330	3.096	3.726	4.272
185	.675	1.284	1.648	1.963	2.330	3.096	3.726	4.272
186	.675	1.284	1.648	1.963	2.330	3.096	3.726	4.272
187	.675	1.284	1.647	1.963	2.330	3.096	3.725	4.272
188	.675	1.284	1.647	1.963	2.330	3.096	3.725	4.272
189	.675	1.284	1.647	1.963	2.330	3.095	3.725	4.272
190	.675	1.284	1.647	1.963	2.330	3.095	3.725	4.272
191	.675	1.283	1.647	1.963	2.330	3.095	3.725	4.272
192	.675	1.283	1.647	1.963	2.330	3.095	3.725	4.272
193	.675	1.283	1.647	1.963	2.330	3.095	3.725	4.272
194	.675	1.283	1.647	1.963	2.330	3.095	3.725	4.272
195	.675	1.283	1.647	1.963	2.330	3.095	3.725	4.272
196	.675	1.283	1.647	1.963	2.330	3.095	3.725	4.272
197	.675	1.283	1.647	1.963	2.330	3.095	3.725	4.272
198	.675	1.283	1.647	1.963	2.330	3.095	3.725	4.272
199	.675	1.283	1.647	1.963	2.330	3.095	3.725	4.272
200	.675	1.283	1.647	1.963	2.330	3.095	3.725	4.272
205	.675	1.283	1.647	1.963	2.330	3.095	3.725	4.272
210	.675	1.283	1.647	1.963	2.330	3.095	3.725	4.272
215	.675	1.283	1.647	1.963	2.330	3.095	3.725	4.271
220	.675	1.283	1.647	1.963	2.330	3.095	3.725	4.271
225	.675	1.283	1.647	1.963	2.330	3.095	3.724	4.271
230	.675	1.283	1.647	1.963	2.330	3.095	3.724	4.271
235	.675	1.283	1.647	1.963	2.329	3.094	3.724	4.271
240	.675	1.283	1.647	1.962	2.329	3.094	3.724	4.271
245	.675	1.283	1.647	1.962	2.329	3.094	3.724	4.271
250	.675	1.283	1.647	1.962	2.329	3.094	3.724	4.270
255	.675	1.283	1.647	1.962	2.329	3.094	3.724	4.270
260	.675	1.283	1.647	1.962	2.329	3.094	3.724	4.270
265	.675	1.283	1.647	1.962	2.329	3.094	3.724	4.270
270	.675	1.283	1.647	1.962	2.329	3.094	3.723	4.270
275	.675	1.283	1.647	1.962	2.329	3.094	3.723	4.270
280	.675	1.283	1.647	1.962	2.329	3.094	3.723	4.270
285	.675	1.283	1.647	1.962	2.329	3.094	3.723	4.270
290	.675	1.283	1.647	1.962	2.329	3.094	3.723	4.270
295	.675	1.283	1.647	1.962	2.329	3.094	3.723	4.270
300	.675	1.283	1.646	1.962	2.329	3.094	3.723	4.270
305	.675	1.283	1.646	1.962	2.329	3.093	3.723	4.269
310	.675	1.283	1.646	1.962	2.329	3.093	3.723	4.269
315	.675	1.283	1.646	1.962	2.329	3.093	3.723	4.269
320	.675	1.283	1.646	1.962	2.329	3.093	3.723	4.269
325	.675	1.283	1.646	1.962	2.329	3.093	3.723	4.269

2.7 Values of k for f = n - 1 and γ = .50 (Continued)

$$\Pr\left\{T_f \leq k\sqrt{n} \,\middle|\, K_p\sqrt{n}\right\} = \gamma$$

	P							
n	.75000	.90000	.95000	.97500	.99000	.99900	.99990	.99999
330	.675	1.283	1.646	1.962	2.329	3.093	3.723	4.269
335	.675	1.283	1.646	1.962	2.329	3.093	3.723	4.269
340	.675	1.283	1.646	1.962	2.328	3.093	3.723	4.269
345	.675	1.283	1.646	1.962	2.328	3.093	3.723	4.269
350	.675	1.283	1.646	1.962	2.328	3.093	3.722	4.269
355	.675	1.283	1.646	1.962	2.328	3.093	3.722	4.269
360	.675	1.283	1.646	1.962	2.328	3.093	3.722	4.269
365	.675	1.283	1.646	1.962	2.328	3.093	3.722	4.269
370	.675	1.283	1.646	1.962	2.328	3.093	3.722	4.269
375	.675	1.283	1.646	1.962	2.328	3.093	3.722	4.269
380	.675	1.283	1.646	1.962	2.328	3.093	3.722	4.269
385	.675	1.283	1.646	1.962	2.328	3.093	3.722	4.269
390	.675	1.282	1.646	1.962	2.328	3.093	3.722	4.268
395	.675	1.282	1.646	1.961	2.328	3.093	3.722	4.268
400	.675	1.282	1.646	1.961	2.328	3.093	3.722	4.268
425	.675	1.282	1.646	1.961	2.328	3.093	3.722	4.268
450	.675	1.282	1.646	1.961	2.328	3.092	3.722	4.268
475	.675	1.282	1.646	1.961	2.328	3.092	3.722	4.268
500	.675	1.282	1.646	1.961	2.328	3.092	3.721	4.268
525	.675	1.282	1.646	1.961	2.328	3.092	3.721	4.268
550	.675	1.282	1.646	1.961	2.328	3.092	3.721	4.267
575	.675	1.282	1.646	1.961	2.328	3.092	3.721	4.267
600	.675	1.282	1.646	1.961	2.328	3.092	3.721	4.267
625	.675	1.282	1.646	1.961	2.328	3.092	3.721	4.267
650	.675	1.282	1.646	1.961	2.327	3.092	3.721	4.267
675	.675	1.282	1.646	1.961	2.327	3.092	3.721	4.267
700	.675	1.282	1.646	1.961	2.327	3.092	3.721	4.267
725	.675	1.282	1.646	1.961	2.327	3.092	3.721	4.267
750	.675	1.282	1.646	1.961	2.327	3.092	3.721	4.267
775	.675	1.282	1.645	1.961	2.327	3.092	3.721	4.267
800	.675	1.282	1.645	1.961	2.327	3.091	3.721	4.267
825	.675	1.282	1.645	1.961	2.327	3.091	3.720	4.267
850	.675	1.282	1.645	1.961	2.327	3.091	3.720	4.267
875	.675	1.282	1.645	1.961	2.327	3.091	3.720	4.266
900	.675	1.282	1.645	1.961	2.327	3.091	3.720	4.266
925	.675	1.282	1.645	1.961	2.327	3.091	3.720	4.266
950	.675	1.282	1.645	1.961	2.327	3.091	3.720	4.266
975	.675	1.282	1.645	1.961	2.327	3.091	3.720	4.266
1000	.675	1.282	1.645	1.961	2.327	3.091	3.720	4.266
1500	.675	1.282	1.645	1.961	2.327	3.091	3.720	4.266
2000	.675	1.282	1.645	1.961	2.327	3.091	3.720	4.266
3000	.675	1.282	1.645	1.961	2.327	3.091	3.720	4.266
5000	.675	1.282	1.645	1.961	2.327	3.091	3.720	4.266
10000	.675	1.282	1.645	1.961	2.327	3.091	3.720	4.266
∞	.674	1.282	1.645	1.960	2.326	3.090	3.719	4.265

2.8 Values of k for f = n - 1 and γ = .25

$$\Pr\left\{T_f \leq k\sqrt{n} \,\middle|\, K_p\sqrt{n}\right\} = \gamma$$

	P							
n	.75000	.90000	.95000	.97500	.99000	.99900	.99990	.99999
2	.236	.886	1.248	1.551	1.895	2.592	3.155	3.639
3	.309	.912	1.253	1.541	1.871	2.544	3.092	3.564
4	.353	.943	1.281	1.567	1.895	2.570	3.118	3.592
5	.384	.969	1.305	1.592	1.921	2.599	3.151	3.628
6	.407	.990	1.326	1.614	1.944	2.625	3.181	3.661
7	.425	1.006	1.344	1.632	1.964	2.648	3.207	3.690
8	.439	1.021	1.358	1.647	1.980	2.668	3.229	3.715
9	.452	1.033	1.371	1.661	1.995	2.685	3.249	3.737
10	.462	1.043	1.382	1.673	2.008	2.700	3.267	3.757
11	.471	1.053	1.392	1.683	2.019	2.714	3.282	3.774
12	.479	1.061	1.401	1.693	2.029	2.726	3.296	3.790
13	.486	1.068	1.409	1.701	2.039	2.737	3.309	3.804
14	.493	1.075	1.416	1.709	2.047	2.747	3.321	3.817
15	.498	1.081	1.422	1.716	2.055	2.756	3.331	3.829
16	.504	1.086	1.428	1.722	2.062	2.765	3.341	3.840
17	.508	1.091	1.434	1.728	2.068	2.773	3.350	3.850
18	.513	1.096	1.439	1.733	2.074	2.780	3.358	3.859
19	.517	1.100	1.443	1.738	2.080	2.787	3.366	3.868
20	.520	1.104	1.448	1.743	2.085	2.793	3.373	3.876
21	.524	1.108	1.452	1.747	2.090	2.799	3.380	3.883
22	.527	1.112	1.455	1.752	2.094	2.804	3.386	3.890
23	.530	1.115	1.459	1.756	2.098	2.809	3.392	3.897
24	.533	1.118	1.462	1.759	2.102	2.814	3.398	3.904
25	.536	1.121	1.466	1.763	2.106	2.819	3.403	3.910
26	.538	1.124	1.469	1.766	2.110	2.823	3.408	3.915
27	.541	1.126	1.472	1.769	2.113	2.828	3.413	3.921
28	.543	1.129	1.474	1.772	2.117	2.832	3.418	3.926
29	.545	1.131	1.477	1.775	2.120	2.835	3.422	3.931
30	.547	1.133	1.479	1.778	2.123	2.839	3.426	3.936
31	.549	1.136	1.482	1.780	2.126	2.842	3.430	3.940
32	.551	1.138	1.484	1.783	2.128	2.846	3.434	3.944
33	.553	1.140	1.486	1.785	2.131	2.849	3.438	3.948
34	.554	1.141	1.488	1.787	2.133	2.852	3.442	3.952
35	.556	1.143	1.490	1.789	2.136	2.855	3.445	3.956
36	.558	1.145	1.492	1.792	2.138	2.858	3.448	3.960
37	.559	1.147	1.494	1.794	2.140	2.861	3.451	3.964
38	.561	1.148	1.496	1.795	2.143	2.863	3.454	3.967
39	.562	1.150	1.497	1.797	2.145	2.866	3.457	3.970
40	.563	1.151	1.499	1.799	2.147	2.868	3.460	3.973
41	.565	1.153	1.501	1.801	2.149	2.870	3.463	3.976
42	.566	1.154	1.502	1.803	2.150	2.873	3.466	3.979
43	.567	1.156	1.504	1.804	2.152	2.875	3.468	3.982
44	.568	1.157	1.505	1.806	2.154	2.877	3.471	3.985
45	.569	1.158	1.507	1.807	2.156	2.879	3.473	3.988

2.8 Values of k for f = n - 1 and γ = .25 (Continued)

$$\Pr\left\{T_f \leq k\sqrt{n} \,\middle|\, K_p\sqrt{n}\right\} = \gamma$$

	P							
n	.75000	.90000	.95000	.97500	.99000	.99900	.99990	.99999
46	.570	1.159	1.508	1.809	2.157	2.881	3.475	3.990
47	.571	1.161	1.509	1.810	2.159	2.883	3.478	3.993
48	.572	1.162	1.511	1.812	2.160	2.885	3.480	3.996
49	.573	1.163	1.512	1.813	2.162	2.887	3.482	3.998
50	.574	1.164	1.513	1.814	2.163	2.889	3.484	4.000
51	.575	1.165	1.514	1.816	2.165	2.890	3.486	4.003
52	.576	1.166	1.515	1.817	2.166	2.892	3.488	4.005
53	.577	1.167	1.516	1.818	2.168	2.894	3.490	4.007
54	.578	1.168	1.518	1.819	2.169	2.895	3.492	4.009
55	.579	1.169	1.519	1.820	2.170	2.897	3.494	4.011
56	.580	1.170	1.520	1.822	2.171	2.899	3.496	4.013
57	.580	1.171	1.521	1.823	2.173	2.900	3.497	4.015
58	.581	1.172	1.522	1.824	2.174	2.902	3.499	4.017
59	.582	1.173	1.523	1.825	2.175	2.903	3.501	4.019
60	.583	1.173	1.523	1.826	2.176	2.904	3.502	4.021
61	.583	1.174	1.524	1.827	2.177	2.906	3.504	4.022
62	.584	1.175	1.525	1.828	2.178	2.907	3.505	4.024
63	.585	1.176	1.526	1.829	2.179	2.908	3.507	4.026
64	.586	1.177	1.527	1.830	2.180	2.910	3.508	4.027
65	.586	1.177	1.528	1.831	2.181	2.911	3.510	4.029
66	.587	1.178	1.529	1.831	2.182	2.912	3.511	4.031
67	.587	1.179	1.529	1.832	2.183	2.913	3.513	4.032
68	.588	1.180	1.530	1.833	2.184	2.914	3.514	4.034
69	.589	1.180	1.531	1.834	2.185	2.916	3.515	4.035
70	.589	1.181	1.532	1.835	2.186	2.917	3.517	4.037
71	.590	1.182	1.532	1.836	2.187	2.918	3.518	4.038
72	.590	1.182	1.533	1.836	2.188	2.919	3.519	4.040
73	.591	1.183	1.534	1.837	2.189	2.920	3.520	4.041
74	.592	1.183	1.535	1.838	2.190	2.921	3.522	4.042
75	.592	1.184	1.535	1.839	2.191	2.922	3.523	4.044
76	.593	1.185	1.536	1.839	2.191	2.923	3.524	4.045
77	.593	1.185	1.537	1.840	2.192	2.924	3.525	4.046
78	.594	1.186	1.537	1.841	2.193	2.925	3.526	4.048
79	.594	1.186	1.538	1.842	2.194	2.926	3.527	4.049
80	.595	1.187	1.538	1.842	2.194	2.927	3.528	4.050
81	.595	1.187	1.539	1.843	2.195	2.928	3.529	4.051
82	.596	1.188	1.540	1.844	2.196	2.929	3.530	4.052
83	.596	1.189	1.540	1.844	2.197	2.929	3.531	4.053
84	.596	1.189	1.541	1.845	2.197	2.930	3.532	4.055
85	.597	1.190	1.541	1.845	2.198	2.931	3.533	4.056
86	.597	1.190	1.542	1.846	2.199	2.932	3.534	4.057
87	.598	1.191	1.543	1.847	2.199	2.933	3.535	4.058
88	.598	1.191	1.543	1.847	2.200	2.934	3.536	4.059
89	.599	1.192	1.544	1.848	2.201	2.934	3.537	4.060
90	.599	1.192	1.544	1.848	2.201	2.935	3.538	4.061

2.8 Values of k for f = n - 1 and γ = .25 (Continued)

$$\Pr\left\{T_f \leq k\sqrt{n} \mid K_p\sqrt{n}\right\} = \gamma$$

	P							
n	.75000	.90000	.95000	.97500	.99000	.99900	.99990	.99999
91	.599	1.192	1.545	1.849	2.202	2.936	3.539	4.062
92	.600	1.193	1.545	1.850	2.203	2.937	3.540	4.063
93	.600	1.193	1.546	1.850	2.203	2.938	3.541	4.064
94	.601	1.194	1.546	1.851	2.204	2.938	3.542	4.065
95	.601	1.194	1.547	1.851	2.204	2.939	3.543	4.066
96	.601	1.195	1.547	1.852	2.205	2.940	3.543	4.067
97	.602	1.195	1.548	1.852	2.206	2.940	3.544	4.068
98	.602	1.196	1.548	1.853	2.206	2.941	3.545	4.069
99	.602	1.196	1.548	1.853	2.207	2.942	3.546	4.070
100	.603	1.196	1.549	1.854	2.207	2.943	3.547	4.071
101	.603	1.197	1.549	1.854	2.208	2.943	3.547	4.071
102	.603	1.197	1.550	1.855	2.208	2.944	3.548	4.072
103	.604	1.197	1.550	1.855	2.209	2.945	3.549	4.073
104	.604	1.198	1.551	1.856	2.209	2.945	3.550	4.074
105	.604	1.198	1.551	1.856	2.210	2.946	3.550	4.075
106	.605	1.199	1.551	1.857	2.210	2.946	3.551	4.076
107	.605	1.199	1.552	1.857	2.211	2.947	3.552	4.076
108	.605	1.199	1.552	1.857	2.211	2.948	3.553	4.077
109	.606	1.200	1.553	1.858	2.212	2.948	3.553	4.078
110	.606	1.200	1.553	1.858	2.212	2.949	3.554	4.079
111	.606	1.200	1.553	1.859	2.213	2.949	3.555	4.080
112	.607	1.201	1.554	1.859	2.213	2.950	3.555	4.080
113	.607	1.201	1.554	1.860	2.214	2.951	3.556	4.081
114	.607	1.201	1.555	1.860	2.214	2.951	3.557	4.082
115	.607	1.202	1.555	1.860	2.215	2.952	3.557	4.083
116	.608	1.202	1.555	1.861	2.215	2.952	3.558	4.083
117	.608	1.202	1.556	1.861	2.216	2.953	3.559	4.084
118	.608	1.203	1.556	1.862	2.216	2.953	3.559	4.085
119	.608	1.203	1.556	1.862	2.216	2.954	3.560	4.085
120	.609	1.203	1.557	1.862	2.217	2.954	3.560	4.086
121	.609	1.204	1.557	1.863	2.217	2.955	3.561	4.087
122	.609	1.204	1.557	1.863	2.218	2.955	3.562	4.087
123	.610	1.204	1.558	1.863	2.218	2.956	3.562	4.088
124	.610	1.205	1.558	1.864	2.218	2.956	3.563	4.089
125	.610	1.205	1.558	1.864	2.219	2.957	3.563	4.089
126	.610	1.205	1.559	1.864	2.219	2.957	3.564	4.090
127	.611	1.205	1.559	1.865	2.220	2.958	3.564	4.091
128	.611	1.206	1.559	1.865	2.220	2.958	3.565	4.091
129	.611	1.206	1.560	1.866	2.220	2.959	3.566	4.092
130	.611	1.206	1.560	1.866	2.221	2.959	3.566	4.092
131	.611	1.206	1.560	1.866	2.221	2.960	3.567	4.093
132	.612	1.207	1.561	1.867	2.222	2.960	3.567	4.094
133	.612	1.207	1.561	1.867	2.222	2.961	3.568	4.094
134	.612	1.207	1.561	1.867	2.222	2.961	3.568	4.095
135	.612	1.208	1.561	1.868	2.223	2.962	3.569	4.095

2.8 Values of k for f = n - 1 and γ = .25 (Continued)

$$\Pr\left\{T_f \leq k\sqrt{n} \,\middle|\, K_p\sqrt{n}\right\} = \gamma$$

	P							
n	.75000	.90000	.95000	.97500	.99000	.99900	.99990	.99999
136	.613	1.208	1.562	1.868	2.223	2.962	3.569	4.096
137	.613	1.208	1.562	1.868	2.223	2.962	3.570	4.097
138	.613	1.208	1.562	1.868	2.224	2.963	3.570	4.097
139	.613	1.209	1.563	1.869	2.224	2.963	3.571	4.098
140	.613	1.209	1.563	1.869	2.224	2.964	3.571	4.098
141	.614	1.209	1.563	1.869	2.225	2.964	3.572	4.099
142	.614	1.209	1.563	1.870	2.225	2.964	3.572	4.099
143	.614	1.210	1.564	1.870	2.225	2.965	3.573	4.100
144	.614	1.210	1.564	1.870	2.226	2.965	3.573	4.100
145	.614	1.210	1.564	1.871	2.226	2.966	3.574	4.101
146	.615	1.210	1.564	1.871	2.226	2.966	3.574	4.101
147	.615	1.210	1.565	1.871	2.227	2.966	3.575	4.102
148	.615	1.211	1.565	1.871	2.227	2.967	3.575	4.102
149	.615	1.211	1.565	1.872	2.227	2.967	3.575	4.103
150	.615	1.211	1.565	1.872	2.228	2.968	3.576	4.103
151	.616	1.211	1.566	1.872	2.228	2.968	3.576	4.104
152	.616	1.212	1.566	1.872	2.228	2.968	3.577	4.104
153	.616	1.212	1.566	1.873	2.229	2.969	3.577	4.105
154	.616	1.212	1.566	1.873	2.229	2.969	3.578	4.105
155	.616	1.212	1.567	1.873	2.229	2.969	3.578	4.106
156	.617	1.212	1.567	1.874	2.229	2.970	3.578	4.106
157	.617	1.213	1.567	1.874	2.230	2.970	3.579	4.107
158	.617	1.213	1.567	1.874	2.230	2.971	3.579	4.107
159	.617	1.213	1.568	1.874	2.230	2.971	3.580	4.108
160	.617	1.213	1.568	1.875	2.231	2.971	3.580	4.108
161	.617	1.213	1.568	1.875	2.231	2.972	3.580	4.109
162	.618	1.214	1.568	1.875	2.231	2.972	3.581	4.109
163	.618	1.214	1.569	1.875	2.231	2.972	3.581	4.110
164	.618	1.214	1.569	1.876	2.232	2.973	3.582	4.110
165	.618	1.214	1.569	1.876	2.232	2.973	3.582	4.110
166	.618	1.214	1.569	1.876	2.232	2.973	3.582	4.111
167	.618	1.215	1.569	1.876	2.232	2.974	3.583	4.111
168	.619	1.215	1.570	1.877	2.233	2.974	3.583	4.112
169	.619	1.215	1.570	1.877	2.233	2.974	3.584	4.112
170	.619	1.215	1.570	1.877	2.233	2.975	3.584	4.113
171	.619	1.215	1.570	1.877	2.233	2.975	3.584	4.113
172	.619	1.216	1.570	1.877	2.234	2.975	3.585	4.113
173	.619	1.216	1.571	1.878	2.234	2.976	3.585	4.114
174	.620	1.216	1.571	1.878	2.234	2.976	3.585	4.114
175	.620	1.216	1.571	1.878	2.234	2.976	3.586	4.115
176	.620	1.216	1.571	1.878	2.235	2.976	3.586	4.115
177	.620	1.216	1.571	1.879	2.235	2.977	3.586	4.115
178	.620	1.217	1.572	1.879	2.235	2.977	3.587	4.116
179	.620	1.217	1.572	1.879	2.235	2.977	3.587	4.116
180	.620	1.217	1.572	1.879	2.236	2.978	3.587	4.117

2.8 Values of k for f = n - 1 and γ = .25 (Continued)

$$\Pr\left\{T_f \leq k\sqrt{n} \,\middle|\, K_p\sqrt{n}\right\} = \gamma$$

	P							
n	.75000	.90000	.95000	.97500	.99000	.99900	.99990	.99999
181	.621	1.217	1.572	1.879	2.236	2.978	3.588	4.117
182	.621	1.217	1.572	1.880	2.236	2.978	3.588	4.117
183	.621	1.218	1.573	1.880	2.236	2.978	3.588	4.118
184	.621	1.218	1.573	1.880	2.237	2.979	3.589	4.118
185	.621	1.218	1.573	1.880	2.237	2.979	3.589	4.118
186	.621	1.218	1.573	1.880	2.237	2.979	3.589	4.119
187	.621	1.218	1.573	1.881	2.237	2.980	3.590	4.119
188	.622	1.218	1.573	1.881	2.238	2.980	3.590	4.119
189	.622	1.218	1.574	1.881	2.238	2.980	3.590	4.120
190	.622	1.219	1.574	1.881	2.238	2.980	3.591	4.120
191	.622	1.219	1.574	1.881	2.238	2.981	3.591	4.121
192	.622	1.219	1.574	1.882	2.238	2.981	3.591	4.121
193	.622	1.219	1.574	1.882	2.239	2.981	3.592	4.121
194	.622	1.219	1.575	1.882	2.239	2.981	3.592	4.122
195	.623	1.219	1.575	1.882	2.239	2.982	3.592	4.122
196	.623	1.220	1.575	1.882	2.239	2.982	3.593	4.122
197	.623	1.220	1.575	1.883	2.239	2.982	3.593	4.123
198	.623	1.220	1.575	1.883	2.240	2.983	3.593	4.123
199	.623	1.220	1.575	1.883	2.240	2.983	3.593	4.123
200	.623	1.220	1.576	1.883	2.240	2.983	3.594	4.124
205	.624	1.221	1.576	1.884	2.241	2.984	3.595	4.125
210	.624	1.222	1.577	1.885	2.242	2.985	3.597	4.127
215	.625	1.222	1.578	1.886	2.243	2.987	3.598	4.128
220	.625	1.223	1.579	1.886	2.244	2.988	3.599	4.130
225	.626	1.224	1.579	1.887	2.245	2.989	3.600	4.131
230	.627	1.224	1.580	1.888	2.246	2.990	3.602	4.133
235	.627	1.225	1.581	1.889	2.246	2.991	3.603	4.134
240	.628	1.225	1.581	1.889	2.247	2.992	3.604	4.135
245	.628	1.226	1.582	1.890	2.248	2.993	3.605	4.136
250	.628	1.226	1.583	1.891	2.249	2.994	3.606	4.138
255	.629	1.227	1.583	1.891	2.249	2.995	3.607	4.139
260	.629	1.227	1.584	1.892	2.250	2.995	3.608	4.140
265	.630	1.228	1.584	1.893	2.251	2.996	3.609	4.141
270	.630	1.228	1.585	1.893	2.251	2.997	3.610	4.142
275	.631	1.229	1.585	1.894	2.252	2.998	3.611	4.143
280	.631	1.229	1.586	1.894	2.253	2.999	3.612	4.144
285	.631	1.230	1.586	1.895	2.253	2.999	3.613	4.145
290	.632	1.230	1.587	1.896	2.254	3.000	3.614	4.146
295	.632	1.231	1.587	1.896	2.255	3.001	3.615	4.147
300	.632	1.231	1.588	1.897	2.255	3.002	3.615	4.148
305	.633	1.231	1.588	1.897	2.256	3.002	3.616	4.149
310	.633	1.232	1.589	1.898	2.256	3.003	3.617	4.150
315	.633	1.232	1.589	1.898	2.257	3.004	3.618	4.151
320	.634	1.233	1.589	1.898	2.257	3.004	3.619	4.152
325	.634	1.233	1.590	1.899	2.258	3.005	3.619	4.152

2.8 Values of k for f = n - 1 and γ = .25 (Continued)

$$\Pr\left\{T_f \leq k\sqrt{n} \,\middle|\, K_p\sqrt{n}\right\} = \gamma$$

	P							
n	.75000	.90000	.95000	.97500	.99000	.99900	.99990	.99999
330	.634	1.233	1.590	1.899	2.258	3.006	3.620	4.153
335	.635	1.234	1.591	1.900	2.259	3.006	3.621	4.154
340	.635	1.234	1.591	1.900	2.259	3.007	3.621	4.155
345	.635	1.234	1.591	1.901	2.260	3.007	3.622	4.156
350	.635	1.235	1.592	1.901	2.260	3.008	3.623	4.156
355	.636	1.235	1.592	1.901	2.261	3.008	3.623	4.157
360	.636	1.235	1.593	1.902	2.261	3.009	3.624	4.158
365	.636	1.236	1.593	1.902	2.261	3.010	3.625	4.158
370	.636	1.236	1.593	1.903	2.262	3.010	3.625	4.159
375	.637	1.236	1.594	1.903	2.262	3.011	3.626	4.160
380	.637	1.236	1.594	1.903	2.263	3.011	3.626	4.160
385	.637	1.237	1.594	1.904	2.263	3.012	3.627	4.161
390	.637	1.237	1.594	1.904	2.263	3.012	3.628	4.162
395	.638	1.237	1.595	1.904	2.264	3.012	3.628	4.162
400	.638	1.238	1.595	1.905	2.264	3.013	3.629	4.163
425	.639	1.239	1.597	1.906	2.266	3.015	3.631	4.166
450	.640	1.240	1.598	1.908	2.268	3.017	3.634	4.169
475	.641	1.241	1.599	1.909	2.269	3.019	3.636	4.171
500	.642	1.242	1.600	1.910	2.271	3.021	3.638	4.173
525	.642	1.243	1.601	1.911	2.272	3.022	3.640	4.175
550	.643	1.244	1.602	1.913	2.273	3.024	3.641	4.177
575	.644	1.245	1.603	1.914	2.274	3.025	3.643	4.179
600	.645	1.245	1.604	1.914	2.275	3.027	3.645	4.181
625	.645	1.246	1.605	1.915	2.276	3.028	3.646	4.183
650	.646	1.247	1.605	1.916	2.277	3.029	3.647	4.184
675	.646	1.247	1.606	1.917	2.278	3.030	3.649	4.186
700	.647	1.248	1.607	1.918	2.279	3.031	3.650	4.187
725	.647	1.249	1.608	1.918	2.280	3.032	3.651	4.188
750	.648	1.249	1.608	1.919	2.280	3.033	3.652	4.189
775	.648	1.250	1.609	1.920	2.281	3.034	3.653	4.191
800	.648	1.250	1.609	1.920	2.282	3.035	3.654	4.192
825	.649	1.251	1.610	1.921	2.283	3.036	3.655	4.193
850	.649	1.251	1.610	1.922	2.283	3.036	3.656	4.194
875	.650	1.251	1.611	1.922	2.284	3.037	3.657	4.195
900	.650	1.252	1.611	1.923	2.284	3.038	3.658	4.196
925	.650	1.252	1.612	1.923	2.285	3.039	3.659	4.197
950	.651	1.253	1.612	1.924	2.285	3.039	3.659	4.198
975	.651	1.253	1.613	1.924	2.286	3.040	3.660	4.198
1000	.651	1.253	1.613	1.924	2.286	3.041	3.661	4.199
1500	.655	1.259	1.619	1.931	2.294	3.050	3.672	4.211
2000	.658	1.262	1.622	1.935	2.298	3.055	3.678	4.219
3000	.661	1.265	1.627	1.940	2.303	3.062	3.686	4.227
5000	.664	1.269	1.631	1.944	2.309	3.068	3.693	4.236
10000	.667	1.273	1.635	1.949	2.314	3.075	3.701	4.244
∞	.674	1.282	1.645	1.960	2.326	3.090	3.719	4.265

2.9 Values of k for f = n - 1 and $\gamma = .10$

$$\Pr\left\{T_f \leq k\sqrt{n} \,\middle|\, K_p\sqrt{n}\right\} = \gamma$$

	P							
n	.75000	.90000	.95000	.97500	.99000	.99900	.99990	.99999
2	-.333	.403	.717	.961	1.225	1.741	2.148	2.495
3	-.075	.535	.840	1.087	1.361	1.907	2.344	2.717
4	.036	.617	.922	1.173	1.455	2.022	2.478	2.868
5	.106	.675	.982	1.237	1.525	2.107	2.575	2.978
6	.155	.719	1.028	1.286	1.578	2.172	2.651	3.063
7	.193	.755	1.065	1.326	1.622	2.224	2.712	3.132
8	.223	.783	1.096	1.358	1.658	2.268	2.763	3.189
9	.248	.808	1.122	1.386	1.688	2.305	2.806	3.237
10	.269	.828	1.144	1.410	1.715	2.337	2.843	3.279
11	.287	.847	1.163	1.431	1.738	2.365	2.875	3.315
12	.302	.863	1.180	1.450	1.758	2.390	2.904	3.348
13	.316	.877	1.196	1.466	1.776	2.412	2.930	3.377
14	.329	.890	1.210	1.481	1.793	2.433	2.953	3.403
15	.340	.901	1.222	1.495	1.808	2.451	2.974	3.427
16	.350	.912	1.234	1.507	1.822	2.468	2.994	3.448
17	.359	.921	1.244	1.519	1.834	2.483	3.012	3.468
18	.367	.930	1.254	1.529	1.846	2.497	3.028	3.487
19	.375	.939	1.263	1.539	1.857	2.510	3.043	3.504
20	.382	.946	1.271	1.548	1.867	2.523	3.058	3.520
21	.389	.953	1.279	1.557	1.876	2.534	3.071	3.535
22	.395	.960	1.286	1.565	1.885	2.545	3.084	3.549
23	.401	.966	1.293	1.572	1.893	2.555	3.095	3.562
24	.406	.972	1.300	1.579	1.901	2.565	3.106	3.575
25	.411	.978	1.306	1.586	1.908	2.574	3.117	3.587
26	.416	.983	1.311	1.592	1.915	2.582	3.127	3.598
27	.421	.988	1.317	1.598	1.922	2.590	3.136	3.608
28	.425	.993	1.322	1.604	1.928	2.598	3.145	3.618
29	.429	.997	1.327	1.609	1.934	2.605	3.154	3.628
30	.433	1.002	1.332	1.614	1.940	2.612	3.162	3.637
31	.437	1.006	1.336	1.619	1.945	2.619	3.170	3.646
32	.440	1.010	1.341	1.624	1.951	2.625	3.177	3.654
33	.444	1.013	1.345	1.629	1.956	2.632	3.184	3.662
34	.447	1.017	1.349	1.633	1.960	2.637	3.191	3.670
35	.450	1.020	1.352	1.637	1.965	2.643	3.198	3.677
36	.453	1.024	1.356	1.641	1.970	2.649	3.204	3.684
37	.456	1.027	1.360	1.645	1.974	2.654	3.210	3.691
38	.459	1.030	1.363	1.648	1.978	2.659	3.216	3.698
39	.461	1.033	1.366	1.652	1.982	2.664	3.221	3.704
40	.464	1.036	1.369	1.655	1.986	2.668	3.227	3.710
41	.466	1.038	1.372	1.659	1.989	2.673	3.232	3.716
42	.469	1.041	1.375	1.662	1.993	2.677	3.237	3.722
43	.471	1.044	1.378	1.665	1.996	2.681	3.242	3.727
44	.473	1.046	1.381	1.668	2.000	2.686	3.247	3.733
45	.475	1.048	1.383	1.671	2.003	2.690	3.252	3.738

2.9 Values of k for f = n - 1 and γ = .10 (Continued)

$$\Pr\left\{T_f \leq k\sqrt{n} \,\middle|\, K_p\sqrt{n}\right\} = \gamma$$

	P							
n	.75000	.90000	.95000	.97500	.99000	.99900	.99990	.99999
46	.477	1.051	1.386	1.674	2.006	2.693	3.256	3.743
47	.479	1.053	1.389	1.677	2.009	2.697	3.260	3.748
48	.481	1.055	1.391	1.679	2.012	2.701	3.265	3.753
49	.483	1.057	1.393	1.682	2.015	2.704	3.269	3.757
50	.485	1.059	1.396	1.684	2.018	2.708	3.273	3.762
51	.487	1.061	1.398	1.687	2.020	2.711	3.277	3.766
52	.489	1.063	1.400	1.689	2.023	2.714	3.280	3.770
53	.490	1.065	1.402	1.691	2.026	2.717	3.284	3.775
54	.492	1.067	1.404	1.694	2.028	2.721	3.288	3.779
55	.494	1.069	1.406	1.696	2.031	2.724	3.291	3.782
56	.495	1.071	1.408	1.698	2.033	2.726	3.294	3.786
57	.497	1.072	1.410	1.700	2.035	2.729	3.298	3.790
58	.498	1.074	1.412	1.702	2.038	2.732	3.301	3.794
59	.500	1.076	1.414	1.704	2.040	2.735	3.304	3.797
60	.501	1.077	1.415	1.706	2.042	2.737	3.307	3.801
61	.502	1.079	1.417	1.708	2.044	2.740	3.310	3.804
62	.504	1.080	1.419	1.710	2.046	2.743	3.313	3.807
63	.505	1.082	1.420	1.712	2.048	2.745	3.316	3.811
64	.506	1.083	1.422	1.713	2.050	2.748	3.319	3.814
65	.507	1.085	1.424	1.715	2.052	2.750	3.322	3.817
66	.509	1.086	1.425	1.717	2.054	2.752	3.324	3.820
67	.510	1.087	1.427	1.718	2.056	2.754	3.327	3.823
68	.511	1.089	1.428	1.720	2.057	2.757	3.330	3.826
69	.512	1.090	1.430	1.722	2.059	2.759	3.332	3.829
70	.513	1.091	1.431	1.723	2.061	2.761	3.335	3.832
71	.514	1.093	1.432	1.725	2.063	2.763	3.337	3.834
72	.515	1.094	1.434	1.726	2.064	2.765	3.339	3.837
73	.516	1.095	1.435	1.728	2.066	2.767	3.342	3.840
74	.517	1.096	1.436	1.729	2.068	2.769	3.344	3.842
75	.518	1.097	1.438	1.730	2.069	2.771	3.346	3.845
76	.519	1.098	1.439	1.732	2.071	2.773	3.349	3.847
77	.520	1.100	1.440	1.733	2.072	2.775	3.351	3.850
78	.521	1.101	1.441	1.735	2.074	2.777	3.353	3.852
79	.522	1.102	1.442	1.736	2.075	2.778	3.355	3.854
80	.523	1.103	1.444	1.737	2.077	2.780	3.357	3.857
81	.524	1.104	1.445	1.738	2.078	2.782	3.359	3.859
82	.525	1.105	1.446	1.740	2.079	2.784	3.361	3.861
83	.526	1.106	1.447	1.741	2.081	2.785	3.363	3.863
84	.527	1.107	1.448	1.742	2.082	2.787	3.365	3.866
85	.528	1.108	1.449	1.743	2.083	2.789	3.367	3.868
86	.528	1.109	1.450	1.744	2.085	2.790	3.369	3.870
87	.529	1.110	1.451	1.746	2.086	2.792	3.371	3.872
88	.530	1.110	1.452	1.747	2.087	2.793	3.372	3.874
89	.531	1.111	1.453	1.748	2.088	2.795	3.374	3.876
90	.532	1.112	1.454	1.749	2.090	2.796	3.376	3.878

2.9 Values of k for f = n - 1 and γ = .10 (Continued)

$$Pr\left\{T_f \leq k\sqrt{n} \,\middle|\, K_p\sqrt{n}\right\} = \gamma$$

	P							
n	.75000	.90000	.95000	.97500	.99000	.99900	.99990	.99999
91	.532	1.113	1.455	1.750	2.091	2.798	3.378	3.880
92	.533	1.114	1.456	1.751	2.092	2.799	3.379	3.882
93	.534	1.115	1.457	1.752	2.093	2.801	3.381	3.884
94	.535	1.116	1.458	1.753	2.094	2.802	3.383	3.885
95	.535	1.116	1.459	1.754	2.095	2.803	3.384	3.887
96	.536	1.117	1.460	1.755	2.096	2.805	3.386	3.889
97	.537	1.118	1.461	1.756	2.098	2.806	3.387	3.891
98	.537	1.119	1.462	1.757	2.099	2.808	3.389	3.893
99	.538	1.120	1.463	1.758	2.100	2.809	3.390	3.894
100	.539	1.120	1.463	1.759	2.101	2.810	3.392	3.896
101	.539	1.121	1.464	1.760	2.102	2.811	3.393	3.898
102	.540	1.122	1.465	1.761	2.103	2.813	3.395	3.899
103	.541	1.123	1.466	1.762	2.104	2.814	3.396	3.901
104	.541	1.123	1.467	1.762	2.105	2.815	3.398	3.902
105	.542	1.124	1.467	1.763	2.106	2.816	3.399	3.904
106	.542	1.125	1.468	1.764	2.107	2.817	3.400	3.906
107	.543	1.125	1.469	1.765	2.108	2.819	3.402	3.907
108	.544	1.126	1.470	1.766	2.109	2.820	3.403	3.909
109	.544	1.127	1.470	1.767	2.110	2.821	3.404	3.910
110	.545	1.127	1.471	1.767	2.110	2.822	3.406	3.912
111	.545	1.128	1.472	1.768	2.111	2.823	3.407	3.913
112	.546	1.129	1.473	1.769	2.112	2.824	3.408	3.915
113	.546	1.129	1.473	1.770	2.113	2.825	3.410	3.916
114	.547	1.130	1.474	1.771	2.114	2.826	3.411	3.917
115	.547	1.131	1.475	1.771	2.115	2.827	3.412	3.919
116	.548	1.131	1.475	1.772	2.116	2.829	3.413	3.920
117	.549	1.132	1.476	1.773	2.116	2.830	3.415	3.921
118	.549	1.132	1.477	1.774	2.117	2.831	3.416	3.923
119	.550	1.133	1.477	1.774	2.118	2.832	3.417	3.924
120	.550	1.134	1.478	1.775	2.119	2.833	3.418	3.925
121	.551	1.134	1.479	1.776	2.120	2.834	3.419	3.927
122	.551	1.135	1.479	1.776	2.120	2.835	3.420	3.928
123	.552	1.135	1.480	1.777	2.121	2.835	3.421	3.929
124	.552	1.136	1.481	1.778	2.122	2.836	3.423	3.930
125	.552	1.136	1.481	1.779	2.123	2.837	3.424	3.932
126	.553	1.137	1.482	1.779	2.124	2.838	3.425	3.933
127	.553	1.138	1.482	1.780	2.124	2.839	3.426	3.934
128	.554	1.138	1.483	1.781	2.125	2.840	3.427	3.935
129	.554	1.139	1.484	1.781	2.126	2.841	3.428	3.936
130	.555	1.139	1.484	1.782	2.126	2.842	3.429	3.938
131	.555	1.140	1.485	1.782	2.127	2.843	3.430	3.939
132	.556	1.140	1.485	1.783	2.128	2.844	3.431	3.940
133	.556	1.141	1.486	1.784	2.129	2.844	3.432	3.941
134	.556	1.141	1.486	1.784	2.129	2.845	3.433	3.942
135	.557	1.142	1.487	1.785	2.130	2.846	3.434	3.943

2.9 Values of k for f = n - 1 and γ = .10 (Continued)

$$\Pr\left\{T_f \leq k\sqrt{n} \,\middle|\, K_p\sqrt{n}\right\} = \gamma$$

	P							
n	.75000	.90000	.95000	.97500	.99000	.99900	.99990	.99999
136	.557	1.142	1.488	1.786	2.131	2.847	3.435	3.944
137	.558	1.143	1.488	1.786	2.131	2.848	3.436	3.945
138	.558	1.143	1.489	1.787	2.132	2.849	3.437	3.947
139	.559	1.144	1.489	1.787	2.133	2.849	3.438	3.948
140	.559	1.144	1.490	1.788	2.133	2.850	3.439	3.949
141	.559	1.144	1.490	1.788	2.134	2.851	3.440	3.950
142	.560	1.145	1.491	1.789	2.134	2.852	3.440	3.951
143	.560	1.145	1.491	1.790	2.135	2.853	3.441	3.952
144	.561	1.146	1.492	1.790	2.136	2.853	3.442	3.953
145	.561	1.146	1.492	1.791	2.136	2.854	3.443	3.954
146	.561	1.147	1.493	1.791	2.137	2.855	3.444	3.955
147	.562	1.147	1.493	1.792	2.138	2.856	3.445	3.956
148	.562	1.148	1.494	1.792	2.138	2.856	3.446	3.957
149	.562	1.148	1.494	1.793	2.139	2.857	3.447	3.958
150	.563	1.148	1.495	1.793	2.139	2.858	3.447	3.959
151	.563	1.149	1.495	1.794	2.140	2.858	3.448	3.959
152	.563	1.149	1.496	1.794	2.140	2.859	3.449	3.960
153	.564	1.150	1.496	1.795	2.141	2.860	3.450	3.961
154	.564	1.150	1.496	1.795	2.142	2.861	3.451	3.962
155	.565	1.150	1.497	1.796	2.142	2.861	3.451	3.963
156	.565	1.151	1.497	1.796	2.143	2.862	3.452	3.964
157	.565	1.151	1.498	1.797	2.143	2.863	3.453	3.965
158	.566	1.152	1.498	1.797	2.144	2.863	3.454	3.966
159	.566	1.152	1.499	1.798	2.144	2.864	3.455	3.967
160	.566	1.152	1.499	1.798	2.145	2.865	3.455	3.968
161	.567	1.153	1.500	1.799	2.145	2.865	3.456	3.968
162	.567	1.153	1.500	1.799	2.146	2.866	3.457	3.969
163	.567	1.154	1.500	1.800	2.146	2.867	3.458	3.970
164	.567	1.154	1.501	1.800	2.147	2.867	3.458	3.971
165	.568	1.154	1.501	1.801	2.147	2.868	3.459	3.972
166	.568	1.155	1.502	1.801	2.148	2.868	3.460	3.973
167	.568	1.155	1.502	1.801	2.148	2.869	3.461	3.973
168	.569	1.155	1.502	1.802	2.149	2.870	3.461	3.974
169	.569	1.156	1.503	1.802	2.149	2.870	3.462	3.975
170	.569	1.156	1.503	1.803	2.150	2.871	3.463	3.976
171	.570	1.156	1.504	1.803	2.150	2.871	3.463	3.977
172	.570	1.157	1.504	1.804	2.151	2.872	3.464	3.977
173	.570	1.157	1.504	1.804	2.151	2.873	3.465	3.978
174	.570	1.157	1.505	1.805	2.152	2.873	3.465	3.979
175	.571	1.158	1.505	1.805	2.152	2.874	3.466	3.980
176	.571	1.158	1.506	1.805	2.153	2.874	3.467	3.980
177	.571	1.158	1.506	1.806	2.153	2.875	3.467	3.981
178	.572	1.159	1.506	1.806	2.154	2.876	3.468	3.982
179	.572	1.159	1.507	1.807	2.154	2.876	3.469	3.983
180	.572	1.159	1.507	1.807	2.155	2.877	3.469	3.983

2.9 Values of k for f = n - 1 and γ = .10 (Continued)

$$\Pr\left\{T_f \leq k\sqrt{n} \,\middle|\, K_p\sqrt{n}\right\} = \gamma$$

	P							
n	.75000	.90000	.95000	.97500	.99000	.99900	.99990	.99999
181	.572	1.160	1.507	1.807	2.155	2.877	3.470	3.984
182	.573	1.160	1.508	1.808	2.155	2.878	3.471	3.985
183	.573	1.160	1.508	1.808	2.156	2.878	3.471	3.985
184	.573	1.161	1.508	1.809	2.156	2.879	3.472	3.986
185	.574	1.161	1.509	1.809	2.157	2.879	3.473	3.987
186	.574	1.161	1.509	1.809	2.157	2.880	3.473	3.988
187	.574	1.162	1.509	1.810	2.158	2.880	3.474	3.988
188	.574	1.162	1.510	1.810	2.158	2.881	3.474	3.989
189	.575	1.162	1.510	1.810	2.158	2.881	3.475	3.990
190	.575	1.163	1.510	1.811	2.159	2.882	3.476	3.990
191	.575	1.163	1.511	1.811	2.159	2.882	3.476	3.991
192	.575	1.163	1.511	1.812	2.160	2.883	3.477	3.992
193	.576	1.163	1.511	1.812	2.160	2.883	3.477	3.992
194	.576	1.164	1.512	1.812	2.160	2.884	3.478	3.993
195	.576	1.164	1.512	1.813	2.161	2.884	3.479	3.994
196	.576	1.164	1.512	1.813	2.161	2.885	3.479	3.994
197	.577	1.165	1.513	1.813	2.162	2.885	3.480	3.995
198	.577	1.165	1.513	1.814	2.162	2.886	3.480	3.996
199	.577	1.165	1.513	1.814	2.162	2.886	3.481	3.996
200	.577	1.165	1.514	1.814	2.163	2.887	3.481	3.997
205	.578	1.167	1.515	1.816	2.165	2.889	3.484	4.000
210	.580	1.168	1.517	1.818	2.167	2.892	3.487	4.003
215	.581	1.169	1.518	1.819	2.168	2.894	3.489	4.006
220	.582	1.171	1.519	1.821	2.170	2.896	3.492	4.008
225	.583	1.172	1.521	1.822	2.172	2.898	3.494	4.011
230	.584	1.173	1.522	1.824	2.173	2.900	3.496	4.014
235	.585	1.174	1.523	1.825	2.175	2.902	3.499	4.016
240	.586	1.175	1.525	1.826	2.176	2.904	3.501	4.019
245	.586	1.176	1.526	1.828	2.178	2.905	3.503	4.021
250	.587	1.177	1.527	1.829	2.179	2.907	3.505	4.023
255	.588	1.178	1.528	1.830	2.181	2.909	3.507	4.026
260	.589	1.179	1.529	1.831	2.182	2.910	3.509	4.028
265	.590	1.180	1.530	1.832	2.183	2.912	3.511	4.030
270	.590	1.181	1.531	1.834	2.184	2.914	3.513	4.032
275	.591	1.182	1.532	1.835	2.186	2.915	3.514	4.034
280	.592	1.183	1.533	1.836	2.187	2.917	3.516	4.036
285	.593	1.183	1.534	1.837	2.188	2.918	3.518	4.038
290	.593	1.184	1.535	1.838	2.189	2.920	3.519	4.040
295	.594	1.185	1.536	1.839	2.190	2.921	3.521	4.041
300	.595	1.186	1.537	1.840	2.191	2.922	3.523	4.043
305	.595	1.187	1.538	1.841	2.192	2.924	3.524	4.045
310	.596	1.187	1.538	1.842	2.193	2.925	3.526	4.047
315	.597	1.188	1.539	1.843	2.194	2.926	3.527	4.048
320	.597	1.189	1.540	1.843	2.195	2.927	3.528	4.050
325	.598	1.189	1.541	1.844	2.196	2.928	3.530	4.051

2.9 Values of k for f = n - 1 and γ = .10 (Continued)

$$\Pr\left\{T_f \leq k\sqrt{n} \,\middle|\, K_p\sqrt{n}\right\} = \gamma$$

	P							
n	.75000	.90000	.95000	.97500	.99000	.99900	.99990	.99999
330	.598	1.190	1.541	1.845	2.197	2.930	3.531	4.053
335	.599	1.191	1.542	1.846	2.198	2.931	3.533	4.055
340	.599	1.191	1.543	1.847	2.199	2.932	3.534	4.056
345	.600	1.192	1.544	1.848	2.200	2.933	3.535	4.057
350	.600	1.193	1.544	1.848	2.201	2.934	3.536	4.059
355	.601	1.193	1.545	1.849	2.202	2.935	3.538	4.060
360	.601	1.194	1.546	1.850	2.203	2.936	3.539	4.062
365	.602	1.194	1.546	1.851	2.203	2.937	3.540	4.063
370	.602	1.195	1.547	1.851	2.204	2.938	3.541	4.064
375	.603	1.196	1.548	1.852	2.205	2.939	3.542	4.065
380	.603	1.196	1.548	1.853	2.206	2.940	3.543	4.067
385	.604	1.197	1.549	1.853	2.206	2.941	3.544	4.068
390	.604	1.197	1.549	1.854	2.207	2.942	3.546	4.069
395	.605	1.198	1.550	1.855	2.208	2.943	3.547	4.070
400	.605	1.198	1.551	1.855	2.209	2.944	3.548	4.071
425	.607	1.201	1.553	1.858	2.212	2.948	3.553	4.077
450	.609	1.203	1.556	1.861	2.215	2.952	3.557	4.082
475	.611	1.205	1.558	1.863	2.218	2.955	3.561	4.087
500	.612	1.207	1.560	1.866	2.221	2.958	3.565	4.091
525	.614	1.208	1.562	1.868	2.223	2.962	3.568	4.095
550	.615	1.210	1.564	1.870	2.225	2.964	3.572	4.099
575	.616	1.212	1.566	1.872	2.227	2.967	3.575	4.102
600	.618	1.213	1.567	1.874	2.229	2.970	3.578	4.106
625	.619	1.214	1.569	1.875	2.231	2.972	3.581	4.109
650	.620	1.216	1.570	1.877	2.233	2.974	3.583	4.112
675	.621	1.217	1.572	1.879	2.235	2.976	3.586	4.114
700	.622	1.218	1.573	1.880	2.236	2.978	3.588	4.117
725	.623	1.219	1.574	1.881	2.238	2.980	3.590	4.119
750	.624	1.220	1.575	1.883	2.239	2.982	3.592	4.122
775	.624	1.221	1.576	1.884	2.241	2.984	3.594	4.124
800	.625	1.222	1.577	1.885	2.242	2.985	3.596	4.126
825	.626	1.223	1.578	1.886	2.243	2.987	3.598	4.128
850	.627	1.224	1.579	1.887	2.244	2.988	3.600	4.130
875	.627	1.225	1.580	1.888	2.246	2.990	3.601	4.132
900	.628	1.225	1.581	1.889	2.247	2.991	3.603	4.134
925	.629	1.226	1.582	1.890	2.248	2.992	3.604	4.136
950	.629	1.227	1.583	1.891	2.249	2.994	3.606	4.137
975	.630	1.227	1.584	1.892	2.250	2.995	3.607	4.139
1000	.630	1.228	1.584	1.893	2.251	2.996	3.609	4.140
1500	.638	1.238	1.596	1.905	2.265	3.014	3.629	4.164
2000	.643	1.244	1.602	1.913	2.273	3.024	3.642	4.178
3000	.649	1.251	1.610	1.922	2.283	3.036	3.656	4.194
5000	.655	1.258	1.618	1.930	2.293	3.049	3.670	4.210
10000	.661	1.265	1.626	1.939	2.303	3.061	3.685	4.226
∞	.674	1.282	1.645	1.960	2.326	3.090	3.719	4.265

2.10 Values of k for f = n - 1 and γ = .05

$$\Pr\left\{T_f \leq k\sqrt{n} \,\middle|\, K_p \sqrt{n}\right\} = \gamma$$

	P							
n	.75000	.90000	.95000	.97500	.99000	.99900	.99990	.99999
2	-.935	.138	.475	.711	.954	1.409	1.761	2.058
3	-.349	.334	.639	.875	1.130	1.626	2.017	2.350
4	-.168	.444	.743	.983	1.246	1.768	2.183	2.537
5	-.066	.519	.818	1.061	1.331	1.871	2.302	2.671
6	.003	.575	.875	1.121	1.396	1.950	2.394	2.774
7	.054	.619	.920	1.169	1.449	2.014	2.468	2.857
8	.095	.655	.958	1.209	1.493	2.067	2.529	2.926
9	.128	.686	.990	1.243	1.530	2.112	2.581	2.985
10	.155	.712	1.017	1.273	1.563	2.151	2.626	3.035
11	.179	.734	1.041	1.299	1.591	2.185	2.666	3.080
12	.199	.754	1.062	1.321	1.616	2.216	2.701	3.119
13	.217	.772	1.081	1.342	1.638	2.243	2.733	3.155
14	.233	.788	1.098	1.360	1.658	2.267	2.761	3.187
15	.247	.802	1.114	1.377	1.677	2.290	2.787	3.216
16	.260	.815	1.128	1.392	1.694	2.310	2.811	3.242
17	.272	.827	1.141	1.406	1.709	2.329	2.833	3.267
18	.283	.839	1.153	1.419	1.724	2.347	2.853	3.290
19	.293	.849	1.164	1.431	1.737	2.363	2.872	3.311
20	.302	.858	1.175	1.443	1.749	2.378	2.889	3.331
21	.310	.867	1.184	1.453	1.761	2.392	2.906	3.349
22	.318	.876	1.193	1.463	1.772	2.405	2.921	3.366
23	.326	.884	1.202	1.472	1.782	2.418	2.936	3.382
24	.333	.891	1.210	1.481	1.791	2.430	2.949	3.398
25	.339	.898	1.217	1.489	1.801	2.441	2.962	3.412
26	.345	.904	1.225	1.497	1.809	2.451	2.974	3.426
27	.351	.911	1.231	1.504	1.817	2.461	2.986	3.439
28	.357	.917	1.238	1.511	1.825	2.471	2.997	3.451
29	.362	.922	1.244	1.518	1.833	2.480	3.008	3.463
30	.367	.928	1.250	1.524	1.840	2.489	3.018	3.475
31	.372	.933	1.255	1.530	1.846	2.497	3.027	3.485
32	.376	.938	1.261	1.536	1.853	2.505	3.036	3.496
33	.381	.942	1.266	1.542	1.859	2.512	3.045	3.506
34	.385	.947	1.271	1.547	1.865	2.520	3.054	3.515
35	.389	.951	1.276	1.552	1.871	2.527	3.062	3.524
36	.392	.955	1.280	1.557	1.876	2.533	3.070	3.533
37	.396	.959	1.284	1.562	1.882	2.540	3.077	3.542
38	.400	.963	1.289	1.567	1.887	2.546	3.084	3.550
39	.403	.967	1.293	1.571	1.892	2.552	3.091	3.558
40	.406	.970	1.297	1.575	1.896	2.558	3.098	3.565
41	.409	.974	1.300	1.580	1.901	2.564	3.105	3.573
42	.412	.977	1.304	1.584	1.905	2.569	3.111	3.580
43	.415	.980	1.308	1.587	1.910	2.574	3.117	3.587
44	.418	.983	1.311	1.591	1.914	2.579	3.123	3.593
45	.421	.986	1.314	1.595	1.918	2.584	3.129	3.600

2.10 Values of k for f = n - 1 and γ = .05 (Continued)

$$\Pr\left\{T_f \leq k\sqrt{n} \,\middle|\, K_p\sqrt{n}\right\} = \gamma$$

	P							
n	.75000	.90000	.95000	.97500	.99000	.99900	.99990	.99999
46	.423	.989	1.317	1.598	1.922	2.589	3.134	3.606
47	.426	.992	1.321	1.602	1.925	2.594	3.140	3.612
48	.428	.995	1.324	1.605	1.929	2.598	3.145	3.618
49	.431	.997	1.327	1.608	1.933	2.603	3.150	3.624
50	.433	1.000	1.329	1.611	1.936	2.607	3.155	3.629
51	.435	1.003	1.332	1.614	1.940	2.611	3.160	3.635
52	.438	1.005	1.335	1.617	1.943	2.615	3.165	3.640
53	.440	1.007	1.337	1.620	1.946	2.619	3.169	3.645
54	.442	1.010	1.340	1.623	1.949	2.623	3.174	3.650
55	.444	1.012	1.343	1.626	1.952	2.627	3.178	3.655
56	.446	1.014	1.345	1.628	1.955	2.630	3.182	3.660
57	.448	1.016	1.347	1.631	1.958	2.634	3.186	3.664
58	.450	1.018	1.350	1.634	1.961	2.637	3.190	3.669
59	.451	1.020	1.352	1.636	1.964	2.641	3.194	3.673
60	.453	1.022	1.354	1.638	1.966	2.644	3.198	3.678
61	.455	1.024	1.356	1.641	1.969	2.647	3.202	3.682
62	.457	1.026	1.358	1.643	1.972	2.650	3.206	3.686
63	.458	1.028	1.360	1.645	1.974	2.653	3.209	3.690
64	.460	1.030	1.362	1.648	1.976	2.657	3.213	3.694
65	.461	1.032	1.364	1.650	1.979	2.659	3.216	3.698
66	.463	1.033	1.366	1.652	1.981	2.662	3.220	3.702
67	.465	1.035	1.368	1.654	1.984	2.665	3.223	3.706
68	.466	1.037	1.370	1.656	1.986	2.668	3.226	3.709
69	.467	1.038	1.372	1.658	1.988	2.671	3.229	3.713
70	.469	1.040	1.374	1.660	1.990	2.673	3.232	3.716
71	.470	1.042	1.375	1.662	1.992	2.676	3.235	3.720
72	.472	1.043	1.377	1.664	1.994	2.679	3.238	3.723
73	.473	1.045	1.379	1.665	1.996	2.681	3.241	3.726
74	.474	1.046	1.380	1.667	1.998	2.684	3.244	3.730
75	.476	1.048	1.382	1.669	2.000	2.686	3.247	3.733
76	.477	1.049	1.384	1.671	2.002	2.688	3.250	3.736
77	.478	1.050	1.385	1.672	2.004	2.691	3.253	3.739
78	.479	1.052	1.387	1.674	2.006	2.693	3.255	3.742
79	.480	1.053	1.388	1.676	2.008	2.695	3.258	3.745
80	.482	1.054	1.390	1.677	2.010	2.697	3.260	3.748
81	.483	1.056	1.391	1.679	2.011	2.700	3.263	3.751
82	.484	1.057	1.392	1.681	2.013	2.702	3.265	3.753
83	.485	1.058	1.394	1.682	2.015	2.704	3.268	3.756
84	.486	1.059	1.395	1.684	2.017	2.706	3.270	3.759
85	.487	1.061	1.397	1.685	2.018	2.708	3.273	3.762
86	.488	1.062	1.398	1.686	2.020	2.710	3.275	3.764
87	.489	1.063	1.399	1.688	2.021	2.712	3.277	3.767
88	.490	1.064	1.400	1.689	2.023	2.714	3.279	3.769
89	.491	1.065	1.402	1.691	2.025	2.716	3.282	3.772
90	.492	1.066	1.403	1.692	2.026	2.718	3.284	3.774

2.10 Values of k for f = n - 1 and γ = .05 (Continued)

$$\Pr\left\{T_f \leq k\sqrt{n} \mid K_p \sqrt{n}\right\} = \gamma$$

	P							
n	.75000	.90000	.95000	.97500	.99000	.99900	.99990	.99999
91	.493	1.068	1.404	1.693	2.028	2.719	3.286	3.777
92	.494	1.069	1.405	1.695	2.029	2.721	3.288	3.779
93	.495	1.070	1.407	1.696	2.030	2.723	3.290	3.781
94	.496	1.071	1.408	1.697	2.032	2.725	3.292	3.784
95	.497	1.072	1.409	1.699	2.033	2.727	3.294	3.786
96	.498	1.073	1.410	1.700	2.035	2.728	3.296	3.788
97	.499	1.074	1.411	1.701	2.036	2.730	3.298	3.790
98	.499	1.075	1.412	1.702	2.037	2.732	3.300	3.793
99	.500	1.076	1.413	1.703	2.039	2.733	3.302	3.795
100	.501	1.077	1.414	1.705	2.040	2.735	3.304	3.797
101	.502	1.078	1.415	1.706	2.041	2.736	3.306	3.799
102	.503	1.079	1.416	1.707	2.043	2.738	3.308	3.801
103	.504	1.079	1.417	1.708	2.044	2.740	3.309	3.803
104	.504	1.080	1.418	1.709	2.045	2.741	3.311	3.805
105	.505	1.081	1.419	1.710	2.046	2.743	3.313	3.807
106	.506	1.082	1.420	1.711	2.048	2.744	3.315	3.809
107	.507	1.083	1.421	1.712	2.049	2.746	3.316	3.811
108	.507	1.084	1.422	1.713	2.050	2.747	3.318	3.813
109	.508	1.085	1.423	1.714	2.051	2.748	3.320	3.815
110	.509	1.086	1.424	1.715	2.052	2.750	3.321	3.817
111	.510	1.086	1.425	1.717	2.053	2.751	3.323	3.818
112	.510	1.087	1.426	1.718	2.054	2.753	3.325	3.820
113	.511	1.088	1.427	1.718	2.056	2.754	3.326	3.822
114	.512	1.089	1.428	1.719	2.057	2.755	3.328	3.824
115	.512	1.090	1.429	1.720	2.058	2.757	3.329	3.825
116	.513	1.090	1.430	1.721	2.059	2.758	3.331	3.827
117	.514	1.091	1.430	1.722	2.060	2.759	3.332	3.829
118	.514	1.092	1.431	1.723	2.061	2.761	3.334	3.831
119	.515	1.093	1.432	1.724	2.062	2.762	3.335	3.832
120	.516	1.093	1.433	1.725	2.063	2.763	3.337	3.834
121	.516	1.094	1.434	1.726	2.064	2.764	3.338	3.835
122	.517	1.095	1.435	1.727	2.065	2.765	3.340	3.837
123	.517	1.095	1.435	1.728	2.066	2.767	3.341	3.839
124	.518	1.096	1.436	1.729	2.067	2.768	3.342	3.840
125	.519	1.097	1.437	1.729	2.068	2.769	3.344	3.842
126	.519	1.098	1.438	1.730	2.069	2.770	3.345	3.843
127	.520	1.098	1.438	1.731	2.070	2.771	3.347	3.845
128	.520	1.099	1.439	1.732	2.071	2.773	3.348	3.846
129	.521	1.100	1.440	1.733	2.071	2.774	3.349	3.848
130	.522	1.100	1.441	1.734	2.072	2.775	3.350	3.849
131	.522	1.101	1.441	1.734	2.073	2.776	3.352	3.851
132	.523	1.102	1.442	1.735	2.074	2.777	3.353	3.852
133	.523	1.102	1.443	1.736	2.075	2.778	3.354	3.854
134	.524	1.103	1.443	1.737	2.076	2.779	3.356	3.855
135	.524	1.103	1.444	1.737	2.077	2.780	3.357	3.856

2.10 Values of k for f = n - 1 and γ = .05 (Continued)

$$\Pr\left\{T_f \leq k\sqrt{n} \mid K_p \sqrt{n}\right\} = \gamma$$

	P							
n	.75000	.90000	.95000	.97500	.99000	.99900	.99990	.99999
136	.525	1.104	1.445	1.738	2.078	2.781	3.358	3.858
137	.525	1.105	1.446	1.739	2.078	2.782	3.359	3.859
138	.526	1.105	1.446	1.740	2.079	2.783	3.360	3.860
139	.526	1.106	1.447	1.740	2.080	2.784	3.362	3.862
140	.527	1.106	1.447	1.741	2.081	2.785	3.363	3.863
141	.527	1.107	1.448	1.742	2.082	2.786	3.364	3.864
142	.528	1.108	1.449	1.743	2.082	2.787	3.365	3.866
143	.528	1.108	1.449	1.743	2.083	2.788	3.366	3.867
144	.529	1.109	1.450	1.744	2.084	2.789	3.367	3.868
145	.529	1.109	1.451	1.745	2.085	2.790	3.368	3.869
146	.530	1.110	1.451	1.745	2.086	2.791	3.369	3.871
147	.530	1.110	1.452	1.746	2.086	2.792	3.371	3.872
148	.531	1.111	1.453	1.747	2.087	2.793	3.372	3.873
149	.531	1.111	1.453	1.747	2.088	2.794	3.373	3.874
150	.532	1.112	1.454	1.748	2.089	2.795	3.374	3.875
151	.532	1.113	1.454	1.749	2.089	2.796	3.375	3.877
152	.533	1.113	1.455	1.749	2.090	2.797	3.376	3.878
153	.533	1.114	1.455	1.750	2.091	2.797	3.377	3.879
154	.534	1.114	1.456	1.751	2.091	2.798	3.378	3.880
155	.534	1.115	1.457	1.751	2.092	2.799	3.379	3.881
156	.534	1.115	1.457	1.752	2.093	2.800	3.380	3.882
157	.535	1.116	1.458	1.752	2.093	2.801	3.381	3.884
158	.535	1.116	1.458	1.753	2.094	2.802	3.382	3.885
159	.536	1.117	1.459	1.754	2.095	2.803	3.383	3.886
160	.536	1.117	1.459	1.754	2.096	2.803	3.384	3.887
161	.537	1.118	1.460	1.755	2.096	2.804	3.385	3.888
162	.537	1.118	1.460	1.755	2.097	2.805	3.386	3.889
163	.537	1.118	1.461	1.756	2.097	2.806	3.387	3.890
164	.538	1.119	1.462	1.757	2.098	2.807	3.388	3.891
165	.538	1.119	1.462	1.757	2.099	2.807	3.389	3.892
166	.539	1.120	1.463	1.758	2.099	2.808	3.389	3.893
167	.539	1.120	1.463	1.758	2.100	2.809	3.390	3.894
168	.539	1.121	1.464	1.759	2.101	2.810	3.391	3.895
169	.540	1.121	1.464	1.759	2.101	2.811	3.392	3.896
170	.540	1.122	1.465	1.760	2.102	2.811	3.393	3.897
171	.541	1.122	1.465	1.761	2.103	2.812	3.394	3.898
172	.541	1.123	1.466	1.761	2.103	2.813	3.395	3.899
173	.541	1.123	1.466	1.762	2.104	2.814	3.396	3.900
174	.542	1.123	1.467	1.762	2.104	2.814	3.397	3.901
175	.542	1.124	1.467	1.763	2.105	2.815	3.397	3.902
176	.542	1.124	1.467	1.763	2.105	2.816	3.398	3.903
177	.543	1.125	1.468	1.764	2.106	2.816	3.399	3.904
178	.543	1.125	1.468	1.764	2.107	2.817	3.400	3.905
179	.543	1.126	1.469	1.765	2.107	2.818	3.401	3.906
180	.544	1.126	1.469	1.765	2.108	2.819	3.402	3.907

2.10 Values of k for f = n - 1 and γ = .05 (Continued)

$$\Pr\left\{T_f \leq k\sqrt{n} \,\middle|\, K_p\sqrt{n}\right\} = \gamma$$

	P							
n	.75000	.90000	.95000	.97500	.99000	.99900	.99990	.99999
181	.544	1.126	1.470	1.766	2.108	2.819	3.402	3.908
182	.545	1.127	1.470	1.766	2.109	2.820	3.403	3.909
183	.545	1.127	1.471	1.767	2.109	2.821	3.404	3.909
184	.545	1.128	1.471	1.767	2.110	2.821	3.405	3.910
185	.546	1.128	1.472	1.768	2.111	2.822	3.406	3.911
186	.546	1.128	1.472	1.768	2.111	2.823	3.406	3.912
187	.546	1.129	1.472	1.769	2.112	2.823	3.407	3.913
188	.547	1.129	1.473	1.769	2.112	2.824	3.408	3.914
189	.547	1.129	1.473	1.770	2.113	2.825	3.409	3.915
190	.547	1.130	1.474	1.770	2.113	2.825	3.409	3.916
191	.547	1.130	1.474	1.771	2.114	2.826	3.410	3.916
192	.548	1.131	1.475	1.771	2.114	2.827	3.411	3.917
193	.548	1.131	1.475	1.771	2.115	2.827	3.412	3.918
194	.548	1.131	1.475	1.772	2.115	2.828	3.412	3.919
195	.549	1.132	1.476	1.772	2.116	2.828	3.413	3.920
196	.549	1.132	1.476	1.773	2.116	2.829	3.414	3.921
197	.549	1.132	1.477	1.773	2.117	2.830	3.414	3.921
198	.550	1.133	1.477	1.774	2.117	2.830	3.415	3.922
199	.550	1.133	1.477	1.774	2.118	2.831	3.416	3.923
200	.550	1.133	1.478	1.775	2.118	2.831	3.417	3.924
205	.552	1.135	1.480	1.777	2.121	2.834	3.420	3.928
210	.553	1.137	1.482	1.779	2.123	2.837	3.423	3.931
215	.555	1.138	1.483	1.781	2.125	2.840	3.427	3.935
220	.556	1.140	1.485	1.783	2.127	2.843	3.430	3.938
225	.557	1.142	1.487	1.785	2.129	2.845	3.433	3.942
230	.558	1.143	1.488	1.786	2.131	2.848	3.436	3.945
235	.560	1.144	1.490	1.788	2.133	2.850	3.438	3.948
240	.561	1.146	1.492	1.790	2.135	2.853	3.441	3.951
245	.562	1.147	1.493	1.791	2.137	2.855	3.444	3.954
250	.563	1.148	1.494	1.793	2.139	2.857	3.446	3.957
255	.564	1.150	1.496	1.795	2.141	2.859	3.449	3.960
260	.565	1.151	1.497	1.796	2.142	2.861	3.451	3.963
265	.566	1.152	1.499	1.798	2.144	2.863	3.454	3.966
270	.567	1.153	1.500	1.799	2.145	2.865	3.456	3.968
275	.568	1.154	1.501	1.800	2.147	2.867	3.458	3.971
280	.569	1.155	1.502	1.802	2.149	2.869	3.460	3.973
285	.570	1.156	1.503	1.803	2.150	2.871	3.463	3.976
290	.571	1.157	1.505	1.804	2.151	2.873	3.465	3.978
295	.572	1.158	1.506	1.806	2.153	2.874	3.467	3.980
300	.572	1.159	1.507	1.807	2.154	2.876	3.469	3.982
305	.573	1.160	1.508	1.808	2.156	2.878	3.471	3.985
310	.574	1.161	1.509	1.809	2.157	2.879	3.473	3.987
315	.575	1.162	1.510	1.810	2.158	2.881	3.474	3.989
320	.576	1.163	1.511	1.811	2.159	2.883	3.476	3.991
325	.576	1.164	1.512	1.812	2.161	2.884	3.478	3.993

2.10 Values of k for f = n - 1 and γ = .05 (Continued)

$$\Pr\left\{T_f \leq k\sqrt{n} \,\middle|\, K_p\sqrt{n}\right\} = \gamma$$

	P							
n	.75000	.90000	.95000	.97500	.99000	.99900	.99990	.99999
330	.577	1.165	1.513	1.814	2.162	2.885	3.480	3.995
335	.578	1.166	1.514	1.815	2.163	2.887	3.481	3.997
340	.578	1.167	1.515	1.816	2.164	2.888	3.483	3.999
345	.579	1.167	1.516	1.817	2.165	2.890	3.485	4.000
350	.580	1.168	1.517	1.818	2.166	2.891	3.486	4.002
355	.580	1.169	1.517	1.818	2.167	2.892	3.488	4.004
360	.581	1.170	1.518	1.819	2.168	2.894	3.489	4.006
365	.582	1.170	1.519	1.820	2.169	2.895	3.491	4.007
370	.582	1.171	1.520	1.821	2.170	2.896	3.492	4.009
375	.583	1.172	1.521	1.822	2.171	2.897	3.494	4.011
380	.584	1.172	1.522	1.823	2.172	2.899	3.495	4.012
385	.584	1.173	1.522	1.824	2.173	2.900	3.496	4.014
390	.585	1.174	1.523	1.825	2.174	2.901	3.498	4.015
395	.585	1.175	1.524	1.825	2.175	2.902	3.499	4.017
400	.586	1.175	1.525	1.826	2.176	2.903	3.500	4.018
425	.588	1.178	1.528	1.830	2.180	2.909	3.507	4.025
450	.591	1.181	1.531	1.834	2.184	2.913	3.512	4.032
475	.593	1.184	1.534	1.837	2.188	2.918	3.518	4.037
500	.595	1.186	1.537	1.840	2.191	2.922	3.522	4.043
525	.597	1.188	1.539	1.843	2.194	2.926	3.527	4.048
550	.599	1.190	1.542	1.845	2.197	2.930	3.531	4.053
575	.600	1.192	1.544	1.848	2.200	2.933	3.535	4.057
600	.602	1.194	1.546	1.850	2.203	2.936	3.539	4.061
625	.603	1.196	1.548	1.852	2.205	2.939	3.542	4.065
650	.605	1.197	1.550	1.854	2.207	2.942	3.545	4.069
675	.606	1.199	1.551	1.856	2.209	2.945	3.549	4.073
700	.607	1.200	1.553	1.858	2.211	2.947	3.552	4.076
725	.608	1.202	1.554	1.859	2.213	2.949	3.554	4.079
750	.609	1.203	1.556	1.861	2.215	2.952	3.557	4.082
775	.610	1.204	1.557	1.863	2.217	2.954	3.560	4.085
800	.611	1.205	1.559	1.864	2.219	2.956	3.562	4.088
825	.612	1.207	1.560	1.866	2.220	2.958	3.564	4.090
850	.613	1.208	1.561	1.867	2.222	2.960	3.566	4.093
875	.614	1.209	1.562	1.868	2.223	2.962	3.569	4.095
900	.615	1.210	1.563	1.869	2.224	2.963	3.571	4.097
925	.616	1.211	1.564	1.871	2.226	2.965	3.573	4.100
950	.616	1.212	1.566	1.872	2.227	2.967	3.574	4.102
975	.617	1.212	1.567	1.873	2.228	2.968	3.576	4.104
1000	.618	1.213	1.567	1.874	2.230	2.970	3.578	4.106
1500	.628	1.226	1.582	1.890	2.248	2.992	3.605	4.136
2000	.635	1.234	1.591	1.900	2.259	3.006	3.620	4.153
3000	.642	1.243	1.601	1.911	2.271	3.022	3.639	4.174
5000	.649	1.251	1.611	1.922	2.284	3.037	3.657	4.195
10000	.657	1.260	1.621	1.933	2.296	3.053	3.675	4.216
∞	.674	1.282	1.645	1.960	2.326	3.090	3.719	4.265

2.11 Values of k for f = n - 1 and γ = .025

$$\Pr\left\{T_f \leq k\sqrt{n} \,\middle|\, K_p\sqrt{n}\right\} = \gamma$$

	P							
n	.75000	.90000	.95000	.97500	.99000	.99900	.99990	.99999
2	-2.006	-.143	.273	.523	.761	1.184	1.501	1.767
3	-.662	.159	.478	.713	.958	1.423	1.784	2.088
4	-.373	.298	.601	.835	1.088	1.579	1.965	2.293
5	-.229	.389	.687	.923	1.182	1.693	2.096	2.440
6	-.136	.455	.752	.991	1.256	1.781	2.198	2.555
7	-.070	.507	.804	1.046	1.315	1.852	2.280	2.647
8	-.019	.550	.847	1.091	1.364	1.911	2.349	2.723
9	.022	.585	.884	1.130	1.406	1.961	2.407	2.789
10	.056	.615	.915	1.163	1.442	2.005	2.457	2.845
11	.084	.642	.943	1.192	1.474	2.043	2.502	2.895
12	.109	.665	.967	1.218	1.502	2.078	2.541	2.940
13	.131	.685	.989	1.242	1.528	2.108	2.577	2.979
14	.150	.704	1.008	1.262	1.551	2.136	2.609	3.016
15	.168	.721	1.026	1.282	1.572	2.161	2.638	3.048
16	.183	.736	1.042	1.299	1.591	2.185	2.665	3.079
17	.197	.750	1.057	1.315	1.608	2.206	2.690	3.106
18	.210	.763	1.071	1.330	1.625	2.226	2.713	3.132
19	.222	.775	1.084	1.344	1.640	2.244	2.734	3.156
20	.233	.786	1.095	1.356	1.654	2.261	2.754	3.178
21	.243	.796	1.107	1.368	1.667	2.278	2.773	3.199
22	.253	.806	1.117	1.380	1.680	2.293	2.790	3.219
23	.262	.815	1.127	1.390	1.691	2.307	2.806	3.237
24	.270	.823	1.136	1.400	1.702	2.320	2.822	3.255
25	.278	.831	1.145	1.410	1.713	2.333	2.837	3.271
26	.285	.839	1.153	1.419	1.723	2.345	2.851	3.287
27	.292	.846	1.161	1.427	1.732	2.356	2.864	3.302
28	.298	.853	1.168	1.435	1.741	2.367	2.877	3.316
29	.305	.860	1.175	1.443	1.749	2.378	2.889	3.330
30	.310	.866	1.182	1.450	1.757	2.388	2.900	3.342
31	.316	.872	1.189	1.457	1.765	2.397	2.911	3.355
32	.321	.878	1.195	1.464	1.773	2.406	2.922	3.367
33	.327	.883	1.201	1.471	1.780	2.415	2.932	3.378
34	.331	.888	1.206	1.477	1.787	2.423	2.941	3.389
35	.336	.893	1.212	1.483	1.793	2.431	2.951	3.399
36	.341	.898	1.217	1.488	1.799	2.439	2.960	3.409
37	.345	.903	1.222	1.494	1.806	2.446	2.968	3.419
38	.349	.907	1.227	1.499	1.811	2.454	2.977	3.429
39	.353	.911	1.232	1.504	1.817	2.460	2.985	3.438
40	.357	.916	1.236	1.509	1.823	2.467	2.993	3.446
41	.361	.920	1.241	1.514	1.828	2.474	3.000	3.455
42	.364	.923	1.245	1.519	1.833	2.480	3.007	3.463
43	.368	.927	1.249	1.523	1.838	2.486	3.014	3.471
44	.371	.931	1.253	1.527	1.843	2.492	3.021	3.478
45	.374	.934	1.257	1.532	1.847	2.498	3.028	3.486

2.11 Values of k for f = n - 1 and γ = .025 (Continued)

$$\Pr\left\{T_f \leq k\sqrt{n} \mid K_p \sqrt{n}\right\} = \gamma$$

	P							
n	.75000	.90000	.95000	.97500	.99000	.99900	.99990	.99999
46	.377	.938	1.260	1.536	1.852	2.503	3.034	3.493
47	.380	.941	1.264	1.540	1.856	2.508	3.040	3.500
48	.383	.944	1.267	1.543	1.860	2.514	3.046	3.507
49	.386	.947	1.271	1.547	1.865	2.519	3.052	3.514
50	.389	.950	1.274	1.551	1.869	2.524	3.058	3.520
51	.391	.953	1.277	1.554	1.873	2.528	3.064	3.526
52	.394	.956	1.281	1.558	1.876	2.533	3.069	3.532
53	.397	.959	1.284	1.561	1.880	2.538	3.074	3.538
54	.399	.961	1.287	1.564	1.884	2.542	3.079	3.544
55	.401	.964	1.289	1.567	1.887	2.546	3.084	3.550
56	.404	.967	1.292	1.570	1.891	2.551	3.089	3.555
57	.406	.969	1.295	1.573	1.894	2.555	3.094	3.561
58	.408	.972	1.298	1.576	1.897	2.559	3.099	3.566
59	.410	.974	1.300	1.579	1.900	2.563	3.103	3.571
60	.412	.976	1.303	1.582	1.903	2.566	3.108	3.576
61	.414	.979	1.305	1.585	1.907	2.570	3.112	3.581
62	.416	.981	1.308	1.588	1.910	2.574	3.116	3.586
63	.418	.983	1.310	1.590	1.912	2.577	3.121	3.590
64	.420	.985	1.313	1.593	1.915	2.581	3.125	3.595
65	.422	.987	1.315	1.595	1.918	2.584	3.129	3.599
66	.424	.989	1.317	1.598	1.921	2.588	3.133	3.604
67	.426	.991	1.319	1.600	1.923	2.591	3.136	3.608
68	.428	.993	1.321	1.602	1.926	2.594	3.140	3.612
69	.429	.995	1.324	1.605	1.929	2.597	3.144	3.616
70	.431	.997	1.326	1.607	1.931	2.600	3.147	3.620
71	.433	.999	1.328	1.609	1.934	2.603	3.151	3.624
72	.434	1.001	1.330	1.611	1.936	2.606	3.154	3.628
73	.436	1.002	1.332	1.614	1.938	2.609	3.158	3.632
74	.437	1.004	1.333	1.616	1.941	2.612	3.161	3.636
75	.439	1.006	1.335	1.618	1.943	2.615	3.164	3.640
76	.440	1.007	1.337	1.620	1.945	2.618	3.168	3.643
77	.442	1.009	1.339	1.622	1.947	2.620	3.171	3.647
78	.443	1.011	1.341	1.624	1.950	2.623	3.174	3.650
79	.445	1.012	1.342	1.625	1.952	2.626	3.177	3.654
80	.446	1.014	1.344	1.627	1.954	2.628	3.180	3.657
81	.447	1.015	1.346	1.629	1.956	2.631	3.183	3.660
82	.449	1.017	1.348	1.631	1.958	2.633	3.186	3.664
83	.450	1.018	1.349	1.633	1.960	2.636	3.188	3.667
84	.451	1.020	1.351	1.635	1.962	2.638	3.191	3.670
85	.452	1.021	1.352	1.636	1.964	2.641	3.194	3.673
86	.454	1.022	1.354	1.638	1.966	2.643	3.197	3.676
87	.455	1.024	1.355	1.640	1.967	2.645	3.199	3.679
88	.456	1.025	1.357	1.641	1.969	2.647	3.202	3.682
89	.457	1.026	1.358	1.643	1.971	2.650	3.205	3.685
90	.458	1.028	1.360	1.644	1.973	2.652	3.207	3.688

2.11 Values of k for f = n - 1 and γ = .025 (Continued)

$$\Pr\left\{T_f \leq k\sqrt{n} \,\middle|\, K_p\sqrt{n}\right\} = \gamma$$

	P							
n	.75000	.90000	.95000	.97500	.99000	.99900	.99990	.99999
91	.460	1.029	1.361	1.646	1.975	2.654	3.210	3.691
92	.461	1.030	1.363	1.648	1.976	2.656	3.212	3.693
93	.462	1.032	1.364	1.649	1.978	2.658	3.214	3.696
94	.463	1.033	1.365	1.651	1.980	2.660	3.217	3.699
95	.464	1.034	1.367	1.652	1.981	2.662	3.219	3.701
96	.465	1.035	1.368	1.653	1.983	2.664	3.222	3.704
97	.466	1.036	1.369	1.655	1.984	2.666	3.224	3.707
98	.467	1.037	1.371	1.656	1.986	2.668	3.226	3.709
99	.468	1.039	1.372	1.658	1.988	2.670	3.228	3.712
100	.469	1.040	1.373	1.659	1.989	2.672	3.230	3.714
101	.470	1.041	1.374	1.660	1.991	2.674	3.233	3.716
102	.471	1.042	1.375	1.662	1.992	2.676	3.235	3.719
103	.472	1.043	1.377	1.663	1.994	2.677	3.237	3.721
104	.473	1.044	1.378	1.664	1.995	2.679	3.239	3.724
105	.474	1.045	1.379	1.666	1.996	2.681	3.241	3.726
106	.475	1.046	1.380	1.667	1.998	2.683	3.243	3.728
107	.476	1.047	1.381	1.668	1.999	2.684	3.245	3.730
108	.476	1.048	1.382	1.669	2.001	2.686	3.247	3.733
109	.477	1.049	1.383	1.671	2.002	2.688	3.249	3.735
110	.478	1.050	1.385	1.672	2.003	2.689	3.251	3.737
111	.479	1.051	1.386	1.673	2.005	2.691	3.253	3.739
112	.480	1.052	1.387	1.674	2.006	2.692	3.255	3.741
113	.481	1.053	1.388	1.675	2.007	2.694	3.256	3.743
114	.481	1.054	1.389	1.676	2.008	2.696	3.258	3.745
115	.482	1.055	1.390	1.678	2.010	2.697	3.260	3.747
116	.483	1.056	1.391	1.679	2.011	2.699	3.262	3.749
117	.484	1.057	1.392	1.680	2.012	2.700	3.264	3.751
118	.485	1.057	1.393	1.681	2.013	2.702	3.265	3.753
119	.485	1.058	1.394	1.682	2.015	2.703	3.267	3.755
120	.486	1.059	1.395	1.683	2.016	2.705	3.269	3.757
121	.487	1.060	1.396	1.684	2.017	2.706	3.270	3.759
122	.488	1.061	1.397	1.685	2.018	2.707	3.272	3.761
123	.488	1.062	1.398	1.686	2.019	2.709	3.274	3.763
124	.489	1.063	1.398	1.687	2.020	2.710	3.275	3.764
125	.490	1.063	1.399	1.688	2.021	2.712	3.277	3.766
126	.490	1.064	1.400	1.689	2.023	2.713	3.278	3.768
127	.491	1.065	1.401	1.690	2.024	2.714	3.280	3.770
128	.492	1.066	1.402	1.691	2.025	2.716	3.282	3.772
129	.493	1.067	1.403	1.692	2.026	2.717	3.283	3.773
130	.493	1.067	1.404	1.693	2.027	2.718	3.285	3.775
131	.494	1.068	1.405	1.694	2.028	2.720	3.286	3.777
132	.495	1.069	1.405	1.695	2.029	2.721	3.288	3.778
133	.495	1.070	1.406	1.696	2.030	2.722	3.289	3.780
134	.496	1.070	1.407	1.697	2.031	2.723	3.290	3.782
135	.496	1.071	1.408	1.697	2.032	2.725	3.292	3.783

2.11 Values of k for f = n - 1 and γ = .025 (Continued)

$$\Pr\left\{T_f \leq k\sqrt{n} \,\middle|\, K_p\sqrt{n}\right\} = \gamma$$

	P							
n	.75000	.90000	.95000	.97500	.99000	.99900	.99990	.99999
136	.497	1.072	1.409	1.698	2.033	2.726	3.293	3.785
137	.498	1.072	1.409	1.699	2.034	2.727	3.295	3.786
138	.498	1.073	1.410	1.700	2.035	2.728	3.296	3.788
139	.499	1.074	1.411	1.701	2.036	2.729	3.298	3.790
140	.500	1.075	1.412	1.702	2.037	2.731	3.299	3.791
141	.500	1.075	1.413	1.703	2.038	2.732	3.300	3.793
142	.501	1.076	1.413	1.703	2.039	2.733	3.302	3.794
143	.501	1.077	1.414	1.704	2.040	2.734	3.303	3.796
144	.502	1.077	1.415	1.705	2.040	2.735	3.304	3.797
145	.502	1.078	1.416	1.706	2.041	2.736	3.305	3.798
146	.503	1.079	1.416	1.707	2.042	2.737	3.307	3.800
147	.504	1.079	1.417	1.707	2.043	2.738	3.308	3.801
148	.504	1.080	1.418	1.708	2.044	2.740	3.309	3.803
149	.505	1.080	1.418	1.709	2.045	2.741	3.311	3.804
150	.505	1.081	1.419	1.710	2.046	2.742	3.312	3.806
151	.506	1.082	1.420	1.711	2.047	2.743	3.313	3.807
152	.506	1.082	1.420	1.711	2.047	2.744	3.314	3.808
153	.507	1.083	1.421	1.712	2.048	2.745	3.315	3.810
154	.507	1.084	1.422	1.713	2.049	2.746	3.317	3.811
155	.508	1.084	1.422	1.714	2.050	2.747	3.318	3.812
156	.508	1.085	1.423	1.714	2.051	2.748	3.319	3.814
157	.509	1.085	1.424	1.715	2.051	2.749	3.320	3.815
158	.509	1.086	1.424	1.716	2.052	2.750	3.321	3.816
159	.510	1.086	1.425	1.716	2.053	2.751	3.322	3.818
160	.510	1.087	1.426	1.717	2.054	2.752	3.324	3.819
161	.511	1.088	1.426	1.718	2.055	2.753	3.325	3.820
162	.511	1.088	1.427	1.718	2.055	2.754	3.326	3.821
163	.512	1.089	1.428	1.719	2.056	2.755	3.327	3.823
164	.512	1.089	1.428	1.720	2.057	2.756	3.328	3.824
165	.513	1.090	1.429	1.720	2.058	2.756	3.329	3.825
166	.513	1.090	1.429	1.721	2.058	2.757	3.330	3.826
167	.514	1.091	1.430	1.722	2.059	2.758	3.331	3.827
168	.514	1.091	1.431	1.722	2.060	2.759	3.332	3.829
169	.515	1.092	1.431	1.723	2.061	2.760	3.333	3.830
170	.515	1.092	1.432	1.724	2.061	2.761	3.334	3.831
171	.516	1.093	1.432	1.724	2.062	2.762	3.335	3.832
172	.516	1.094	1.433	1.725	2.063	2.763	3.336	3.833
173	.516	1.094	1.434	1.726	2.063	2.764	3.337	3.834
174	.517	1.095	1.434	1.726	2.064	2.764	3.338	3.836
175	.517	1.095	1.435	1.727	2.065	2.765	3.339	3.837
176	.518	1.096	1.435	1.728	2.066	2.766	3.340	3.838
177	.518	1.096	1.436	1.728	2.066	2.767	3.341	3.839
178	.519	1.097	1.436	1.729	2.067	2.768	3.342	3.840
179	.519	1.097	1.437	1.729	2.068	2.769	3.343	3.841
180	.519	1.097	1.437	1.730	2.068	2.769	3.344	3.842

2.11 Values of k for f = n - 1 and γ = .025 (Continued)

$$\Pr\left\{T_f \leq k\sqrt{n} \,\middle|\, K_p\sqrt{n}\right\} = \gamma$$

	P							
n	.75000	.90000	.95000	.97500	.99000	.99900	.99990	.99999
181	.520	1.098	1.438	1.730	2.069	2.770	3.345	3.843
182	.520	1.098	1.438	1.731	2.070	2.771	3.346	3.844
183	.521	1.099	1.439	1.732	2.070	2.772	3.347	3.845
184	.521	1.099	1.439	1.732	2.071	2.773	3.348	3.846
185	.521	1.100	1.440	1.733	2.071	2.773	3.349	3.847
186	.522	1.100	1.441	1.733	2.072	2.774	3.350	3.848
187	.522	1.101	1.441	1.734	2.073	2.775	3.351	3.849
188	.523	1.101	1.442	1.734	2.073	2.776	3.352	3.850
189	.523	1.102	1.442	1.735	2.074	2.777	3.352	3.851
190	.523	1.102	1.443	1.736	2.075	2.777	3.353	3.852
191	.524	1.103	1.443	1.736	2.075	2.778	3.354	3.853
192	.524	1.103	1.444	1.737	2.076	2.779	3.355	3.854
193	.525	1.103	1.444	1.737	2.076	2.780	3.356	3.855
194	.525	1.104	1.444	1.738	2.077	2.780	3.357	3.856
195	.525	1.104	1.445	1.738	2.078	2.781	3.358	3.857
196	.526	1.105	1.445	1.739	2.078	2.782	3.359	3.858
197	.526	1.105	1.446	1.739	2.079	2.782	3.359	3.859
198	.526	1.106	1.446	1.740	2.079	2.783	3.360	3.860
199	.527	1.106	1.447	1.740	2.080	2.784	3.361	3.861
200	.527	1.106	1.447	1.741	2.080	2.785	3.362	3.862
205	.529	1.108	1.450	1.743	2.083	2.788	3.366	3.867
210	.531	1.110	1.452	1.746	2.086	2.791	3.370	3.871
215	.532	1.112	1.454	1.748	2.089	2.795	3.374	3.875
220	.534	1.114	1.456	1.750	2.091	2.798	3.377	3.879
225	.535	1.116	1.458	1.753	2.093	2.801	3.381	3.883
230	.537	1.118	1.460	1.755	2.096	2.804	3.384	3.887
235	.538	1.119	1.462	1.757	2.098	2.806	3.387	3.891
240	.540	1.121	1.463	1.759	2.100	2.809	3.391	3.894
245	.541	1.122	1.465	1.761	2.103	2.812	3.394	3.898
250	.542	1.124	1.467	1.762	2.105	2.815	3.397	3.901
255	.543	1.125	1.469	1.764	2.107	2.817	3.400	3.905
260	.545	1.127	1.470	1.766	2.109	2.819	3.403	3.908
265	.546	1.128	1.472	1.768	2.111	2.822	3.405	3.911
270	.547	1.129	1.473	1.769	2.112	2.824	3.408	3.914
275	.548	1.131	1.475	1.771	2.114	2.826	3.411	3.917
280	.549	1.132	1.476	1.773	2.116	2.829	3.413	3.920
285	.550	1.133	1.477	1.774	2.118	2.831	3.416	3.923
290	.551	1.135	1.479	1.776	2.119	2.833	3.418	3.926
295	.552	1.136	1.480	1.777	2.121	2.835	3.421	3.928
300	.553	1.137	1.481	1.779	2.123	2.837	3.423	3.931
305	.554	1.138	1.483	1.780	2.124	2.839	3.425	3.933
310	.555	1.139	1.484	1.781	2.126	2.841	3.427	3.936
315	.556	1.140	1.485	1.783	2.127	2.843	3.430	3.938
320	.557	1.141	1.486	1.784	2.129	2.844	3.432	3.941
325	.558	1.142	1.488	1.785	2.130	2.846	3.434	3.943

2.11 Values of k for f = n - 1 and γ = .025 (Continued)

$$\Pr\left\{T_f \leq k\sqrt{n} \,\middle|\, K_p\sqrt{n}\right\} = \gamma$$

	P							
n	.75000	.90000	.95000	.97500	.99000	.99900	.99990	.99999
330	.559	1.143	1.489	1.787	2.132	2.848	3.436	3.945
335	.560	1.144	1.490	1.788	2.133	2.850	3.438	3.948
340	.560	1.145	1.491	1.789	2.134	2.851	3.440	3.950
345	.561	1.146	1.492	1.790	2.136	2.853	3.442	3.952
350	.562	1.147	1.493	1.791	2.137	2.855	3.443	3.954
355	.563	1.148	1.494	1.792	2.138	2.856	3.445	3.956
360	.564	1.149	1.495	1.794	2.139	2.858	3.447	3.958
365	.564	1.150	1.496	1.795	2.141	2.859	3.449	3.960
370	.565	1.151	1.497	1.796	2.142	2.861	3.451	3.962
375	.566	1.151	1.498	1.797	2.143	2.862	3.452	3.964
380	.566	1.152	1.499	1.798	2.144	2.863	3.454	3.966
385	.567	1.153	1.500	1.799	2.145	2.865	3.456	3.968
390	.568	1.154	1.501	1.800	2.146	2.866	3.457	3.969
395	.569	1.155	1.501	1.801	2.147	2.868	3.459	3.971
400	.569	1.155	1.502	1.802	2.148	2.869	3.460	3.973
425	.572	1.159	1.506	1.806	2.153	2.875	3.467	3.981
450	.575	1.162	1.510	1.810	2.158	2.881	3.474	3.989
475	.578	1.165	1.513	1.814	2.162	2.886	3.480	3.996
500	.580	1.168	1.517	1.818	2.166	2.891	3.486	4.002
525	.582	1.171	1.520	1.821	2.170	2.896	3.491	4.008
550	.584	1.173	1.522	1.824	2.173	2.900	3.496	4.014
575	.586	1.176	1.525	1.827	2.177	2.904	3.501	4.019
600	.588	1.178	1.527	1.829	2.180	2.907	3.505	4.024
625	.590	1.180	1.530	1.832	2.182	2.911	3.509	4.028
650	.591	1.182	1.532	1.834	2.185	2.914	3.513	4.033
675	.593	1.183	1.534	1.837	2.188	2.917	3.517	4.037
700	.594	1.185	1.536	1.839	2.190	2.920	3.520	4.041
725	.596	1.187	1.538	1.841	2.192	2.923	3.524	4.044
750	.597	1.188	1.539	1.843	2.194	2.926	3.527	4.048
775	.598	1.190	1.541	1.844	2.196	2.928	3.530	4.051
800	.599	1.191	1.543	1.846	2.198	2.931	3.533	4.055
825	.601	1.192	1.544	1.848	2.200	2.933	3.535	4.058
850	.602	1.194	1.545	1.849	2.202	2.935	3.538	4.061
875	.603	1.195	1.547	1.851	2.204	2.938	3.541	4.063
900	.604	1.196	1.548	1.852	2.205	2.940	3.543	4.066
925	.605	1.197	1.549	1.854	2.207	2.942	3.545	4.069
950	.605	1.198	1.551	1.855	2.209	2.944	3.547	4.071
975	.606	1.199	1.552	1.857	2.210	2.945	3.550	4.074
1000	.607	1.200	1.553	1.858	2.211	2.947	3.552	4.076
1500	.620	1.216	1.570	1.877	2.233	2.974	3.583	4.112
2000	.627	1.225	1.581	1.889	2.246	2.990	3.602	4.133
3000	.636	1.235	1.593	1.902	2.261	3.009	3.624	4.158
5000	.645	1.246	1.605	1.915	2.276	3.028	3.646	4.182
10000	.653	1.256	1.616	1.928	2.291	3.046	3.668	4.207
∞	.674	1.282	1.645	1.960	2.326	3.090	3.719	4.265

2.12 Values of k for f = n - 1 and γ = .01

$$\Pr\left\{T_f \leq k\sqrt{n} \,\middle|\, K_p\sqrt{n}\right\} = \gamma$$

	P							
n	.75000	.90000	.95000	.97500	.99000	.99900	.99990	.99999
2	-5.110	-.707	-.000	.311	.564	.969	1.259	1.497
3	-1.204	-.072	.295	.539	.782	1.222	1.555	1.834
4	-.670	.123	.443	.678	.924	1.388	1.747	2.050
5	-.447	.238	.543	.777	1.027	1.510	1.888	2.207
6	-.316	.319	.618	.853	1.108	1.605	1.997	2.330
7	-.226	.381	.678	.914	1.173	1.683	2.086	2.430
8	-.159	.431	.727	.965	1.227	1.747	2.160	2.513
9	-.107	.472	.768	1.008	1.273	1.803	2.224	2.584
10	-.064	.508	.804	1.045	1.314	1.851	2.279	2.646
11	-.028	.538	.835	1.078	1.349	1.893	2.328	2.701
12	.003	.565	.862	1.107	1.381	1.931	2.372	2.749
13	.030	.589	.887	1.133	1.409	1.965	2.411	2.793
14	.053	.610	.909	1.156	1.434	1.996	2.446	2.833
15	.074	.629	.929	1.178	1.458	2.024	2.479	2.870
16	.093	.647	.948	1.197	1.479	2.049	2.509	2.903
17	.110	.663	.965	1.215	1.499	2.073	2.536	2.934
18	.126	.678	.980	1.232	1.517	2.095	2.562	2.962
19	.140	.692	.995	1.248	1.534	2.116	2.585	2.989
20	.153	.705	1.008	1.262	1.550	2.135	2.608	3.014
21	.165	.716	1.021	1.276	1.565	2.153	2.628	3.037
22	.177	.728	1.033	1.289	1.579	2.170	2.648	3.059
23	.187	.738	1.044	1.301	1.592	2.186	2.666	3.080
24	.197	.748	1.054	1.312	1.605	2.201	2.684	3.100
25	.206	.757	1.064	1.323	1.616	2.215	2.700	3.118
26	.215	.766	1.074	1.333	1.628	2.229	2.716	3.136
27	.223	.774	1.083	1.342	1.638	2.242	2.731	3.152
28	.231	.782	1.091	1.351	1.648	2.254	2.745	3.168
29	.238	.790	1.099	1.360	1.658	2.266	2.759	3.184
30	.245	.797	1.107	1.369	1.667	2.277	2.772	3.198
31	.252	.804	1.114	1.377	1.676	2.288	2.784	3.212
32	.258	.810	1.121	1.384	1.684	2.298	2.796	3.225
33	.264	.817	1.128	1.392	1.692	2.308	2.807	3.238
34	.270	.823	1.135	1.399	1.700	2.317	2.818	3.250
35	.276	.828	1.141	1.405	1.708	2.326	2.829	3.262
36	.281	.834	1.147	1.412	1.715	2.335	2.839	3.274
37	.286	.839	1.153	1.418	1.722	2.343	2.849	3.285
38	.291	.844	1.158	1.424	1.728	2.352	2.858	3.295
39	.296	.849	1.164	1.430	1.735	2.359	2.867	3.305
40	.300	.854	1.169	1.436	1.741	2.367	2.876	3.315
41	.304	.859	1.174	1.441	1.747	2.374	2.885	3.325
42	.309	.863	1.179	1.446	1.753	2.381	2.893	3.334
43	.313	.867	1.183	1.451	1.758	2.388	2.901	3.343
44	.317	.872	1.188	1.456	1.764	2.395	2.909	3.352
45	.320	.876	1.192	1.461	1.769	2.402	2.916	3.360

2.12 Values of k for f = n - 1 and γ = .01 (Continued)

$$\Pr\left\{T_f \leq k\sqrt{n} \,\middle|\, K_p\sqrt{n}\right\} = \gamma$$

	P							
n	.75000	.90000	.95000	.97500	.99000	.99900	.99990	.99999
46	.324	.880	1.197	1.466	1.774	2.408	2.923	3.369
47	.328	.883	1.201	1.470	1.779	2.414	2.931	3.376
48	.331	.887	1.205	1.475	1.784	2.420	2.937	3.384
49	.334	.891	1.209	1.479	1.789	2.426	2.944	3.392
50	.338	.894	1.212	1.483	1.793	2.431	2.951	3.399
51	.341	.897	1.216	1.487	1.798	2.437	2.957	3.406
52	.344	.901	1.220	1.491	1.802	2.442	2.963	3.413
53	.347	.904	1.223	1.495	1.806	2.447	2.969	3.420
54	.350	.907	1.227	1.499	1.811	2.452	2.975	3.426
55	.353	.910	1.230	1.502	1.815	2.457	2.981	3.433
56	.355	.913	1.233	1.506	1.819	2.462	2.986	3.439
57	.358	.916	1.236	1.509	1.822	2.467	2.992	3.445
58	.361	.919	1.239	1.513	1.826	2.471	2.997	3.451
59	.363	.922	1.242	1.516	1.830	2.476	3.002	3.457
60	.366	.924	1.245	1.519	1.833	2.480	3.007	3.463
61	.368	.927	1.248	1.522	1.837	2.484	3.012	3.468
62	.370	.929	1.251	1.525	1.840	2.489	3.017	3.474
63	.373	.932	1.254	1.528	1.844	2.493	3.022	3.479
64	.375	.934	1.257	1.531	1.847	2.497	3.027	3.485
65	.377	.937	1.259	1.534	1.850	2.501	3.031	3.490
66	.379	.939	1.262	1.537	1.853	2.504	3.036	3.495
67	.381	.941	1.264	1.540	1.856	2.508	3.040	3.500
68	.383	.944	1.267	1.542	1.859	2.512	3.044	3.504
69	.385	.946	1.269	1.545	1.862	2.515	3.048	3.509
70	.387	.948	1.272	1.548	1.865	2.519	3.053	3.514
71	.389	.950	1.274	1.550	1.868	2.522	3.057	3.518
72	.391	.952	1.276	1.553	1.871	2.526	3.061	3.523
73	.393	.954	1.278	1.555	1.873	2.529	3.064	3.527
74	.395	.956	1.281	1.558	1.876	2.533	3.068	3.531
75	.397	.958	1.283	1.560	1.879	2.536	3.072	3.536
76	.398	.960	1.285	1.562	1.881	2.539	3.076	3.540
77	.400	.962	1.287	1.565	1.884	2.542	3.079	3.544
78	.402	.964	1.289	1.567	1.886	2.545	3.083	3.548
79	.403	.966	1.291	1.569	1.889	2.548	3.086	3.552
80	.405	.968	1.293	1.571	1.891	2.551	3.090	3.556
81	.407	.969	1.295	1.573	1.893	2.554	3.093	3.559
82	.408	.971	1.297	1.575	1.896	2.557	3.096	3.563
83	.410	.973	1.299	1.577	1.898	2.560	3.100	3.567
84	.411	.974	1.301	1.579	1.900	2.562	3.103	3.570
85	.413	.976	1.302	1.581	1.903	2.565	3.106	3.574
86	.414	.978	1.304	1.583	1.905	2.568	3.109	3.577
87	.416	.979	1.306	1.585	1.907	2.570	3.112	3.581
88	.417	.981	1.308	1.587	1.909	2.573	3.115	3.584
89	.418	.982	1.309	1.589	1.911	2.575	3.118	3.588
90	.420	.984	1.311	1.591	1.913	2.578	3.121	3.591

2.12 Values of k for f = n - 1 and γ = .01 (Continued)

$$\Pr\left\{T_f \leq k\sqrt{n} \mid K_p \sqrt{n}\right\} = \gamma$$

	P							
n	.75000	.90000	.95000	.97500	.99000	.99900	.99990	.99999
91	.421	.985	1.313	1.593	1.915	2.580	3.124	3.594
92	.422	.987	1.314	1.594	1.917	2.583	3.127	3.597
93	.424	.988	1.316	1.596	1.919	2.585	3.130	3.600
94	.425	.990	1.317	1.598	1.921	2.588	3.132	3.603
95	.426	.991	1.319	1.600	1.923	2.590	3.135	3.606
96	.427	.992	1.321	1.601	1.925	2.592	3.138	3.609
97	.429	.994	1.322	1.603	1.926	2.594	3.140	3.612
98	.430	.995	1.323	1.605	1.928	2.597	3.143	3.615
99	.431	.996	1.325	1.606	1.930	2.599	3.145	3.618
100	.432	.998	1.326	1.608	1.932	2.601	3.148	3.621
101	.433	.999	1.328	1.609	1.934	2.603	3.150	3.624
102	.434	1.000	1.329	1.611	1.935	2.605	3.153	3.627
103	.435	1.002	1.331	1.612	1.937	2.607	3.155	3.629
104	.437	1.003	1.332	1.614	1.939	2.609	3.158	3.632
105	.438	1.004	1.333	1.615	1.940	2.611	3.160	3.635
106	.439	1.005	1.335	1.617	1.942	2.613	3.162	3.637
107	.440	1.006	1.336	1.618	1.943	2.615	3.165	3.640
108	.441	1.008	1.337	1.620	1.945	2.617	3.167	3.642
109	.442	1.009	1.339	1.621	1.947	2.619	3.169	3.645
110	.443	1.010	1.340	1.622	1.948	2.621	3.171	3.647
111	.444	1.011	1.341	1.624	1.950	2.623	3.174	3.650
112	.445	1.012	1.342	1.625	1.951	2.625	3.176	3.652
113	.446	1.013	1.343	1.626	1.953	2.627	3.178	3.655
114	.447	1.014	1.345	1.628	1.954	2.628	3.180	3.657
115	.448	1.015	1.346	1.629	1.956	2.630	3.182	3.659
116	.449	1.016	1.347	1.630	1.957	2.632	3.184	3.662
117	.450	1.017	1.348	1.632	1.958	2.634	3.186	3.664
118	.450	1.018	1.349	1.633	1.960	2.635	3.188	3.666
119	.451	1.019	1.350	1.634	1.961	2.637	3.190	3.668
120	.452	1.020	1.352	1.635	1.963	2.639	3.192	3.671
121	.453	1.021	1.353	1.636	1.964	2.641	3.194	3.673
122	.454	1.022	1.354	1.638	1.965	2.642	3.196	3.675
123	.455	1.023	1.355	1.639	1.967	2.644	3.198	3.677
124	.456	1.024	1.356	1.640	1.968	2.645	3.200	3.679
125	.457	1.025	1.357	1.641	1.969	2.647	3.201	3.681
126	.457	1.026	1.358	1.642	1.970	2.649	3.203	3.683
127	.458	1.027	1.359	1.643	1.972	2.650	3.205	3.685
128	.459	1.028	1.360	1.645	1.973	2.652	3.207	3.687
129	.460	1.029	1.361	1.646	1.974	2.653	3.209	3.689
130	.461	1.030	1.362	1.647	1.975	2.655	3.210	3.691
131	.461	1.031	1.363	1.648	1.977	2.656	3.212	3.693
132	.462	1.032	1.364	1.649	1.978	2.658	3.214	3.695
133	.463	1.032	1.365	1.650	1.979	2.659	3.215	3.697
134	.464	1.033	1.366	1.651	1.980	2.660	3.217	3.699
135	.464	1.034	1.367	1.652	1.981	2.662	3.219	3.701

2.12 Values of k for f = n - 1 and γ = .01 (Continued)

$$Pr\left\{T_f \leq k\sqrt{n} \,\middle|\, K_p\sqrt{n}\right\} = \gamma$$

	P							
n	.75000	.90000	.95000	.97500	.99000	.99900	.99990	.99999
136	.465	1.035	1.368	1.653	1.982	2.663	3.220	3.703
137	.466	1.036	1.369	1.654	1.983	2.665	3.222	3.705
138	.467	1.037	1.370	1.655	1.985	2.666	3.224	3.706
139	.467	1.038	1.370	1.656	1.986	2.667	3.225	3.708
140	.468	1.038	1.371	1.657	1.987	2.669	3.227	3.710
141	.469	1.039	1.372	1.658	1.988	2.670	3.228	3.712
142	.469	1.040	1.373	1.659	1.989	2.671	3.230	3.713
143	.470	1.041	1.374	1.660	1.990	2.673	3.232	3.715
144	.471	1.041	1.375	1.661	1.991	2.674	3.233	3.717
145	.471	1.042	1.376	1.662	1.992	2.675	3.235	3.719
146	.472	1.043	1.377	1.663	1.993	2.677	3.236	3.720
147	.473	1.044	1.377	1.664	1.994	2.678	3.237	3.722
148	.473	1.044	1.378	1.665	1.995	2.679	3.239	3.723
149	.474	1.045	1.379	1.666	1.996	2.680	3.240	3.725
150	.475	1.046	1.380	1.666	1.997	2.682	3.242	3.727
151	.475	1.047	1.381	1.667	1.998	2.683	3.243	3.728
152	.476	1.047	1.381	1.668	1.999	2.684	3.245	3.730
153	.477	1.048	1.382	1.669	2.000	2.685	3.246	3.731
154	.477	1.049	1.383	1.670	2.001	2.686	3.247	3.733
155	.478	1.049	1.384	1.671	2.002	2.688	3.249	3.735
156	.478	1.050	1.385	1.672	2.003	2.689	3.250	3.736
157	.479	1.051	1.385	1.672	2.004	2.690	3.251	3.738
158	.480	1.052	1.386	1.673	2.005	2.691	3.253	3.739
159	.480	1.052	1.387	1.674	2.006	2.692	3.254	3.741
160	.481	1.053	1.388	1.675	2.007	2.693	3.255	3.742
161	.481	1.054	1.388	1.676	2.008	2.694	3.257	3.743
162	.482	1.054	1.389	1.676	2.008	2.696	3.258	3.745
163	.483	1.055	1.390	1.677	2.009	2.697	3.259	3.746
164	.483	1.055	1.390	1.678	2.010	2.698	3.261	3.748
165	.484	1.056	1.391	1.679	2.011	2.699	3.262	3.749
166	.484	1.057	1.392	1.680	2.012	2.700	3.263	3.751
167	.485	1.057	1.393	1.680	2.013	2.701	3.264	3.752
168	.485	1.058	1.393	1.681	2.014	2.702	3.265	3.753
169	.486	1.059	1.394	1.682	2.015	2.703	3.267	3.755
170	.486	1.059	1.395	1.683	2.015	2.704	3.268	3.756
171	.487	1.060	1.395	1.683	2.016	2.705	3.269	3.757
172	.487	1.060	1.396	1.684	2.017	2.706	3.270	3.759
173	.488	1.061	1.397	1.685	2.018	2.707	3.271	3.760
174	.488	1.062	1.397	1.686	2.019	2.708	3.273	3.761
175	.489	1.062	1.398	1.686	2.019	2.709	3.274	3.763
176	.489	1.063	1.399	1.687	2.020	2.710	3.275	3.764
177	.490	1.063	1.399	1.688	2.021	2.711	3.276	3.765
178	.490	1.064	1.400	1.688	2.022	2.712	3.277	3.767
179	.491	1.064	1.400	1.689	2.023	2.713	3.278	3.768
180	.491	1.065	1.401	1.690	2.023	2.714	3.279	3.769

2.12 Values of k for f = n - 1 and γ = .01 (Continued)

$$\Pr\left\{T_f \leq k\sqrt{n} \,\middle|\, K_p\sqrt{n}\right\} = \gamma$$

	P							
n	.75000	.90000	.95000	.97500	.99000	.99900	.99990	.99999
181	.492	1.066	1.402	1.690	2.024	2.715	3.280	3.770
182	.492	1.066	1.402	1.691	2.025	2.716	3.282	3.771
183	.493	1.067	1.403	1.692	2.026	2.717	3.283	3.773
184	.493	1.067	1.404	1.692	2.026	2.718	3.284	3.774
185	.494	1.068	1.404	1.693	2.027	2.719	3.285	3.775
186	.494	1.068	1.405	1.694	2.028	2.719	3.286	3.776
187	.495	1.069	1.405	1.694	2.029	2.720	3.287	3.777
188	.495	1.069	1.406	1.695	2.029	2.721	3.288	3.779
189	.496	1.070	1.406	1.696	2.030	2.722	3.289	3.780
190	.496	1.070	1.407	1.696	2.031	2.723	3.290	3.781
191	.497	1.071	1.408	1.697	2.031	2.724	3.291	3.782
192	.497	1.071	1.408	1.698	2.032	2.725	3.292	3.783
193	.497	1.072	1.409	1.698	2.033	2.726	3.293	3.784
194	.498	1.072	1.409	1.699	2.033	2.726	3.294	3.786
195	.498	1.073	1.410	1.700	2.034	2.727	3.295	3.787
196	.499	1.073	1.410	1.700	2.035	2.728	3.296	3.788
197	.499	1.074	1.411	1.701	2.036	2.729	3.297	3.789
198	.500	1.074	1.412	1.701	2.036	2.730	3.298	3.790
199	.500	1.075	1.412	1.702	2.037	2.731	3.299	3.791
200	.500	1.075	1.413	1.703	2.038	2.731	3.300	3.792
205	.503	1.078	1.415	1.705	2.041	2.735	3.305	3.797
210	.505	1.080	1.418	1.708	2.044	2.739	3.309	3.802
215	.506	1.082	1.420	1.711	2.047	2.743	3.313	3.807
220	.508	1.084	1.423	1.714	2.050	2.747	3.318	3.812
225	.510	1.086	1.425	1.716	2.053	2.750	3.322	3.817
230	.512	1.088	1.427	1.719	2.055	2.754	3.326	3.821
235	.513	1.090	1.429	1.721	2.058	2.757	3.330	3.826
240	.515	1.092	1.431	1.723	2.061	2.760	3.333	3.830
245	.517	1.094	1.433	1.726	2.063	2.763	3.337	3.834
250	.518	1.096	1.435	1.728	2.066	2.766	3.340	3.838
255	.520	1.098	1.437	1.730	2.068	2.769	3.344	3.842
260	.521	1.099	1.439	1.732	2.070	2.772	3.347	3.845
265	.523	1.101	1.441	1.734	2.073	2.775	3.350	3.849
270	.524	1.102	1.443	1.736	2.075	2.777	3.354	3.853
275	.525	1.104	1.445	1.738	2.077	2.780	3.357	3.856
280	.527	1.105	1.446	1.740	2.079	2.783	3.360	3.859
285	.528	1.107	1.448	1.741	2.081	2.785	3.362	3.863
290	.529	1.108	1.449	1.743	2.083	2.788	3.365	3.866
295	.530	1.110	1.451	1.745	2.085	2.790	3.368	3.869
300	.531	1.111	1.452	1.747	2.087	2.792	3.371	3.872
305	.532	1.112	1.454	1.748	2.089	2.795	3.373	3.875
310	.534	1.114	1.455	1.750	2.090	2.797	3.376	3.878
315	.535	1.115	1.457	1.751	2.092	2.799	3.379	3.881
320	.536	1.116	1.458	1.753	2.094	2.801	3.381	3.884
325	.537	1.117	1.460	1.754	2.095	2.803	3.383	3.886

2.12 Values of k for f = n - 1 and γ = .01 (Continued)

$$\Pr\left\{T_f \leq k\sqrt{n} \,\middle|\, K_p\sqrt{n}\right\} = \gamma$$

	P							
n	.75000	.90000	.95000	.97500	.99000	.99900	.99990	.99999
330	.538	1.119	1.461	1.756	2.097	2.805	3.386	3.889
335	.539	1.120	1.462	1.757	2.099	2.807	3.388	3.892
340	.540	1.121	1.463	1.759	2.100	2.809	3.390	3.894
345	.541	1.122	1.465	1.760	2.102	2.811	3.393	3.897
350	.542	1.123	1.466	1.761	2.103	2.813	3.395	3.899
355	.543	1.124	1.467	1.763	2.105	2.815	3.397	3.901
360	.543	1.125	1.468	1.764	2.106	2.816	3.399	3.904
365	.544	1.126	1.469	1.765	2.108	2.818	3.401	3.906
370	.545	1.127	1.471	1.766	2.109	2.820	3.403	3.908
375	.546	1.128	1.472	1.768	2.110	2.822	3.405	3.911
380	.547	1.129	1.473	1.769	2.112	2.823	3.407	3.913
385	.548	1.130	1.474	1.770	2.113	2.825	3.409	3.915
390	.548	1.131	1.475	1.771	2.114	2.826	3.411	3.917
395	.549	1.132	1.476	1.772	2.116	2.828	3.413	3.919
400	.550	1.133	1.477	1.773	2.117	2.830	3.414	3.921
425	.554	1.137	1.482	1.779	2.123	2.837	3.423	3.931
450	.557	1.141	1.486	1.783	2.128	2.844	3.431	3.939
475	.560	1.144	1.490	1.788	2.133	2.850	3.438	3.948
500	.563	1.148	1.494	1.792	2.138	2.855	3.444	3.955
525	.565	1.151	1.497	1.796	2.142	2.861	3.451	3.962
550	.568	1.154	1.500	1.799	2.146	2.866	3.457	3.969
575	.570	1.156	1.503	1.803	2.150	2.870	3.462	3.975
600	.572	1.159	1.506	1.806	2.153	2.875	3.467	3.981
625	.574	1.161	1.509	1.809	2.157	2.879	3.472	3.986
650	.576	1.164	1.511	1.812	2.160	2.883	3.476	3.991
675	.578	1.166	1.514	1.814	2.163	2.886	3.481	3.996
700	.580	1.168	1.516	1.817	2.165	2.890	3.485	4.001
725	.581	1.170	1.518	1.819	2.168	2.893	3.489	4.005
750	.583	1.171	1.520	1.821	2.171	2.896	3.492	4.009
775	.584	1.173	1.522	1.824	2.173	2.899	3.496	4.013
800	.586	1.175	1.524	1.826	2.175	2.902	3.499	4.017
825	.587	1.176	1.526	1.828	2.178	2.905	3.502	4.020
850	.588	1.178	1.527	1.830	2.180	2.908	3.505	4.024
875	.589	1.179	1.529	1.831	2.182	2.910	3.508	4.027
900	.591	1.181	1.531	1.833	2.184	2.912	3.511	4.030
925	.592	1.182	1.532	1.835	2.185	2.915	3.514	4.033
950	.593	1.183	1.534	1.836	2.187	2.917	3.516	4.036
975	.594	1.184	1.535	1.838	2.189	2.919	3.519	4.039
1000	.595	1.186	1.536	1.839	2.191	2.921	3.521	4.042
1500	.610	1.204	1.557	1.862	2.217	2.954	3.559	4.084
2000	.619	1.214	1.569	1.876	2.232	2.972	3.581	4.110
3000	.629	1.227	1.583	1.892	2.250	2.995	3.607	4.139
5000	.639	1.240	1.597	1.907	2.267	3.017	3.633	4.168
10000	.650	1.252	1.611	1.923	2.285	3.039	3.659	4.197
∞	.674	1.282	1.645	1.960	2.326	3.090	3.719	4.265

2.13 Values of k for f = n - 1 and γ = .005

$$\Pr\left\{T_f \leq k\sqrt{n} \,\middle|\, K_p\sqrt{n}\right\} = \gamma$$

	P							
n	.75000	.90000	.95000	.97500	.99000	.99900	.99990	.99999
2	-10.247	-1.524	-.273	.153	.438	.844	1.120	1.345
3	-1.778	-.266	.163	.425	.671	1.102	1.420	1.684
4	-.934	-.007	.336	.577	.821	1.273	1.616	1.905
5	-.624	.132	.448	.683	.930	1.399	1.761	2.066
6	-.454	.225	.531	.764	1.015	1.497	1.874	2.193
7	-.343	.295	.595	.829	1.083	1.578	1.966	2.296
8	-.262	.351	.648	.884	1.141	1.645	2.044	2.383
9	-.199	.397	.693	.929	1.190	1.703	2.110	2.457
10	-.149	.436	.731	.969	1.232	1.754	2.168	2.522
11	-.107	.469	.765	1.004	1.270	1.798	2.219	2.579
12	-.072	.499	.794	1.035	1.303	1.838	2.265	2.630
13	-.041	.525	.821	1.063	1.333	1.874	2.306	2.676
14	-.014	.548	.845	1.088	1.360	1.906	2.344	2.718
15	.010	.569	.866	1.111	1.385	1.936	2.378	2.757
16	.031	.588	.886	1.132	1.408	1.963	2.409	2.792
17	.050	.606	.904	1.151	1.429	1.989	2.439	2.824
18	.068	.622	.921	1.169	1.448	2.012	2.466	2.855
19	.084	.637	.937	1.186	1.466	2.034	2.491	2.883
20	.098	.651	.951	1.201	1.483	2.054	2.514	2.909
21	.112	.664	.965	1.216	1.499	2.073	2.536	2.934
22	.125	.676	.978	1.229	1.514	2.091	2.557	2.957
23	.136	.687	.990	1.242	1.528	2.108	2.577	2.979
24	.147	.698	1.001	1.254	1.541	2.124	2.595	3.000
25	.158	.708	1.012	1.266	1.554	2.140	2.613	3.020
26	.167	.718	1.022	1.277	1.566	2.154	2.630	3.038
27	.176	.727	1.032	1.287	1.577	2.168	2.645	3.056
28	.185	.735	1.041	1.297	1.588	2.181	2.661	3.073
29	.193	.743	1.049	1.306	1.598	2.193	2.675	3.090
30	.201	.751	1.058	1.315	1.608	2.205	2.689	3.105
31	.208	.759	1.066	1.324	1.618	2.217	2.702	3.120
32	.215	.766	1.073	1.332	1.627	2.228	2.715	3.134
33	.222	.773	1.081	1.340	1.635	2.238	2.727	3.148
34	.229	.779	1.088	1.348	1.644	2.248	2.739	3.161
35	.235	.785	1.094	1.355	1.652	2.258	2.750	3.174
36	.241	.791	1.101	1.362	1.659	2.268	2.761	3.186
37	.246	.797	1.107	1.369	1.667	2.277	2.771	3.198
38	.252	.803	1.113	1.375	1.674	2.285	2.781	3.209
39	.257	.808	1.119	1.381	1.681	2.294	2.791	3.220
40	.262	.813	1.125	1.387	1.688	2.302	2.801	3.230
41	.267	.818	1.130	1.393	1.694	2.310	2.810	3.241
42	.271	.823	1.135	1.399	1.700	2.317	2.819	3.251
43	.276	.828	1.140	1.404	1.706	2.325	2.827	3.260
44	.280	.832	1.145	1.410	1.712	2.332	2.835	3.270
45	.284	.837	1.150	1.415	1.718	2.339	2.844	3.279

2.13 Values of k for f = n - 1 and γ = .005 (Continued)

$$\Pr\left\{T_f \leq k\sqrt{n} \,\middle|\, K_p\sqrt{n}\right\} = \gamma$$

	P							
n	.75000	.90000	.95000	.97500	.99000	.99900	.99990	.99999
46	.288	.841	1.155	1.420	1.724	2.346	2.851	3.287
47	.292	.845	1.159	1.425	1.729	2.352	2.859	3.296
48	.296	.849	1.163	1.430	1.734	2.359	2.866	3.304
49	.300	.853	1.168	1.434	1.739	2.365	2.874	3.312
50	.303	.857	1.172	1.439	1.744	2.371	2.881	3.320
51	.307	.861	1.176	1.443	1.749	2.377	2.887	3.328
52	.310	.864	1.180	1.447	1.754	2.383	2.894	3.335
53	.313	.868	1.183	1.451	1.758	2.388	2.900	3.343
54	.317	.871	1.187	1.455	1.763	2.394	2.907	3.350
55	.320	.874	1.191	1.459	1.767	2.399	2.913	3.357
56	.323	.878	1.194	1.463	1.771	2.404	2.919	3.363
57	.326	.881	1.198	1.467	1.775	2.409	2.925	3.370
58	.328	.884	1.201	1.471	1.779	2.414	2.931	3.376
59	.331	.887	1.204	1.474	1.783	2.419	2.936	3.383
60	.334	.890	1.207	1.478	1.787	2.424	2.942	3.389
61	.337	.893	1.211	1.481	1.791	2.428	2.947	3.395
62	.339	.895	1.214	1.484	1.795	2.433	2.952	3.401
63	.342	.898	1.217	1.488	1.798	2.437	2.957	3.407
64	.344	.901	1.220	1.491	1.802	2.441	2.962	3.412
65	.347	.903	1.222	1.494	1.805	2.446	2.967	3.418
66	.349	.906	1.225	1.497	1.809	2.450	2.972	3.423
67	.351	.908	1.228	1.500	1.812	2.454	2.977	3.428
68	.354	.911	1.231	1.503	1.815	2.458	2.981	3.434
69	.356	.913	1.233	1.506	1.818	2.462	2.986	3.439
70	.358	.916	1.236	1.509	1.822	2.466	2.990	3.444
71	.360	.918	1.238	1.511	1.825	2.469	2.995	3.449
72	.362	.920	1.241	1.514	1.828	2.473	2.999	3.453
73	.364	.922	1.243	1.517	1.831	2.477	3.003	3.458
74	.366	.925	1.246	1.519	1.833	2.480	3.007	3.463
75	.368	.927	1.248	1.522	1.836	2.484	3.011	3.467
76	.370	.929	1.250	1.524	1.839	2.487	3.015	3.472
77	.372	.931	1.253	1.527	1.842	2.490	3.019	3.476
78	.374	.933	1.255	1.529	1.845	2.494	3.023	3.481
79	.376	.935	1.257	1.532	1.847	2.497	3.027	3.485
80	.377	.937	1.259	1.534	1.850	2.500	3.031	3.489
81	.379	.939	1.261	1.536	1.852	2.503	3.034	3.493
82	.381	.941	1.263	1.539	1.855	2.506	3.038	3.497
83	.383	.943	1.265	1.541	1.857	2.509	3.041	3.501
84	.384	.944	1.267	1.543	1.860	2.512	3.045	3.505
85	.386	.946	1.269	1.545	1.862	2.515	3.048	3.509
86	.387	.948	1.271	1.547	1.864	2.518	3.052	3.513
87	.389	.950	1.273	1.549	1.867	2.521	3.055	3.516
88	.391	.951	1.275	1.551	1.869	2.524	3.058	3.520
89	.392	.953	1.277	1.553	1.871	2.527	3.061	3.523
90	.394	.955	1.279	1.555	1.874	2.529	3.064	3.527

2.13 Values of k for f = n - 1 and γ = .005 (Continued)

$$\Pr\left\{T_f \leq k\sqrt{n} \,\middle|\, K_p\sqrt{n}\right\} = \gamma$$

	P							
n	.75000	.90000	.95000	.97500	.99000	.99900	.99990	.99999
91	.395	.956	1.280	1.557	1.876	2.532	3.068	3.531
92	.396	.958	1.282	1.559	1.878	2.535	3.071	3.534
93	.398	.959	1.284	1.561	1.880	2.537	3.074	3.537
94	.399	.961	1.286	1.563	1.882	2.540	3.077	3.541
95	.401	.963	1.287	1.565	1.884	2.542	3.080	3.544
96	.402	.964	1.289	1.567	1.886	2.545	3.082	3.547
97	.403	.965	1.291	1.568	1.888	2.547	3.085	3.550
98	.405	.967	1.292	1.570	1.890	2.550	3.088	3.554
99	.406	.968	1.294	1.572	1.892	2.552	3.091	3.557
100	.407	.970	1.295	1.574	1.894	2.554	3.094	3.560
101	.409	.971	1.297	1.575	1.896	2.557	3.096	3.563
102	.410	.973	1.298	1.577	1.898	2.559	3.099	3.566
103	.411	.974	1.300	1.579	1.899	2.561	3.101	3.569
104	.412	.975	1.301	1.580	1.901	2.563	3.104	3.572
105	.413	.977	1.303	1.582	1.903	2.566	3.107	3.575
106	.415	.978	1.304	1.583	1.905	2.568	3.109	3.577
107	.416	.979	1.306	1.585	1.907	2.570	3.112	3.580
108	.417	.980	1.307	1.587	1.908	2.572	3.114	3.583
109	.418	.982	1.309	1.588	1.910	2.574	3.117	3.586
110	.419	.983	1.310	1.590	1.912	2.576	3.119	3.588
111	.420	.984	1.311	1.591	1.913	2.578	3.121	3.591
112	.421	.985	1.313	1.593	1.915	2.580	3.124	3.594
113	.422	.987	1.314	1.594	1.917	2.582	3.126	3.596
114	.423	.988	1.315	1.595	1.918	2.584	3.128	3.599
115	.424	.989	1.317	1.597	1.920	2.586	3.130	3.601
116	.425	.990	1.318	1.598	1.921	2.588	3.133	3.604
117	.426	.991	1.319	1.600	1.923	2.590	3.135	3.606
118	.427	.992	1.320	1.601	1.924	2.592	3.137	3.609
119	.428	.993	1.322	1.602	1.926	2.594	3.139	3.611
120	.429	.995	1.323	1.604	1.927	2.595	3.141	3.614
121	.430	.996	1.324	1.605	1.929	2.597	3.143	3.616
122	.431	.997	1.325	1.606	1.930	2.599	3.145	3.618
123	.432	.998	1.326	1.608	1.932	2.601	3.147	3.621
124	.433	.999	1.327	1.609	1.933	2.602	3.150	3.623
125	.434	1.000	1.329	1.610	1.934	2.604	3.152	3.625
126	.435	1.001	1.330	1.611	1.936	2.606	3.154	3.627
127	.436	1.002	1.331	1.613	1.937	2.608	3.155	3.629
128	.437	1.003	1.332	1.614	1.939	2.609	3.157	3.632
129	.438	1.004	1.333	1.615	1.940	2.611	3.159	3.634
130	.439	1.005	1.334	1.616	1.941	2.612	3.161	3.636
131	.439	1.006	1.335	1.617	1.942	2.614	3.163	3.638
132	.440	1.007	1.336	1.619	1.944	2.616	3.165	3.640
133	.441	1.008	1.337	1.620	1.945	2.617	3.167	3.642
134	.442	1.009	1.338	1.621	1.946	2.619	3.169	3.644
135	.443	1.010	1.339	1.622	1.948	2.620	3.170	3.646

2.13 Values of k for f = n - 1 and γ = .005 (Continued)

$$\Pr\left\{T_f \leq k\sqrt{n} \mid K_p \sqrt{n}\right\} = \gamma$$

	P							
n	.75000	.90000	.95000	.97500	.99000	.99900	.99990	.99999
136	.444	1.011	1.340	1.623	1.949	2.622	3.172	3.648
137	.444	1.011	1.341	1.624	1.950	2.623	3.174	3.650
138	.445	1.012	1.342	1.625	1.951	2.625	3.176	3.652
139	.446	1.013	1.343	1.626	1.952	2.626	3.177	3.654
140	.447	1.014	1.344	1.627	1.954	2.628	3.179	3.656
141	.448	1.015	1.345	1.628	1.955	2.629	3.181	3.658
142	.448	1.016	1.346	1.630	1.956	2.631	3.183	3.660
143	.449	1.017	1.347	1.631	1.957	2.632	3.184	3.662
144	.450	1.018	1.348	1.632	1.958	2.634	3.186	3.664
145	.451	1.018	1.349	1.633	1.959	2.635	3.187	3.665
146	.451	1.019	1.350	1.634	1.961	2.636	3.189	3.667
147	.452	1.020	1.351	1.635	1.962	2.638	3.191	3.669
148	.453	1.021	1.352	1.636	1.963	2.639	3.192	3.671
149	.453	1.022	1.353	1.637	1.964	2.640	3.194	3.673
150	.454	1.022	1.354	1.638	1.965	2.642	3.195	3.674
151	.455	1.023	1.354	1.639	1.966	2.643	3.197	3.676
152	.456	1.024	1.355	1.639	1.967	2.644	3.198	3.678
153	.456	1.025	1.356	1.640	1.968	2.646	3.200	3.680
154	.457	1.026	1.357	1.641	1.969	2.647	3.201	3.681
155	.458	1.026	1.358	1.642	1.970	2.648	3.203	3.683
156	.458	1.027	1.359	1.643	1.971	2.650	3.204	3.685
157	.459	1.028	1.360	1.644	1.972	2.651	3.206	3.686
158	.460	1.029	1.360	1.645	1.973	2.652	3.207	3.688
159	.460	1.029	1.361	1.646	1.974	2.653	3.209	3.689
160	.461	1.030	1.362	1.647	1.975	2.655	3.210	3.691
161	.461	1.031	1.363	1.648	1.976	2.656	3.212	3.693
162	.462	1.031	1.364	1.649	1.977	2.657	3.213	3.694
163	.463	1.032	1.364	1.649	1.978	2.658	3.214	3.696
164	.463	1.033	1.365	1.650	1.979	2.659	3.216	3.697
165	.464	1.034	1.366	1.651	1.980	2.660	3.217	3.699
166	.465	1.034	1.367	1.652	1.981	2.662	3.218	3.700
167	.465	1.035	1.367	1.653	1.982	2.663	3.220	3.702
168	.466	1.036	1.368	1.654	1.983	2.664	3.221	3.703
169	.466	1.036	1.369	1.654	1.984	2.665	3.222	3.705
170	.467	1.037	1.370	1.655	1.985	2.666	3.224	3.706
171	.468	1.038	1.370	1.656	1.986	2.667	3.225	3.708
172	.468	1.038	1.371	1.657	1.987	2.668	3.226	3.709
173	.469	1.039	1.372	1.658	1.987	2.669	3.228	3.711
174	.469	1.040	1.373	1.658	1.988	2.671	3.229	3.712
175	.470	1.040	1.373	1.659	1.989	2.672	3.230	3.714
176	.470	1.041	1.374	1.660	1.990	2.673	3.231	3.715
177	.471	1.041	1.375	1.661	1.991	2.674	3.233	3.716
178	.471	1.042	1.375	1.662	1.992	2.675	3.234	3.718
179	.472	1.043	1.376	1.662	1.993	2.676	3.235	3.719
180	.473	1.043	1.377	1.663	1.993	2.677	3.236	3.720

2.13 Values of k for f = n - 1 and γ = .005 (Continued)

$$\Pr\left\{T_f \leq k\sqrt{n} \,\middle|\, K_p\sqrt{n}\right\} = \gamma$$

	P							
n	.75000	.90000	.95000	.97500	.99000	.99900	.99990	.99999
181	.473	1.044	1.377	1.664	1.994	2.678	3.237	3.722
182	.474	1.045	1.378	1.665	1.995	2.679	3.239	3.723
183	.474	1.045	1.379	1.665	1.996	2.680	3.240	3.724
184	.475	1.046	1.379	1.666	1.997	2.681	3.241	3.726
185	.475	1.046	1.380	1.667	1.998	2.682	3.242	3.727
186	.476	1.047	1.381	1.667	1.998	2.683	3.243	3.728
187	.476	1.047	1.381	1.668	1.999	2.684	3.244	3.730
188	.477	1.048	1.382	1.669	2.000	2.685	3.246	3.731
189	.477	1.049	1.383	1.670	2.001	2.686	3.247	3.732
190	.478	1.049	1.383	1.670	2.001	2.687	3.248	3.733
191	.478	1.050	1.384	1.671	2.002	2.688	3.249	3.735
192	.479	1.050	1.385	1.672	2.003	2.689	3.250	3.736
193	.479	1.051	1.385	1.672	2.004	2.690	3.251	3.737
194	.480	1.051	1.386	1.673	2.005	2.691	3.252	3.738
195	.480	1.052	1.386	1.674	2.005	2.692	3.253	3.740
196	.481	1.052	1.387	1.674	2.006	2.692	3.254	3.741
197	.481	1.053	1.388	1.675	2.007	2.693	3.255	3.742
198	.482	1.054	1.388	1.676	2.007	2.694	3.256	3.743
199	.482	1.054	1.389	1.676	2.008	2.695	3.258	3.744
200	.482	1.055	1.389	1.677	2.009	2.696	3.259	3.746
205	.485	1.057	1.392	1.680	2.012	2.700	3.264	3.751
210	.487	1.060	1.395	1.683	2.016	2.705	3.269	3.757
215	.489	1.062	1.398	1.686	2.019	2.709	3.273	3.762
220	.491	1.064	1.400	1.689	2.022	2.713	3.278	3.767
225	.493	1.067	1.403	1.692	2.025	2.716	3.282	3.772
230	.495	1.069	1.405	1.694	2.028	2.720	3.287	3.777
235	.497	1.071	1.408	1.697	2.031	2.724	3.291	3.782
240	.499	1.073	1.410	1.700	2.034	2.727	3.295	3.787
245	.500	1.075	1.412	1.702	2.037	2.731	3.299	3.791
250	.502	1.077	1.414	1.704	2.040	2.734	3.303	3.795
255	.504	1.079	1.416	1.707	2.042	2.737	3.307	3.800
260	.505	1.081	1.419	1.709	2.045	2.740	3.310	3.804
265	.507	1.082	1.421	1.711	2.047	2.743	3.314	3.808
270	.508	1.084	1.422	1.713	2.050	2.746	3.317	3.812
275	.510	1.086	1.424	1.715	2.052	2.749	3.320	3.815
280	.511	1.088	1.426	1.717	2.054	2.752	3.324	3.819
285	.513	1.089	1.428	1.719	2.056	2.755	3.327	3.823
290	.514	1.091	1.430	1.721	2.059	2.757	3.330	3.826
295	.515	1.092	1.431	1.723	2.061	2.760	3.333	3.829
300	.516	1.094	1.433	1.725	2.063	2.762	3.336	3.833
305	.518	1.095	1.435	1.727	2.065	2.765	3.339	3.836
310	.519	1.097	1.436	1.729	2.067	2.767	3.342	3.839
315	.520	1.098	1.438	1.730	2.069	2.770	3.344	3.842
320	.521	1.099	1.439	1.732	2.070	2.772	3.347	3.845
325	.522	1.101	1.441	1.734	2.072	2.774	3.350	3.848

2.13 Values of k for f = n - 1 and γ = .005 (Continued)

$$\Pr\left\{T_f \leq k\sqrt{n} \,\middle|\, K_p\sqrt{n}\right\} = \gamma$$

	P							
n	.75000	.90000	.95000	.97500	.99000	.99900	.99990	.99999
330	.524	1.102	1.442	1.735	2.074	2.777	3.352	3.851
335	.525	1.103	1.444	1.737	2.076	2.779	3.355	3.854
340	.526	1.104	1.445	1.738	2.078	2.781	3.357	3.857
345	.527	1.106	1.446	1.740	2.079	2.783	3.360	3.860
350	.528	1.107	1.448	1.741	2.081	2.785	3.362	3.862
355	.529	1.108	1.449	1.743	2.082	2.787	3.365	3.865
360	.530	1.109	1.450	1.744	2.084	2.789	3.367	3.868
365	.531	1.110	1.452	1.746	2.086	2.791	3.369	3.870
370	.532	1.111	1.453	1.747	2.087	2.793	3.371	3.873
375	.533	1.112	1.454	1.748	2.089	2.795	3.373	3.875
380	.534	1.114	1.455	1.749	2.090	2.796	3.376	3.877
385	.534	1.115	1.456	1.751	2.091	2.798	3.378	3.880
390	.535	1.116	1.457	1.752	2.093	2.800	3.380	3.882
395	.536	1.117	1.459	1.753	2.094	2.802	3.382	3.884
400	.537	1.118	1.460	1.754	2.096	2.803	3.384	3.886
425	.541	1.122	1.465	1.760	2.102	2.811	3.393	3.897
450	.545	1.126	1.470	1.766	2.108	2.819	3.401	3.907
475	.548	1.130	1.474	1.770	2.113	2.825	3.409	3.915
500	.551	1.134	1.478	1.775	2.118	2.832	3.417	3.924
525	.554	1.137	1.482	1.779	2.123	2.837	3.423	3.931
550	.557	1.141	1.486	1.783	2.128	2.843	3.430	3.939
575	.559	1.144	1.489	1.787	2.132	2.848	3.436	3.945
600	.562	1.146	1.492	1.790	2.136	2.853	3.441	3.952
625	.564	1.149	1.495	1.793	2.139	2.857	3.447	3.958
650	.566	1.151	1.498	1.796	2.143	2.862	3.452	3.963
675	.568	1.154	1.500	1.799	2.146	2.866	3.456	3.968
700	.570	1.156	1.503	1.802	2.149	2.869	3.461	3.973
725	.571	1.158	1.505	1.805	2.152	2.873	3.465	3.978
750	.573	1.160	1.507	1.807	2.155	2.876	3.469	3.983
775	.575	1.162	1.509	1.810	2.157	2.880	3.473	3.987
800	.576	1.164	1.512	1.812	2.160	2.883	3.477	3.991
825	.578	1.165	1.513	1.814	2.162	2.886	3.480	3.995
850	.579	1.167	1.515	1.816	2.165	2.889	3.483	3.999
875	.580	1.169	1.517	1.818	2.167	2.892	3.487	4.003
900	.582	1.170	1.519	1.820	2.169	2.894	3.490	4.006
925	.583	1.172	1.520	1.822	2.171	2.897	3.493	4.009
950	.584	1.173	1.522	1.823	2.173	2.899	3.496	4.013
975	.585	1.174	1.524	1.825	2.175	2.902	3.498	4.016
1000	.586	1.176	1.525	1.827	2.177	2.904	3.501	4.019
1500	.603	1.196	1.548	1.852	2.205	2.940	3.543	4.066
2000	.613	1.208	1.561	1.867	2.222	2.961	3.567	4.094
3000	.624	1.221	1.577	1.885	2.242	2.985	3.596	4.126
5000	.636	1.235	1.593	1.902	2.261	3.009	3.625	4.158
10000	.647	1.249	1.608	1.919	2.281	3.033	3.653	4.190
∞	.674	1.282	1.645	1.960	2.326	3.090	3.719	4.265

3. TABLES OF SOME SPECIAL VALUES OF k.

In Sections 3.1, 3.2, and 3.3 k is defined as in Section 2. That is, k is given for which

$$\Pr\left\{ \Pr(X \leq \overline{x} + ks) \geq P \right\} = \gamma.$$

At least a proportion P of a normal distribution is below $\overline{x} + ks$ with probability equal to γ.

Sections 3.4, 3.5, 3.6, 3.7, and 3.8 contain values of k where k is defined by the equations in the heading.

3.1 Special Values of k for $\gamma = .90$

$$\Pr\left\{T_f \leq k\sqrt{n} \,\middle|\, K_p\sqrt{n}\right\} = \gamma$$

	f = 1		f = 2		f = ∞	
p	n = 1	n = ∞	n = 1	n = ∞	n = 1	n = ∞
.500	3.078	.000	1.886	.000	1.282	.000
.510	3.180	.199	1.933	.077	1.307	.025
.520	3.285	.399	1.981	.155	1.332	.050
.530	3.392	.599	2.029	.232	1.357	.075
.540	3.501	.799	2.078	.309	1.382	.100
.550	3.612	1.000	2.127	.387	1.407	.126
.560	3.725	1.201	2.177	.465	1.433	.151
.570	3.841	1.404	2.228	.543	1.458	.176
.580	3.959	1.607	2.279	.622	1.483	.202
.590	4.080	1.811	2.331	.701	1.509	.228
.600	4.204	2.016	2.384	.781	1.535	.253
.610	4.330	2.223	2.437	.861	1.561	.279
.620	4.460	2.431	2.492	.941	1.587	.305
.630	4.592	2.641	2.547	1.022	1.613	.332
.640	4.728	2.853	2.603	1.104	1.640	.358
.650	4.867	3.066	2.660	1.187	1.667	.385
.660	5.010	3.282	2.718	1.271	1.694	.412
.670	5.157	3.501	2.778	1.355	1.721	.440
.680	5.307	3.722	2.838	1.441	1.749	.468
.690	5.462	3.946	2.900	1.528	1.777	.496
.700	5.621	4.173	2.964	1.616	1.806	.524
.710	5.785	4.404	3.028	1.705	1.835	.553
.720	5.954	4.638	3.094	1.796	1.864	.583
.730	6.128	4.877	3.162	1.888	1.894	.613
.740	6.308	5.120	3.232	1.982	1.925	.643
.750	6.494	5.368	3.304	2.078	1.956	.674
.760	6.686	5.621	3.378	2.176	1.988	.706
.770	6.885	5.880	3.454	2.276	2.020	.739
.780	7.092	6.145	3.532	2.379	2.054	.772
.790	7.307	6.417	3.614	2.484	2.088	.806
.800	7.531	6.698	3.698	2.593	2.123	.842
.810	7.764	6.986	3.785	2.705	2.159	.878
.820	8.008	7.284	3.876	2.820	2.197	.915
.830	8.264	7.593	3.971	2.940	2.236	.954
.840	8.533	7.914	4.071	3.064	2.276	.994
.850	8.817	8.248	4.175	3.193	2.318	1.036
.860	9.116	8.597	4.285	3.328	2.362	1.080
.870	9.435	8.964	4.402	3.470	2.408	1.126
.880	9.774	9.350	4.525	3.620	2.457	1.175
.890	10.139	9.761	4.658	3.779	2.508	1.227
.900	10.532	10.198	4.800	3.948	2.563	1.282
.905	10.741	10.429	4.876	4.038	2.592	1.311
.910	10.960	10.670	4.955	4.131	2.622	1.341
.915	11.189	10.920	5.038	4.227	2.654	1.372
.920	11.429	11.181	5.125	4.329	2.687	1.405

3.1 Special Values of k for $\gamma = .90$ (Continued)

$$\Pr\left\{T_f \leq k\sqrt{n} \,\middle|\, K_p\sqrt{n}\right\} = \gamma$$

	f = 1		f = 2		f = ∞	
P	n = 1	n = ∞	n = 1	n = ∞	n = 1	n = ∞
.925000000	11.683	11.456	5.216	4.435	2.721	1.440
.930000000	11.951	11.744	5.313	4.547	2.757	1.476
.935000000	12.236	12.049	5.415	4.665	2.796	1.514
.940000000	12.541	12.373	5.525	4.790	2.836	1.555
.945000000	12.867	12.718	5.642	4.924	2.880	1.598
.950000000	13.220	13.090	5.769	5.067	2.926	1.645
.955000000	13.604	13.492	5.907	5.223	2.977	1.695
.960000000	14.026	13.932	6.059	5.393	3.032	1.751
.965000000	14.496	14.419	6.228	5.582	3.093	1.812
.970000000	15.027	14.967	6.419	5.794	3.162	1.881
.975000000	15.641	15.597	6.640	6.038	3.242	1.960
.980000000	16.372	16.344	6.904	6.327	3.335	2.054
.985000000	17.283	17.269	7.234	6.686	3.452	2.170
.990000000	18.513	18.513	7.681	7.167	3.608	2.326
.991000000	18.823	18.825	7.794	7.288	3.647	2.366
.992000000	19.165	19.170	7.918	7.421	3.690	2.409
.993000000	19.547	19.555	8.058	7.570	3.739	2.457
.994000000	19.982	19.991	8.217	7.739	3.794	2.512
.995000000	20.486	20.498	8.402	7.936	3.857	2.576
.996000000	21.091	21.105	8.624	8.170	3.934	2.652
.997000000	21.851	21.867	8.903	8.465	4.029	2.748
.998000000	22.887	22.904	9.286	8.867	4.160	2.878
.999000000	24.574	24.592	9.911	9.520	4.372	3.090
.999100000	24.822	24.840	10.003	9.616	4.403	3.121
.999200000	25.096	25.114	10.105	9.723	4.437	3.156
.999300000	25.405	25.423	10.220	9.842	4.476	3.195
.999400000	25.757	25.775	10.351	9.978	4.520	3.239
.999500000	26.168	26.186	10.504	10.137	4.572	3.291
.999600000	26.663	26.681	10.690	10.329	4.634	3.353
.999700000	27.291	27.308	10.924	10.572	4.713	3.432
.999800000	28.154	28.172	11.248	10.906	4.822	3.540
.999900000	29.579	29.596	11.783	11.457	5.001	3.719
.999950000	30.945	30.961	12.297	11.986	5.172	3.891
.999990000	33.925	33.940	13.423	13.139	5.546	4.265
.999995000	35.137	35.151	13.883	13.608	5.699	4.417
.999999000	37.814	37.827	14.899	14.644	6.035	4.753
.999999500	38.914	38.927	15.318	15.070	6.173	4.892
.999999900	41.363	41.375	16.251	16.018	6.481	5.199
.999999950	42.377	42.389	16.638	16.410	6.608	5.327
.999999990	44.644	44.656	17.504	17.288	6.893	5.611
.999999995	45.574	45.585	17.859	17.647	7.010	5.728
.999999999	47.621	47.631	18.642	18.440	7.267	5.985

3.2 Special Values of k for $\gamma = .95$

$$\Pr\left\{T_f \leq k\sqrt{n} \,\middle|\, K_p\sqrt{n}\right\} = \gamma$$

	f = 1		f = 2		f = ∞	
P	n = 1	n = ∞	n = 1	n = ∞	n = 1	n = ∞
.500	6.314	.000	2.920	.000	1.645	.000
.510	6.517	.400	2.985	.111	1.670	.025
.520	6.724	.800	3.051	.221	1.695	.050
.530	6.935	1.200	3.118	.332	1.720	.075
.540	7.150	1.602	3.185	.443	1.745	.100
.550	7.370	2.004	3.254	.555	1.771	.126
.560	7.595	2.408	3.323	.667	1.796	.151
.570	7.825	2.813	3.393	.779	1.821	.176
.580	8.060	3.220	3.464	.891	1.847	.202
.590	8.300	3.629	3.536	1.005	1.872	.228
.600	8.545	4.040	3.609	1.119	1.898	.253
.610	8.797	4.454	3.684	1.233	1.924	.279
.620	9.054	4.872	3.759	1.349	1.950	.305
.630	9.317	5.292	3.836	1.465	1.977	.332
.640	9.587	5.716	3.915	1.583	2.003	.358
.650	9.864	6.145	3.994	1.701	2.030	.385
.660	10.149	6.578	4.076	1.821	2.057	.412
.670	10.440	7.015	4.159	1.942	2.085	.440
.680	10.740	7.459	4.243	2.065	2.113	.468
.690	11.048	7.907	4.330	2.189	2.141	.496
.700	11.365	8.363	4.418	2.315	2.169	.524
.710	11.692	8.825	4.509	2.443	2.198	.553
.720	12.028	9.295	4.602	2.573	2.228	.583
.730	12.375	9.773	4.697	2.706	2.258	.613
.740	12.734	10.260	4.795	2.841	2.288	.643
.750	13.104	10.756	4.895	2.978	2.319	.674
.760	13.488	11.264	4.999	3.119	2.351	.706
.770	13.886	11.783	5.106	3.262	2.384	.739
.780	14.298	12.314	5.216	3.410	2.417	.772
.790	14.728	12.860	5.331	3.561	2.451	.806
.800	15.174	13.422	5.449	3.716	2.486	.842
.810	15.641	14.000	5.572	3.876	2.523	.878
.820	16.128	14.598	5.701	4.042	2.560	.915
.830	16.639	15.216	5.835	4.213	2.599	.954
.840	17.176	15.859	5.975	4.391	2.639	.994
.850	17.743	16.528	6.122	4.576	2.681	1.036
.860	18.342	17.228	6.277	4.770	2.725	1.080
.870	18.978	17.963	6.442	4.973	2.771	1.126
.880	19.657	18.738	6.617	5.188	2.820	1.175
.890	20.385	19.560	6.804	5.416	2.871	1.227
.900	21.171	20.437	7.006	5.659	2.926	1.282
.905	21.589	20.900	7.113	5.787	2.955	1.311
.910	22.026	21.381	7.225	5.920	2.986	1.341
.915	22.484	21.883	7.342	6.059	3.017	1.372
.920	22.965	22.407	7.465	6.204	3.050	1.405

3.2 Special Values of k for $\gamma = .95$ (Continued)

$$\Pr\left\{T_f \leq k\sqrt{n} \,\middle|\, K_p\sqrt{n}\right\} = \gamma$$

	f = 1		f = 2		f = ∞	
p	n = 1	n = ∞	n = 1	n = ∞	n = 1	n = ∞
.925000000	23.472	22.957	7.594	6.356	3.084	1.440
.930000000	24.009	23.535	7.731	6.516	3.121	1.476
.935000000	24.579	24.146	7.876	6.685	3.159	1.514
.940000000	25.188	24.794	8.032	6.865	3.200	1.555
.945000000	25.841	25.487	8.198	7.057	3.243	1.598
.950000000	26.546	26.231	8.378	7.263	3.290	1.645
.955000000	27.314	27.037	8.574	7.486	3.340	1.695
.960000000	28.159	27.919	8.789	7.730	3.396	1.751
.965000000	29.099	28.895	9.029	8.000	3.457	1.812
.970000000	30.163	29.993	9.301	8.304	3.526	1.881
.975000000	31.391	31.256	9.616	8.654	3.605	1.960
.980000000	32.854	32.752	9.991	9.068	3.699	2.054
.985000000	34.678	34.607	10.460	9.582	3.815	2.170
.990000000	37.140	37.099	11.096	10.272	3.971	2.326
.991000000	37.760	37.725	11.257	10.445	4.010	2.366
.992000000	38.445	38.416	11.434	10.636	4.054	2.409
.993000000	39.210	39.187	11.633	10.850	4.102	2.457
.994000000	40.080	40.062	11.859	11.092	4.157	2.512
.995000000	41.090	41.077	12.123	11.373	4.221	2.576
.996000000	42.301	42.293	12.439	11.710	4.297	2.652
.997000000	43.823	43.820	12.838	12.133	4.393	2.748
.998000000	45.897	45.899	13.383	12.708	4.523	2.878
.999000000	49.275	49.281	14.275	13.645	4.735	3.090
.999100000	49.771	49.778	14.406	13.782	4.766	3.121
.999200000	50.322	50.328	14.552	13.935	4.801	3.156
.999300000	50.939	50.946	14.716	14.106	4.840	3.195
.999400000	51.644	51.651	14.903	14.301	4.884	3.239
.999500000	52.467	52.475	15.122	14.529	4.935	3.291
.999600000	53.460	53.468	15.386	14.804	4.998	3.353
.999700000	54.717	54.725	15.721	15.152	5.076	3.432
.999800000	56.447	56.455	16.183	15.631	5.185	3.540
.999900000	59.300	59.308	16.947	16.421	5.364	3.719
.999950000	62.036	62.044	17.682	17.179	5.535	3.891
.999990000	68.006	68.013	19.291	18.831	5.910	4.265
.999995000	70.435	70.442	19.948	19.504	6.062	4.417
.999999000	75.797	75.804	21.402	20.988	6.398	4.753
.999999500	78.001	78.008	22.001	21.598	6.536	4.892
.999999900	82.907	82.913	23.335	22.957	6.844	5.199
.999999950	84.939	84.945	23.889	23.519	6.971	5.327
.999999990	89.482	89.488	25.128	24.777	7.256	5.611
.999999995	91.344	91.349	25.637	25.292	7.373	5.728
.999999999	95.445	95.451	26.757	26.428	7.630	5.985

3.3 Special Values of k for $\gamma = .99$

$$\Pr\left\{T_f \leq k\sqrt{n} \,\middle|\, K_p\sqrt{n}\right\} = \gamma$$

	f = 1		f = 2		f = ∞	
P	n = 1	n = ∞	n = 1	n = ∞	n = 1	n = ∞
.500	31.821	.000	6.965	.000	2.326	.000
.510	32.831	2.000	7.107	.250	2.351	.025
.520	33.862	4.002	7.252	.500	2.377	.050
.530	34.914	6.006	7.398	.751	2.402	.075
.540	35.988	8.013	7.547	1.002	2.427	.100
.550	37.085	10.026	7.697	1.253	2.452	.126
.560	38.206	12.045	7.849	1.506	2.477	.151
.570	39.352	14.072	8.004	1.759	2.503	.176
.580	40.523	16.108	8.160	2.014	2.528	.202
.590	41.720	18.155	8.319	2.270	2.554	.228
.600	42.945	20.214	8.481	2.527	2.580	.253
.610	44.199	22.286	8.645	2.786	2.606	.279
.620	45.483	24.373	8.812	3.047	2.632	.305
.630	46.798	26.477	8.982	3.310	2.658	.332
.640	48.146	28.600	9.155	3.576	2.685	.358
.650	49.529	30.743	9.332	3.844	2.712	.385
.660	50.947	32.909	9.512	4.114	2.739	.412
.670	52.404	35.099	9.695	4.388	2.766	.440
.680	53.900	37.316	9.883	4.665	2.794	.468
.690	55.439	39.562	10.075	4.946	2.822	.496
.700	57.022	41.840	10.271	5.231	2.851	.524
.710	58.653	44.153	10.472	5.520	2.880	.553
.720	60.334	46.503	10.679	5.814	2.909	.583
.730	62.067	48.894	10.890	6.113	2.939	.613
.740	63.858	51.330	11.108	6.417	2.970	.643
.750	65.709	53.815	11.331	6.728	3.001	.674
.760	67.626	56.353	11.562	7.045	3.033	.706
.770	69.613	58.950	11.800	7.370	3.065	.739
.780	71.675	61.610	12.046	7.703	3.099	.772
.790	73.819	64.341	12.301	8.044	3.133	.806
.800	76.052	67.150	12.565	8.395	3.168	.842
.810	78.382	70.044	12.839	8.757	3.204	.878
.820	80.818	73.034	13.125	9.131	3.242	.915
.830	83.372	76.129	13.424	9.518	3.281	.954
.840	86.057	79.344	13.737	9.920	3.321	.994
.850	88.887	82.693	14.066	10.338	3.363	1.036
.860	91.881	86.195	14.413	10.776	3.407	1.080
.870	95.061	89.871	14.781	11.236	3.453	1.126
.880	98.454	93.748	15.172	11.720	3.501	1.175
.890	102.094	97.860	15.590	12.235	3.553	1.227
.900	106.023	102.250	16.041	12.783	3.608	1.282
.905	108.114	104.566	16.281	13.073	3.637	1.311
.910	110.299	106.974	16.531	13.374	3.667	1.341
.915	112.588	109.483	16.793	13.688	3.699	1.372
.920	114.995	112.106	17.069	14.015	3.731	1.405

3.3 Special Values of k for $\gamma = .99$ (Continued)

$$\Pr\left\{T_f \leq k\sqrt{n} \,\middle|\, K_p\sqrt{n}\right\} = \gamma$$

	f = 1		f = 2		f = ∞	
p	n = 1	n = ∞	n = 1	n = ∞	n = 1	n = ∞
.925000000	117.531	114.855	17.359	14.359	3.766	1.440
.930000000	120.214	117.748	17.665	14.721	3.802	1.476
.935000000	123.065	120.805	17.991	15.103	3.840	1.514
.940000000	126.107	124.050	18.339	15.509	3.881	1.555
.945000000	129.373	127.514	18.712	15.942	3.925	1.598
.950000000	132.900	131.237	19.115	16.407	3.971	1.645
.955000000	136.742	135.270	19.555	16.911	4.022	1.695
.960000000	140.966	139.681	20.038	17.463	4.077	1.751
.965000000	145.668	144.566	20.577	18.074	4.138	1.812
.970000000	150.985	150.062	21.186	18.761	4.207	1.881
.975000000	157.129	156.378	21.892	19.550	4.286	1.960
.980000000	164.444	163.861	22.735	20.486	4.380	2.054
.985000000	173.565	173.144	23.789	21.646	4.496	2.170
.990000000	185.879	185.611	25.217	23.205	4.653	2.326
.991000000	188.982	188.744	25.579	23.597	4.692	2.366
.992000000	192.407	192.199	25.978	24.029	4.735	2.409
.993000000	196.236	196.056	26.425	24.511	4.784	2.457
.994000000	200.586	200.435	26.934	25.058	4.838	2.512
.995000000	205.640	205.516	27.526	25.694	4.902	2.576
.996000000	211.695	211.599	28.238	26.454	4.978	2.652
.997000000	219.305	219.235	29.134	27.409	5.074	2.748
.998000000	229.682	229.638	30.361	28.709	5.205	2.878
.999000000	246.578	246.558	32.369	30.825	5.417	3.090
.999100000	249.062	249.044	32.665	31.136	5.448	3.121
.999200000	251.814	251.798	32.993	31.480	5.482	3.156
.999300000	254.903	254.890	33.362	31.866	5.521	3.195
.999400000	258.429	258.418	33.784	32.308	5.565	3.239
.999500000	262.548	262.539	34.277	32.823	5.617	3.291
.999600000	267.514	267.507	34.872	33.444	5.679	3.353
.999700000	273.800	273.796	35.627	34.230	5.758	3.432
.999800000	282.453	282.450	36.668	35.312	5.866	3.540
.999900000	296.727	296.727	38.389	37.097	6.045	3.719
.999950000	310.415	310.416	40.046	38.808	6.217	3.891
.999990000	340.279	340.280	43.673	42.542	6.591	4.265
.999995000	352.429	352.430	45.154	44.061	6.744	4.417
.999999000	379.256	379.257	48.433	47.415	7.080	4.753
.999999500	390.284	390.285	49.783	48.794	7.218	4.892
.999999900	414.825	414.827	52.794	51.862	7.526	5.199
.999999950	424.989	424.990	54.043	53.132	7.653	5.327
.999999990	447.718	447.719	56.839	55.974	7.938	5.611
.999999995	457.034	457.035	57.986	57.139	8.055	5.728
.999999999	477.552	477.554	60.515	59.704	8.312	5.985

3.4 Values of k for Expected Coverage with μ and σ Unknown

$$E\left[G\left(\frac{\bar{x} + ks - \mu}{\sigma}\right)\right] = P$$

	P							
n	.75000	.90000	.95000	.97500	.99000	.99900	.99990	.99999
2	1.225	3.769	7.733	15.562	38.972	389.847	3898.48	38984.8
3	.943	2.177	3.372	4.968	8.042	25.781	81.637	258.195
4	.855	1.831	2.631	3.558	5.077	11.420	24.825	53.585
5	.811	1.680	2.335	3.041	4.105	7.858	14.278	25.559
6	.785	1.594	2.177	2.777	3.635	6.366	10.453	16.793
7	.767	1.539	2.077	2.616	3.360	5.567	8.579	12.862
8	.754	1.501	2.010	2.508	3.180	5.076	7.492	10.716
9	.745	1.472	1.960	2.431	3.053	4.744	6.790	9.389
10	.737	1.451	1.923	2.373	2.959	4.507	6.303	8.498
11	.731	1.433	1.893	2.327	2.887	4.328	5.947	7.862
12	.726	1.419	1.869	2.291	2.829	4.189	5.675	7.387
13	.722	1.407	1.850	2.261	2.782	4.078	5.462	7.021
14	.718	1.398	1.833	2.236	2.743	3.987	5.290	6.729
15	.715	1.389	1.819	2.215	2.711	3.912	5.148	6.493
16	.712	1.382	1.807	2.197	2.683	3.848	5.030	6.297
17	.710	1.376	1.796	2.181	2.658	3.793	4.930	6.132
18	.708	1.370	1.787	2.168	2.637	3.746	4.844	5.992
19	.706	1.365	1.779	2.156	2.619	3.704	4.769	5.871
20	.705	1.361	1.772	2.145	2.602	3.668	4.703	5.766
21	.703	1.357	1.765	2.135	2.587	3.635	4.645	5.673
22	.702	1.353	1.759	2.126	2.574	3.606	4.594	5.591
23	.701	1.350	1.754	2.118	2.562	3.580	4.548	5.519
24	.699	1.347	1.749	2.111	2.551	3.557	4.506	5.453
25	.698	1.344	1.745	2.105	2.542	3.535	4.469	5.394
26	.697	1.341	1.741	2.099	2.532	3.516	4.435	5.341
27	.697	1.339	1.737	2.093	2.524	3.498	4.403	5.292
28	.696	1.337	1.733	2.088	2.516	3.482	4.375	5.248
29	.695	1.335	1.730	2.083	2.509	3.466	4.348	5.207
30	.694	1.333	1.727	2.079	2.503	3.452	4.324	5.170
31	.694	1.331	1.724	2.075	2.497	3.439	4.302	5.135
32	.693	1.330	1.722	2.071	2.491	3.427	4.281	5.103
33	.692	1.328	1.719	2.068	2.486	3.416	4.261	5.073
34	.692	1.327	1.717	2.064	2.480	3.405	4.243	5.045
35	.691	1.325	1.715	2.061	2.476	3.395	4.226	5.019
36	.691	1.324	1.713	2.058	2.471	3.386	4.210	4.995
37	.691	1.323	1.711	2.055	2.467	3.377	4.195	4.972
38	.690	1.322	1.709	2.053	2.463	3.369	4.181	4.951
39	.690	1.321	1.707	2.050	2.460	3.361	4.168	4.931
40	.689	1.320	1.706	2.048	2.456	3.354	4.156	4.912
41	.689	1.319	1.704	2.046	2.453	3.347	4.144	4.894
42	.689	1.318	1.703	2.043	2.449	3.340	4.133	4.877
43	.688	1.317	1.701	2.041	2.446	3.334	4.122	4.861
44	.688	1.316	1.700	2.039	2.444	3.328	4.112	4.845
45	.688	1.315	1.699	2.038	2.441	3.322	4.102	4.831

3.4 Values of k for Expected Coverage with μ and σ Unknown (Continued)

$$E\left[G\left(\frac{\bar{x} + ks - \mu}{\sigma}\right)\right] = P$$

	P							
n	.75000	.90000	.95000	.97500	.99000	.99900	.99990	.99999
46	.687	1.315	1.698	2.036	2.438	3.317	4.093	4.817
47	.687	1.314	1.696	2.034	2.436	3.312	4.084	4.804
48	.687	1.313	1.695	2.033	2.433	3.307	4.076	4.791
49	.687	1.313	1.694	2.031	2.431	3.302	4.068	4.779
50	.686	1.312	1.693	2.030	2.429	3.298	4.060	4.768
51	.686	1.311	1.692	2.028	2.427	3.293	4.053	4.757
52	.686	1.311	1.691	2.027	2.425	3.289	4.046	4.746
53	.686	1.310	1.690	2.025	2.423	3.285	4.040	4.736
54	.685	1.310	1.690	2.024	2.421	3.281	4.033	4.727
55	.685	1.309	1.689	2.023	2.419	3.278	4.027	4.718
56	.685	1.309	1.688	2.022	2.417	3.274	4.021	4.709
57	.685	1.308	1.687	2.021	2.416	3.271	4.015	4.700
58	.685	1.308	1.686	2.020	2.414	3.267	4.010	4.692
59	.684	1.307	1.686	2.019	2.413	3.264	4.004	4.684
60	.684	1.307	1.685	2.018	2.411	3.261	3.999	4.676
61	.684	1.306	1.684	2.017	2.410	3.258	3.994	4.669
62	.684	1.306	1.684	2.016	2.408	3.255	3.990	4.662
63	.684	1.306	1.683	2.015	2.407	3.252	3.985	4.655
64	.684	1.305	1.682	2.014	2.406	3.250	3.981	4.648
65	.684	1.305	1.682	2.013	2.404	3.247	3.976	4.642
66	.683	1.304	1.681	2.012	2.403	3.245	3.972	4.636
67	.683	1.304	1.681	2.011	2.402	3.242	3.968	4.630
68	.683	1.304	1.680	2.011	2.401	3.240	3.964	4.624
69	.683	1.303	1.680	2.010	2.400	3.238	3.960	4.619
70	.683	1.303	1.679	2.009	2.399	3.235	3.957	4.613
71	.683	1.303	1.679	2.008	2.398	3.233	3.953	4.608
72	.683	1.303	1.678	2.008	2.396	3.231	3.950	4.603
73	.683	1.302	1.678	2.007	2.396	3.229	3.946	4.598
74	.682	1.302	1.677	2.006	2.395	3.227	3.943	4.593
75	.682	1.302	1.677	2.006	2.394	3.225	3.940	4.588
76	.682	1.301	1.676	2.005	2.393	3.223	3.937	4.584
77	.682	1.301	1.676	2.005	2.392	3.222	3.934	4.579
78	.682	1.301	1.676	2.004	2.391	3.220	3.931	4.575
79	.682	1.301	1.675	2.003	2.390	3.218	3.928	4.571
80	.682	1.300	1.675	2.003	2.389	3.217	3.925	4.567
81	.682	1.300	1.674	2.002	2.388	3.215	3.923	4.563
82	.682	1.300	1.674	2.002	2.388	3.213	3.920	4.559
83	.682	1.300	1.674	2.001	2.387	3.212	3.918	4.555
84	.681	1.300	1.673	2.001	2.386	3.210	3.915	4.551
85	.681	1.299	1.673	2.000	2.385	3.209	3.913	4.548
86	.681	1.299	1.673	2.000	2.385	3.207	3.910	4.544
87	.681	1.299	1.672	1.999	2.384	3.206	3.908	4.541
88	.681	1.299	1.672	1.999	2.383	3.205	3.906	4.537
89	.681	1.298	1.672	1.998	2.383	3.203	3.904	4.534
90	.681	1.298	1.671	1.998	2.382	3.202	3.901	4.531

3.4 Values of k for Expected.Coverage with μ and σ Unknown (Continued)

$$E\left[G\left(\frac{\overline{x} + ks - \mu}{\sigma}\right)\right] = P$$

	P							
n	.75000	.90000	.95000	.97500	.99000	.99900	.99990	.99999
91	.681	1.298	1.671	1.998	2.381	3.201	3.899	4.528
92	.681	1.298	1.671	1.997	2.381	3.199	3.897	4.525
93	.681	1.298	1.670	1.997	2.380	3.198	3.895	4.522
94	.681	1.298	1.670	1.996	2.380	3.197	3.893	4.519
95	.681	1.297	1.670	1.996	2.379	3.196	3.891	4.516
96	.681	1.297	1.670	1.996	2.379	3.195	3.889	4.514
97	.681	1.297	1.669	1.995	2.378	3.194	3.888	4.511
98	.680	1.297	1.669	1.995	2.377	3.193	3.886	4.508
99	.680	1.297	1.669	1.994	2.377	3.191	3.884	4.506
100	.680	1.297	1.669	1.994	2.376	3.190	3.882	4.503
101	.680	1.296	1.668	1.994	2.376	3.189	3.881	4.501
102	.680	1.296	1.668	1.993	2.375	3.188	3.879	4.498
103	.680	1.296	1.668	1.993	2.375	3.187	3.877	4.496
104	.680	1.296	1.668	1.993	2.374	3.186	3.876	4.493
105	.680	1.296	1.668	1.992	2.374	3.186	3.874	4.491
106	.680	1.296	1.667	1.992	2.374	3.185	3.873	4.489
107	.680	1.296	1.667	1.992	2.373	3.184	3.871	4.487
108	.680	1.295	1.667	1.992	2.373	3.183	3.870	4.485
109	.680	1.295	1.667	1.991	2.372	3.182	3.868	4.482
110	.680	1.295	1.666	1.991	2.372	3.181	3.867	4.480
111	.680	1.295	1.666	1.991	2.371	3.180	3.866	4.478
112	.680	1.295	1.666	1.990	2.371	3.179	3.864	4.476
113	.680	1.295	1.666	1.990	2.371	3.179	3.863	4.474
114	.680	1.295	1.666	1.990	2.370	3.178	3.862	4.472
115	.680	1.295	1.666	1.990	2.370	3.177	3.860	4.471
116	.680	1.295	1.665	1.989	2.369	3.176	3.859	4.469
117	.679	1.294	1.665	1.989	2.369	3.175	3.858	4.467
118	.679	1.294	1.665	1.989	2.369	3.175	3.857	4.465
119	.679	1.294	1.665	1.989	2.368	3.174	3.855	4.463
120	.679	1.294	1.665	1.988	2.368	3.173	3.854	4.462
121	.679	1.294	1.664	1.988	2.368	3.173	3.853	4.460
122	.679	1.294	1.664	1.988	2.367	3.172	3.852	4.458
123	.679	1.294	1.664	1.988	2.367	3.171	3.851	4.457
124	.679	1.294	1.664	1.987	2.367	3.171	3.850	4.455
125	.679	1.294	1.664	1.987	2.366	3.170	3.849	4.453
126	.679	1.293	1.664	1.987	2.366	3.169	3.847	4.452
127	.679	1.293	1.664	1.987	2.366	3.169	3.846	4.450
128	.679	1.293	1.663	1.987	2.365	3.168	3.845	4.449
129	.679	1.293	1.663	1.986	2.365	3.167	3.844	4.447
130	.679	1.293	1.663	1.986	2.365	3.167	3.843	4.446
131	.679	1.293	1.663	1.986	2.364	3.166	3.842	4.444
132	.679	1.293	1.663	1.986	2.364	3.166	3.841	4.443
133	.679	1.293	1.663	1.986	2.364	3.165	3.841	4.442
134	.679	1.293	1.663	1.985	2.363	3.164	3.840	4.440
135	.679	1.293	1.662	1.985	2.363	3.164	3.839	4.439

3.4 Values of k for Expected Coverage with μ and σ Unknown (Continued)

$$E\left[G\left(\frac{\overline{x} + ks - \mu}{\sigma}\right)\right] = P$$

	P							
n	.75000	.90000	.95000	.97500	.99000	.99900	.99990	.99999
136	.679	1.293	1.662	1.985	2.363	3.163	3.838	4.438
137	.679	1.292	1.662	1.985	2.363	3.163	3.837	4.436
138	.679	1.292	1.662	1.985	2.362	3.162	3.836	4.435
139	.679	1.292	1.662	1.984	2.362	3.162	3.835	4.434
140	.679	1.292	1.662	1.984	2.362	3.161	3.834	4.432
141	.679	1.292	1.662	1.984	2.362	3.161	3.833	4.431
142	.679	1.292	1.662	1.984	2.361	3.160	3.833	4.430
143	.679	1.292	1.661	1.984	2.361	3.160	3.832	4.429
144	.679	1.292	1.661	1.984	2.361	3.159	3.831	4.428
145	.679	1.292	1.661	1.983	2.361	3.159	3.830	4.426
146	.678	1.292	1.661	1.983	2.360	3.158	3.829	4.425
147	.678	1.292	1.661	1.983	2.360	3.158	3.829	4.424
148	.678	1.292	1.661	1.983	2.360	3.157	3.828	4.423
149	.678	1.292	1.661	1.983	2.360	3.157	3.827	4.422
150	.678	1.292	1.661	1.983	2.359	3.156	3.826	4.421
151	.678	1.291	1.661	1.982	2.359	3.156	3.826	4.420
152	.678	1.291	1.660	1.982	2.359	3.155	3.825	4.419
153	.678	1.291	1.660	1.982	2.359	3.155	3.824	4.418
154	.678	1.291	1.660	1.982	2.359	3.155	3.823	4.417
155	.678	1.291	1.660	1.982	2.358	3.154	3.823	4.416
156	.678	1.291	1.660	1.982	2.358	3.154	3.822	4.415
157	.678	1.291	1.660	1.982	2.358	3.153	3.821	4.414
158	.678	1.291	1.660	1.981	2.358	3.153	3.821	4.413
159	.678	1.291	1.660	1.981	2.358	3.152	3.820	4.412
160	.678	1.291	1.660	1.981	2.357	3.152	3.819	4.411
161	.678	1.291	1.660	1.981	2.357	3.152	3.819	4.410
162	.678	1.291	1.659	1.981	2.357	3.151	3.818	4.409
163	.678	1.291	1.659	1.981	2.357	3.151	3.818	4.408
164	.678	1.291	1.659	1.981	2.357	3.151	3.817	4.407
165	.678	1.291	1.659	1.981	2.356	3.150	3.816	4.406
166	.678	1.291	1.659	1.980	2.356	3.150	3.816	4.405
167	.678	1.291	1.659	1.980	2.356	3.149	3.815	4.404
168	.678	1.290	1.659	1.980	2.356	3.149	3.815	4.404
169	.678	1.290	1.659	1.980	2.356	3.149	3.814	4.403
170	.678	1.290	1.659	1.980	2.356	3.148	3.813	4.402
171	.678	1.290	1.659	1.980	2.355	3.148	3.813	4.401
172	.678	1.290	1.659	1.980	2.355	3.148	3.812	4.400
173	.678	1.290	1.659	1.980	2.355	3.147	3.812	4.399
174	.678	1.290	1.658	1.979	2.355	3.147	3.811	4.399
175	.678	1.290	1.658	1.979	2.355	3.147	3.811	4.398
176	.678	1.290	1.658	1.979	2.355	3.146	3.810	4.397
177	.678	1.290	1.658	1.979	2.354	3.146	3.810	4.396
178	.678	1.290	1.658	1.979	2.354	3.146	3.809	4.396
179	.678	1.290	1.658	1.979	2.354	3.145	3.809	4.395
180	.678	1.290	1.658	1.979	2.354	3.145	3.808	4.394

3.4 Values of k for Expected Coverage with μ and σ Unknown (Continued)

$$E\left[G\left(\frac{\overline{x} + ks - \mu}{\sigma}\right)\right] = P$$

	P							
n	.75000	.90000	.95000	.97500	.99000	.99900	.99990	.99999
181	.678	1.290	1.658	1.979	2.354	3.145	3.808	4.393
182	.678	1.290	1.658	1.979	2.354	3.144	3.807	4.393
183	.678	1.290	1.658	1.978	2.353	3.144	3.807	4.392
184	.678	1.290	1.658	1.978	2.353	3.144	3.806	4.391
185	.678	1.290	1.658	1.978	2.353	3.144	3.806	4.391
186	.678	1.290	1.658	1.978	2.353	3.143	3.805	4.390
187	.678	1.290	1.658	1.978	2.353	3.143	3.805	4.389
188	.678	1.290	1.657	1.978	2.353	3.143	3.804	4.388
189	.678	1.289	1.657	1.978	2.353	3.142	3.804	4.388
190	.678	1.289	1.657	1.978	2.352	3.142	3.803	4.387
191	.678	1.289	1.657	1.978	2.352	3.142	3.803	4.386
192	.678	1.289	1.657	1.978	2.352	3.142	3.802	4.386
193	.678	1.289	1.657	1.977	2.352	3.141	3.802	4.385
194	.678	1.289	1.657	1.977	2.352	3.141	3.801	4.385
195	.677	1.289	1.657	1.977	2.352	3.141	3.801	4.384
196	.677	1.289	1.657	1.977	2.352	3.141	3.801	4.383
197	.677	1.289	1.657	1.977	2.351	3.140	3.800	4.383
198	.677	1.289	1.657	1.977	2.351	3.140	3.800	4.382
199	.677	1.289	1.657	1.977	2.351	3.140	3.799	4.381
200	.677	1.289	1.657	1.977	2.351	3.140	3.799	4.381
205	.677	1.289	1.656	1.976	2.350	3.138	3.797	4.378
210	.677	1.289	1.656	1.976	2.350	3.137	3.795	4.375
215	.677	1.289	1.656	1.976	2.349	3.136	3.793	4.373
220	.677	1.288	1.656	1.975	2.349	3.135	3.792	4.370
225	.677	1.288	1.655	1.975	2.348	3.134	3.790	4.368
230	.677	1.288	1.655	1.975	2.348	3.133	3.788	4.365
235	.677	1.288	1.655	1.974	2.347	3.132	3.787	4.363
240	.677	1.288	1.655	1.974	2.347	3.131	3.785	4.361
245	.677	1.288	1.654	1.974	2.347	3.130	3.784	4.359
250	.677	1.288	1.654	1.973	2.346	3.130	3.783	4.357
255	.677	1.287	1.654	1.973	2.346	3.129	3.781	4.355
260	.677	1.287	1.654	1.973	2.345	3.128	3.780	4.354
265	.677	1.287	1.654	1.973	2.345	3.127	3.779	4.352
270	.677	1.287	1.654	1.972	2.345	3.127	3.778	4.350
275	.677	1.287	1.653	1.972	2.344	3.126	3.777	4.349
280	.677	1.287	1.653	1.972	2.344	3.125	3.776	4.347
285	.677	1.287	1.653	1.972	2.344	3.125	3.775	4.346
290	.677	1.287	1.653	1.972	2.343	3.124	3.774	4.344
295	.676	1.287	1.653	1.971	2.343	3.123	3.773	4.343
300	.676	1.287	1.653	1.971	2.343	3.123	3.772	4.342
305	.676	1.286	1.653	1.971	2.343	3.122	3.771	4.340
310	.676	1.286	1.652	1.971	2.342	3.122	3.770	4.339
315	.676	1.286	1.652	1.971	2.342	3.121	3.769	4.338
320	.676	1.286	1.652	1.971	2.342	3.121	3.769	4.337
325	.676	1.286	1.652	1.970	2.342	3.120	3.768	4.336

3.4 Values of k for Expected Coverage with μ and σ Unknown (Continued)

$$E\left[G\left(\frac{\overline{x} + ks - \mu}{\sigma}\right)\right] = P$$

	P							
n	.75000	.90000	.95000	.97500	.99000	.99900	.99990	.99999
330	.676	1.286	1.652	1.970	2.341	3.120	3.767	4.334
335	.676	1.286	1.652	1.970	2.341	3.119	3.766	4.333
340	.676	1.286	1.652	1.970	2.341	3.119	3.766	4.332
345	.676	1.286	1.652	1.970	2.341	3.119	3.765	4.331
350	.676	1.286	1.652	1.970	2.340	3.118	3.764	4.330
355	.676	1.286	1.651	1.969	2.340	3.118	3.764	4.329
360	.676	1.286	1.651	1.969	2.340	3.117	3.763	4.329
365	.676	1.286	1.651	1.969	2.340	3.117	3.762	4.328
370	.676	1.286	1.651	1.969	2.340	3.117	3.762	4.327
375	.676	1.286	1.651	1.969	2.339	3.116	3.761	4.326
380	.676	1.285	1.651	1.969	2.339	3.116	3.761	4.325
385	.676	1.285	1.651	1.969	2.339	3.116	3.760	4.324
390	.676	1.285	1.651	1.969	2.339	3.115	3.760	4.324
395	.676	1.285	1.651	1.968	2.339	3.115	3.759	4.323
400	.676	1.285	1.651	1.968	2.339	3.115	3.759	4.322
425	.676	1.285	1.650	1.968	2.338	3.113	3.756	4.319
450	.676	1.285	1.650	1.967	2.337	3.112	3.754	4.316
475	.676	1.285	1.650	1.967	2.337	3.111	3.752	4.313
500	.676	1.285	1.650	1.967	2.336	3.110	3.751	4.311
525	.676	1.284	1.649	1.966	2.336	3.109	3.749	4.308
550	.676	1.284	1.649	1.966	2.335	3.108	3.748	4.306
575	.676	1.284	1.649	1.966	2.335	3.107	3.746	4.305
600	.675	1.284	1.649	1.966	2.335	3.106	3.745	4.303
625	.675	1.284	1.649	1.965	2.334	3.106	3.744	4.301
650	.675	1.284	1.648	1.965	2.334	3.105	3.743	4.300
675	.675	1.284	1.648	1.965	2.334	3.105	3.742	4.299
700	.675	1.284	1.648	1.965	2.333	3.104	3.742	4.297
725	.675	1.284	1.648	1.965	2.333	3.104	3.741	4.296
750	.675	1.284	1.648	1.964	2.333	3.103	3.740	4.295
775	.675	1.283	1.648	1.964	2.333	3.103	3.739	4.294
800	.675	1.283	1.648	1.964	2.332	3.102	3.739	4.293
825	.675	1.283	1.648	1.964	2.332	3.102	3.738	4.292
850	.675	1.283	1.648	1.964	2.332	3.102	3.738	4.292
875	.675	1.283	1.648	1.964	2.332	3.101	3.737	4.291
900	.675	1.283	1.647	1.964	2.332	3.101	3.736	4.290
925	.675	1.283	1.647	1.964	2.332	3.101	3.736	4.289
950	.675	1.283	1.647	1.963	2.332	3.100	3.736	4.289
975	.675	1.283	1.647	1.963	2.331	3.100	3.735	4.288
1000	.675	1.283	1.647	1.963	2.331	3.100	3.735	4.288
1500	.675	1.283	1.646	1.962	2.330	3.097	3.729	4.280
2000	.675	1.282	1.646	1.962	2.329	3.095	3.727	4.276
3000	.675	1.282	1.646	1.961	2.328	3.093	3.724	4.272
5000	.675	1.282	1.645	1.961	2.327	3.092	3.722	4.269
10000	.675	1.282	1.645	1.960	2.327	3.091	3.721	4.267
∞	.674	1.282	1.645	1.960	2.326	3.090	3.719	4.265

3.5 Values of k for Expected Coverage With σ Known

$$E\left[G\left(\frac{\bar{x} + k\sigma - \mu}{\sigma}\right)\right] = P$$

	P							
n	.75000	.90000	.95000	.97500	.99000	.99900	.99990	.99999
1	.954	1.812	2.326	2.772	3.290	4.370	5.259	6.031
2	.826	1.570	2.015	2.400	2.849	3.785	4.555	5.223
3	.779	1.480	1.899	2.263	2.686	3.568	4.294	4.925
4	.754	1.433	1.839	2.191	2.601	3.455	4.158	4.768
5	.739	1.404	1.802	2.147	2.548	3.385	4.074	4.672
6	.729	1.384	1.777	2.117	2.513	3.338	4.017	4.607
7	.721	1.370	1.758	2.095	2.487	3.304	3.976	4.559
8	.715	1.359	1.745	2.079	2.467	3.278	3.945	4.524
9	.711	1.351	1.734	2.066	2.452	3.257	3.920	4.496
10	.707	1.344	1.725	2.056	2.440	3.241	3.901	4.473
11	.704	1.339	1.718	2.047	2.430	3.228	3.884	4.455
12	.702	1.334	1.712	2.040	2.421	3.216	3.871	4.439
13	.700	1.330	1.707	2.034	2.414	3.207	3.859	4.426
14	.698	1.327	1.703	2.029	2.408	3.199	3.850	4.415
15	.697	1.324	1.699	2.024	2.403	3.192	3.841	4.405
16	.695	1.321	1.695	2.020	2.398	3.185	3.833	4.396
17	.694	1.319	1.693	2.017	2.394	3.180	3.827	4.389
18	.693	1.317	1.690	2.014	2.390	3.175	3.821	4.382
19	.692	1.315	1.688	2.011	2.387	3.171	3.816	4.376
20	.691	1.313	1.685	2.008	2.384	3.167	3.811	4.370
21	.690	1.312	1.684	2.006	2.381	3.163	3.807	4.365
22	.690	1.310	1.682	2.004	2.379	3.160	3.803	4.361
23	.689	1.309	1.680	2.002	2.376	3.157	3.799	4.357
24	.688	1.308	1.679	2.000	2.374	3.154	3.796	4.353
25	.688	1.307	1.677	1.999	2.372	3.151	3.793	4.349
26	.687	1.306	1.676	1.997	2.371	3.149	3.790	4.346
27	.687	1.305	1.675	1.996	2.369	3.147	3.787	4.343
28	.686	1.304	1.674	1.995	2.368	3.145	3.785	4.340
29	.686	1.303	1.673	1.993	2.366	3.143	3.783	4.338
30	.686	1.303	1.672	1.992	2.365	3.141	3.780	4.335
31	.685	1.302	1.671	1.991	2.364	3.140	3.779	4.333
32	.685	1.301	1.670	1.990	2.362	3.138	3.777	4.331
33	.685	1.301	1.670	1.989	2.361	3.137	3.775	4.329
34	.684	1.300	1.669	1.989	2.360	3.135	3.773	4.327
35	.684	1.300	1.668	1.988	2.359	3.134	3.772	4.325
36	.684	1.299	1.668	1.987	2.358	3.133	3.770	4.324
37	.684	1.299	1.667	1.986	2.358	3.132	3.769	4.322
38	.683	1.298	1.666	1.986	2.357	3.131	3.768	4.321
39	.683	1.298	1.666	1.985	2.356	3.130	3.766	4.319
40	.683	1.297	1.665	1.984	2.355	3.129	3.765	4.318
41	.683	1.297	1.665	1.984	2.355	3.128	3.764	4.317
42	.682	1.297	1.664	1.983	2.354	3.127	3.763	4.315
43	.682	1.296	1.664	1.983	2.353	3.126	3.762	4.314
44	.682	1.296	1.663	1.982	2.353	3.125	3.761	4.313
45	.682	1.296	1.663	1.982	2.352	3.124	3.760	4.312

3.5 Values of k for Expected Coverage With σ Known (Continued)

$$E\left[G\left(\frac{\bar{x} + k\sigma - \mu}{\sigma}\right)\right] = P$$

	P							
n	.75000	.90000	.95000	.97500	.99000	.99900	.99990	.99999
46	.682	1.295	1.663	1.981	2.351	3.124	3.759	4.311
47	.682	1.295	1.662	1.981	2.351	3.123	3.758	4.310
48	.681	1.295	1.662	1.980	2.350	3.122	3.758	4.309
49	.681	1.295	1.662	1.980	2.350	3.122	3.757	4.308
50	.681	1.294	1.661	1.979	2.349	3.121	3.756	4.307
51	.681	1.294	1.661	1.979	2.349	3.120	3.755	4.306
52	.681	1.294	1.661	1.979	2.349	3.120	3.755	4.306
53	.681	1.294	1.660	1.978	2.348	3.119	3.754	4.305
54	.681	1.293	1.660	1.978	2.348	3.119	3.753	4.304
55	.681	1.293	1.660	1.978	2.347	3.118	3.753	4.303
56	.680	1.293	1.659	1.977	2.347	3.118	3.752	4.303
57	.680	1.293	1.659	1.977	2.347	3.117	3.751	4.302
58	.680	1.293	1.659	1.977	2.346	3.117	3.751	4.301
59	.680	1.292	1.659	1.977	2.346	3.116	3.750	4.301
60	.680	1.292	1.659	1.976	2.346	3.116	3.750	4.300
61	.680	1.292	1.658	1.976	2.345	3.115	3.749	4.300
62	.680	1.292	1.658	1.976	2.345	3.115	3.749	4.299
63	.680	1.292	1.658	1.975	2.345	3.115	3.748	4.299
64	.680	1.292	1.658	1.975	2.344	3.114	3.748	4.298
65	.680	1.291	1.657	1.975	2.344	3.114	3.748	4.298
66	.680	1.291	1.657	1.975	2.344	3.114	3.747	4.297
67	.680	1.291	1.657	1.975	2.344	3.113	3.747	4.297
68	.679	1.291	1.657	1.974	2.343	3.113	3.746	4.296
69	.679	1.291	1.657	1.974	2.343	3.113	3.746	4.296
70	.679	1.291	1.657	1.974	2.343	3.112	3.745	4.295
71	.679	1.291	1.656	1.974	2.343	3.112	3.745	4.295
72	.679	1.290	1.656	1.974	2.342	3.112	3.745	4.294
73	.679	1.290	1.656	1.973	2.342	3.111	3.744	4.294
74	.679	1.290	1.656	1.973	2.342	3.111	3.744	4.294
75	.679	1.290	1.656	1.973	2.342	3.111	3.744	4.293
76	.679	1.290	1.656	1.973	2.342	3.110	3.743	4.293
77	.679	1.290	1.656	1.973	2.341	3.110	3.743	4.292
78	.679	1.290	1.655	1.972	2.341	3.110	3.743	4.292
79	.679	1.290	1.655	1.972	2.341	3.110	3.742	4.292
80	.679	1.290	1.655	1.972	2.341	3.109	3.742	4.291
81	.679	1.289	1.655	1.972	2.341	3.109	3.742	4.291
82	.679	1.289	1.655	1.972	2.340	3.109	3.742	4.291
83	.679	1.289	1.655	1.972	2.340	3.109	3.741	4.291
84	.678	1.289	1.655	1.972	2.340	3.109	3.741	4.290
85	.678	1.289	1.655	1.971	2.340	3.108	3.741	4.290
86	.678	1.289	1.654	1.971	2.340	3.108	3.741	4.290
87	.678	1.289	1.654	1.971	2.340	3.108	3.740	4.289
88	.678	1.289	1.654	1.971	2.340	3.108	3.740	4.289
89	.678	1.289	1.654	1.971	2.339	3.108	3.740	4.289
90	.678	1.289	1.654	1.971	2.339	3.107	3.740	4.289

3.5 Values of k for Expected Coverage With σ Known (Continued)

$$E\left[G\left(\frac{\overline{x} + k\sigma - \mu}{\sigma}\right)\right] = P$$

	P							
n	.75000	.90000	.95000	.97500	.99000	.99900	.99990	.99999
91	.678	1.289	1.654	1.971	2.339	3.107	3.739	4.288
92	.678	1.288	1.654	1.971	2.339	3.107	3.739	4.288
93	.678	1.288	1.654	1.970	2.339	3.107	3.739	4.288
94	.678	1.288	1.654	1.970	2.339	3.107	3.739	4.288
95	.678	1.288	1.653	1.970	2.339	3.106	3.739	4.287
96	.678	1.288	1.653	1.970	2.338	3.106	3.738	4.287
97	.678	1.288	1.653	1.970	2.338	3.106	3.738	4.287
98	.678	1.288	1.653	1.970	2.338	3.106	3.738	4.287
99	.678	1.288	1.653	1.970	2.338	3.106	3.738	4.286
100	.678	1.288	1.653	1.970	2.338	3.106	3.738	4.286
101	.678	1.288	1.653	1.970	2.338	3.105	3.737	4.286
102	.678	1.288	1.653	1.970	2.338	3.105	3.737	4.286
103	.678	1.288	1.653	1.969	2.338	3.105	3.737	4.286
104	.678	1.288	1.653	1.969	2.338	3.105	3.737	4.285
105	.678	1.288	1.653	1.969	2.337	3.105	3.737	4.285
106	.678	1.288	1.653	1.969	2.337	3.105	3.737	4.285
107	.678	1.288	1.653	1.969	2.337	3.105	3.736	4.285
108	.678	1.287	1.652	1.969	2.337	3.105	3.736	4.285
109	.678	1.287	1.652	1.969	2.337	3.104	3.736	4.284
110	.678	1.287	1.652	1.969	2.337	3.104	3.736	4.284
111	.678	1.287	1.652	1.969	2.337	3.104	3.736	4.284
112	.677	1.287	1.652	1.969	2.337	3.104	3.736	4.284
113	.677	1.287	1.652	1.969	2.337	3.104	3.735	4.284
114	.677	1.287	1.652	1.969	2.337	3.104	3.735	4.284
115	.677	1.287	1.652	1.968	2.336	3.104	3.735	4.283
116	.677	1.287	1.652	1.968	2.336	3.104	3.735	4.283
117	.677	1.287	1.652	1.968	2.336	3.103	3.735	4.283
118	.677	1.287	1.652	1.968	2.336	3.103	3.735	4.283
119	.677	1.287	1.652	1.968	2.336	3.103	3.735	4.283
120	.677	1.287	1.652	1.968	2.336	3.103	3.734	4.283
121	.677	1.287	1.652	1.968	2.336	3.103	3.734	4.282
122	.677	1.287	1.652	1.968	2.336	3.103	3.734	4.282
123	.677	1.287	1.652	1.968	2.336	3.103	3.734	4.282
124	.677	1.287	1.651	1.968	2.336	3.103	3.734	4.282
125	.677	1.287	1.651	1.968	2.336	3.103	3.734	4.282
126	.677	1.287	1.651	1.968	2.336	3.102	3.734	4.282
127	.677	1.287	1.651	1.968	2.335	3.102	3.734	4.282
128	.677	1.287	1.651	1.968	2.335	3.102	3.734	4.282
129	.677	1.287	1.651	1.968	2.335	3.102	3.733	4.281
130	.677	1.286	1.651	1.967	2.335	3.102	3.733	4.281
131	.677	1.286	1.651	1.967	2.335	3.102	3.733	4.281
132	.677	1.286	1.651	1.967	2.335	3.102	3.733	4.281
133	.677	1.286	1.651	1.967	2.335	3.102	3.733	4.281
134	.677	1.286	1.651	1.967	2.335	3.102	3.733	4.281
135	.677	1.286	1.651	1.967	2.335	3.102	3.733	4.281

3.5 Values of k for Expected Coverage With σ Known (Continued)

$$E\left[G\left(\frac{\overline{x} + k\sigma - \mu}{\sigma}\right)\right] = P$$

	P							
n	.75000	.90000	.95000	.97500	.99000	.99900	.99990	.99999
136	.677	1.286	1.651	1.967	2.335	3.102	3.733	4.281
137	.677	1.286	1.651	1.967	2.335	3.101	3.733	4.280
138	.677	1.286	1.651	1.967	2.335	3.101	3.732	4.280
139	.677	1.286	1.651	1.967	2.335	3.101	3.732	4.280
140	.677	1.286	1.651	1.967	2.335	3.101	3.732	4.280
141	.677	1.286	1.651	1.967	2.335	3.101	3.732	4.280
142	.677	1.286	1.651	1.967	2.335	3.101	3.732	4.280
143	.677	1.286	1.651	1.967	2.334	3.101	3.732	4.280
144	.677	1.286	1.651	1.967	2.334	3.101	3.732	4.280
145	.677	1.286	1.651	1.967	2.334	3.101	3.732	4.280
146	.677	1.286	1.650	1.967	2.334	3.101	3.732	4.279
147	.677	1.286	1.650	1.967	2.334	3.101	3.732	4.279
148	.677	1.286	1.650	1.967	2.334	3.101	3.732	4.279
149	.677	1.286	1.650	1.967	2.334	3.101	3.731	4.279
150	.677	1.286	1.650	1.966	2.334	3.101	3.731	4.279
151	.677	1.286	1.650	1.966	2.334	3.100	3.731	4.279
152	.677	1.286	1.650	1.966	2.334	3.100	3.731	4.279
153	.677	1.286	1.650	1.966	2.334	3.100	3.731	4.279
154	.677	1.286	1.650	1.966	2.334	3.100	3.731	4.279
155	.677	1.286	1.650	1.966	2.334	3.100	3.731	4.279
156	.677	1.286	1.650	1.966	2.334	3.100	3.731	4.279
157	.677	1.286	1.650	1.966	2.334	3.100	3.731	4.278
158	.677	1.286	1.650	1.966	2.334	3.100	3.731	4.278
159	.677	1.286	1.650	1.966	2.334	3.100	3.731	4.278
160	.677	1.286	1.650	1.966	2.334	3.100	3.731	4.278
161	.677	1.286	1.650	1.966	2.334	3.100	3.731	4.278
162	.677	1.286	1.650	1.966	2.334	3.100	3.730	4.278
163	.677	1.285	1.650	1.966	2.333	3.100	3.730	4.278
164	.677	1.285	1.650	1.966	2.333	3.100	3.730	4.278
165	.677	1.285	1.650	1.966	2.333	3.100	3.730	4.278
166	.677	1.285	1.650	1.966	2.333	3.100	3.730	4.278
167	.677	1.285	1.650	1.966	2.333	3.099	3.730	4.278
168	.676	1.285	1.650	1.966	2.333	3.099	3.730	4.278
169	.676	1.285	1.650	1.966	2.333	3.099	3.730	4.277
170	.676	1.285	1.650	1.966	2.333	3.099	3.730	4.277
171	.676	1.285	1.650	1.966	2.333	3.099	3.730	4.277
172	.676	1.285	1.650	1.966	2.333	3.099	3.730	4.277
173	.676	1.285	1.650	1.966	2.333	3.099	3.730	4.277
174	.676	1.285	1.650	1.966	2.333	3.099	3.730	4.277
175	.676	1.285	1.650	1.966	2.333	3.099	3.730	4.277
176	.676	1.285	1.650	1.966	2.333	3.099	3.730	4.277
177	.676	1.285	1.649	1.965	2.333	3.099	3.730	4.277
178	.676	1.285	1.649	1.965	2.333	3.099	3.729	4.277
179	.676	1.285	1.649	1.965	2.333	3.099	3.729	4.277
180	.676	1.285	1.649	1.965	2.333	3.099	3.729	4.277

3.5 Values of k for Expected Coverage With σ Known (Continued)

$$E\left[G\left(\frac{\overline{x} + k\sigma - \mu}{\sigma}\right)\right] = P$$

	P							
n	.75000	.90000	.95000	.97500	.99000	.99900	.99990	.99999
181	.676	1.285	1.649	1.965	2.333	3.099	3.729	4.277
182	.676	1.285	1.649	1.965	2.333	3.099	3.729	4.277
183	.676	1.285	1.649	1.965	2.333	3.099	3.729	4.277
184	.676	1.285	1.649	1.965	2.333	3.099	3.729	4.276
185	.676	1.285	1.649	1.965	2.333	3.099	3.729	4.276
186	.676	1.285	1.649	1.965	2.333	3.099	3.729	4.276
187	.676	1.285	1.649	1.965	2.333	3.098	3.729	4.276
188	.676	1.285	1.649	1.965	2.333	3.098	3.729	4.276
189	.676	1.285	1.649	1.965	2.332	3.098	3.729	4.276
190	.676	1.285	1.649	1.965	2.332	3.098	3.729	4.276
191	.676	1.285	1.649	1.965	2.332	3.098	3.729	4.276
192	.676	1.285	1.649	1.965	2.332	3.098	3.729	4.276
193	.676	1.285	1.649	1.965	2.332	3.098	3.729	4.276
194	.676	1.285	1.649	1.965	2.332	3.098	3.729	4.276
195	.676	1.285	1.649	1.965	2.332	3.098	3.729	4.276
196	.676	1.285	1.649	1.965	2.332	3.098	3.728	4.276
197	.676	1.285	1.649	1.965	2.332	3.098	3.728	4.276
198	.676	1.285	1.649	1.965	2.332	3.098	3.728	4.276
199	.676	1.285	1.649	1.965	2.332	3.098	3.728	4.276
200	.676	1.285	1.649	1.965	2.332	3.098	3.728	4.276
205	.676	1.285	1.649	1.965	2.332	3.098	3.728	4.275
210	.676	1.285	1.649	1.965	2.332	3.098	3.728	4.275
215	.676	1.285	1.649	1.965	2.332	3.097	3.728	4.275
220	.676	1.284	1.649	1.964	2.332	3.097	3.727	4.275
225	.676	1.284	1.649	1.964	2.332	3.097	3.727	4.274
230	.676	1.284	1.648	1.964	2.331	3.097	3.727	4.274
235	.676	1.284	1.648	1.964	2.331	3.097	3.727	4.274
240	.676	1.284	1.648	1.964	2.331	3.097	3.727	4.274
245	.676	1.284	1.648	1.964	2.331	3.097	3.727	4.274
250	.676	1.284	1.648	1.964	2.331	3.096	3.726	4.273
255	.676	1.284	1.648	1.964	2.331	3.096	3.726	4.273
260	.676	1.284	1.648	1.964	2.331	3.096	3.726	4.273
265	.676	1.284	1.648	1.964	2.331	3.096	3.726	4.273
270	.676	1.284	1.648	1.964	2.331	3.096	3.726	4.273
275	.676	1.284	1.648	1.964	2.331	3.096	3.726	4.273
280	.676	1.284	1.648	1.963	2.330	3.096	3.726	4.272
285	.676	1.284	1.648	1.963	2.330	3.096	3.726	4.272
290	.676	1.284	1.648	1.963	2.330	3.096	3.725	4.272
295	.676	1.284	1.648	1.963	2.330	3.095	3.725	4.272
300	.676	1.284	1.648	1.963	2.330	3.095	3.725	4.272
305	.676	1.284	1.648	1.963	2.330	3.095	3.725	4.272
310	.676	1.284	1.648	1.963	2.330	3.095	3.725	4.272
315	.676	1.284	1.647	1.963	2.330	3.095	3.725	4.272
320	.676	1.284	1.647	1.963	2.330	3.095	3.725	4.272
325	.676	1.284	1.647	1.963	2.330	3.095	3.725	4.271

3.5 Values of k for Expected Coverage With σ Known (Continued)

$$E\left[G\left(\frac{\overline{x} + k\sigma - \mu}{\sigma}\right)\right] = P$$

	P							
n	.75000	.90000	.95000	.97500	.99000	.99900	.99990	.99999
330	.676	1.283	1.647	1.963	2.330	3.095	3.725	4.271
335	.675	1.283	1.647	1.963	2.330	3.095	3.725	4.271
340	.675	1.283	1.647	1.963	2.330	3.095	3.724	4.271
345	.675	1.283	1.647	1.963	2.330	3.095	3.724	4.271
350	.675	1.283	1.647	1.963	2.330	3.095	3.724	4.271
355	.675	1.283	1.647	1.963	2.330	3.095	3.724	4.271
360	.675	1.283	1.647	1.963	2.330	3.095	3.724	4.271
365	.675	1.283	1.647	1.963	2.330	3.094	3.724	4.271
370	.675	1.283	1.647	1.963	2.329	3.094	3.724	4.271
375	.675	1.283	1.647	1.963	2.329	3.094	3.724	4.271
380	.675	1.283	1.647	1.963	2.329	3.094	3.724	4.270
385	.675	1.283	1.647	1.963	2.329	3.094	3.724	4.270
390	.675	1.283	1.647	1.962	2.329	3.094	3.724	4.270
395	.675	1.283	1.647	1.962	2.329	3.094	3.724	4.270
400	.675	1.283	1.647	1.962	2.329	3.094	3.724	4.270
425	.675	1.283	1.647	1.962	2.329	3.094	3.723	4.270
450	.675	1.283	1.647	1.962	2.329	3.094	3.723	4.270
475	.675	1.283	1.647	1.962	2.329	3.093	3.723	4.269
500	.675	1.283	1.646	1.962	2.329	3.093	3.723	4.269
525	.675	1.283	1.646	1.962	2.329	3.093	3.723	4.269
550	.675	1.283	1.646	1.962	2.328	3.093	3.722	4.269
575	.675	1.283	1.646	1.962	2.328	3.093	3.722	4.269
600	.675	1.283	1.646	1.962	2.328	3.093	3.722	4.268
625	.675	1.283	1.646	1.962	2.328	3.093	3.722	4.268
650	.675	1.283	1.646	1.961	2.328	3.093	3.722	4.268
675	.675	1.283	1.646	1.961	2.328	3.093	3.722	4.268
700	.675	1.282	1.646	1.961	2.328	3.092	3.722	4.268
725	.675	1.282	1.646	1.961	2.328	3.092	3.722	4.268
750	.675	1.282	1.646	1.961	2.328	3.092	3.721	4.268
775	.675	1.282	1.646	1.961	2.328	3.092	3.721	4.268
800	.675	1.282	1.646	1.961	2.328	3.092	3.721	4.268
825	.675	1.282	1.646	1.961	2.328	3.092	3.721	4.267
850	.675	1.282	1.646	1.961	2.328	3.092	3.721	4.267
875	.675	1.282	1.646	1.961	2.328	3.092	3.721	4.267
900	.675	1.282	1.646	1.961	2.328	3.092	3.721	4.267
925	.675	1.282	1.646	1.961	2.328	3.092	3.721	4.267
950	.675	1.282	1.646	1.961	2.328	3.092	3.721	4.267
975	.675	1.282	1.646	1.961	2.328	3.092	3.721	4.267
1000	.675	1.282	1.646	1.961	2.328	3.092	3.721	4.267
1500	.675	1.282	1.645	1.961	2.327	3.091	3.720	4.266
2000	.675	1.282	1.645	1.960	2.327	3.091	3.720	4.266
3000	.675	1.282	1.645	1.960	2.327	3.091	3.720	4.266
5000	.675	1.282	1.645	1.960	2.327	3.091	3.719	4.265
10000	.675	1.282	1.645	1.960	2.326	3.090	3.719	4.265
∞	.674	1.282	1.645	1.960	2.326	3.090	3.719	4.265

3.6 Moments of $\overline{x} + ks$

3.6.1 Values of k From the Expected Value of $\overline{x} + ks$

$$E[\overline{x} + ks] = \mu + K_p \sigma$$

	P							
n	.75000	.90000	.95000	.97500	.99000	.99900	.99990	.99999
2	.845	1.606	2.062	2.456	2.916	3.873	4.661	5.345
3	.761	1.446	1.856	2.212	2.625	3.487	4.196	4.812
4	.732	1.391	1.785	2.127	2.525	3.354	4.037	4.629
5	.718	1.363	1.750	2.085	2.475	3.288	3.956	4.537
6	.709	1.347	1.729	2.060	2.445	3.248	3.908	4.482
7	.703	1.336	1.715	2.043	2.425	3.221	3.877	4.446
8	.699	1.328	1.704	2.031	2.411	3.202	3.854	4.419
9	.696	1.322	1.697	2.022	2.400	3.188	3.837	4.400
10	.693	1.318	1.691	2.015	2.392	3.177	3.824	4.385
11	.692	1.314	1.686	2.009	2.385	3.168	3.813	4.373
12	.690	1.311	1.683	2.005	2.380	3.161	3.804	4.363
13	.689	1.308	1.679	2.001	2.375	3.155	3.797	4.355
14	.688	1.306	1.677	1.998	2.371	3.150	3.791	4.348
15	.687	1.305	1.674	1.995	2.368	3.146	3.786	4.342
16	.686	1.303	1.672	1.993	2.365	3.142	3.781	4.337
17	.685	1.302	1.671	1.991	2.363	3.139	3.778	4.332
18	.684	1.301	1.669	1.989	2.361	3.136	3.774	4.328
19	.684	1.299	1.668	1.987	2.359	3.133	3.771	4.325
20	.683	1.299	1.667	1.986	2.357	3.131	3.768	4.321
21	.683	1.298	1.666	1.985	2.356	3.129	3.766	4.319
22	.683	1.297	1.665	1.983	2.354	3.127	3.764	4.316
23	.682	1.296	1.664	1.982	2.353	3.126	3.762	4.314
24	.682	1.296	1.663	1.981	2.352	3.124	3.760	4.311
25	.682	1.295	1.662	1.980	2.351	3.123	3.758	4.310
26	.681	1.294	1.661	1.980	2.350	3.121	3.756	4.308
27	.681	1.294	1.661	1.979	2.349	3.120	3.755	4.306
28	.681	1.293	1.660	1.978	2.348	3.119	3.754	4.305
29	.681	1.293	1.660	1.978	2.347	3.118	3.752	4.303
30	.680	1.293	1.659	1.977	2.346	3.117	3.751	4.302
31	.680	1.292	1.659	1.976	2.346	3.116	3.750	4.301
32	.680	1.292	1.658	1.976	2.345	3.115	3.749	4.299
33	.680	1.292	1.658	1.975	2.345	3.114	3.748	4.298
34	.680	1.291	1.657	1.975	2.344	3.114	3.747	4.297
35	.679	1.291	1.657	1.974	2.344	3.113	3.746	4.296
36	.679	1.291	1.657	1.974	2.343	3.112	3.746	4.295
37	.679	1.290	1.656	1.974	2.343	3.112	3.745	4.295
38	.679	1.290	1.656	1.973	2.342	3.111	3.744	4.294
39	.679	1.290	1.656	1.973	2.342	3.111	3.744	4.293
40	.679	1.290	1.655	1.973	2.341	3.110	3.743	4.292
41	.679	1.290	1.655	1.972	2.341	3.110	3.742	4.292
42	.679	1.289	1.655	1.972	2.341	3.109	3.742	4.291
43	.679	1.289	1.655	1.972	2.340	3.109	3.741	4.290
44	.678	1.289	1.654	1.971	2.340	3.108	3.741	4.290
45	.678	1.289	1.654	1.971	2.340	3.108	3.740	4.289

3.6.1 Values of k From the Expected Value of $\overline{x} + ks$ (Continued)

$$E[\overline{x} + ks] = \mu + K_p \sigma$$

	P							
n	.75000	.90000	.95000	.97500	.99000	.99900	.99990	.99999
46	.678	1.289	1.654	1.971	2.339	3.107	3.740	4.289
47	.678	1.289	1.654	1.971	2.339	3.107	3.739	4.288
48	.678	1.288	1.654	1.970	2.339	3.107	3.739	4.288
49	.678	1.288	1.653	1.970	2.338	3.106	3.738	4.287
50	.678	1.288	1.653	1.970	2.338	3.106	3.738	4.287
51	.678	1.288	1.653	1.970	2.338	3.106	3.738	4.286
52	.678	1.288	1.653	1.970	2.338	3.105	3.737	4.286
53	.678	1.288	1.653	1.969	2.338	3.105	3.737	4.285
54	.678	1.288	1.653	1.969	2.337	3.105	3.737	4.285
55	.678	1.287	1.652	1.969	2.337	3.105	3.736	4.285
56	.678	1.287	1.652	1.969	2.337	3.104	3.736	4.284
57	.678	1.287	1.652	1.969	2.337	3.104	3.736	4.284
58	.677	1.287	1.652	1.969	2.337	3.104	3.735	4.284
59	.677	1.287	1.652	1.968	2.336	3.104	3.735	4.283
60	.677	1.287	1.652	1.968	2.336	3.103	3.735	4.283
61	.677	1.287	1.652	1.968	2.336	3.103	3.735	4.283
62	.677	1.287	1.652	1.968	2.336	3.103	3.734	4.282
63	.677	1.287	1.651	1.968	2.336	3.103	3.734	4.282
64	.677	1.287	1.651	1.968	2.336	3.103	3.734	4.282
65	.677	1.287	1.651	1.968	2.335	3.102	3.734	4.282
66	.677	1.286	1.651	1.968	2.335	3.102	3.733	4.281
67	.677	1.286	1.651	1.967	2.335	3.102	3.733	4.281
68	.677	1.286	1.651	1.967	2.335	3.102	3.733	4.281
69	.677	1.286	1.651	1.967	2.335	3.102	3.733	4.281
70	.677	1.286	1.651	1.967	2.335	3.101	3.733	4.280
71	.677	1.286	1.651	1.967	2.335	3.101	3.732	4.280
72	.677	1.286	1.651	1.967	2.335	3.101	3.732	4.280
73	.677	1.286	1.651	1.967	2.334	3.101	3.732	4.280
74	.677	1.286	1.650	1.967	2.334	3.101	3.732	4.280
75	.677	1.286	1.650	1.967	2.334	3.101	3.732	4.279
76	.677	1.286	1.650	1.967	2.334	3.101	3.731	4.279
77	.677	1.286	1.650	1.966	2.334	3.100	3.731	4.279
78	.677	1.286	1.650	1.966	2.334	3.100	3.731	4.279
79	.677	1.286	1.650	1.966	2.334	3.100	3.731	4.279
80	.677	1.286	1.650	1.966	2.334	3.100	3.731	4.278
81	.677	1.286	1.650	1.966	2.334	3.100	3.731	4.278
82	.677	1.286	1.650	1.966	2.334	3.100	3.731	4.278
83	.677	1.285	1.650	1.966	2.333	3.100	3.730	4.278
84	.677	1.285	1.650	1.966	2.333	3.100	3.730	4.278
85	.677	1.285	1.650	1.966	2.333	3.099	3.730	4.278
86	.676	1.285	1.650	1.966	2.333	3.099	3.730	4.277
87	.676	1.285	1.650	1.966	2.333	3.099	3.730	4.277
88	.676	1.285	1.650	1.966	2.333	3.099	3.730	4.277
89	.676	1.285	1.650	1.966	2.333	3.099	3.730	4.277
90	.676	1.285	1.649	1.965	2.333	3.099	3.729	4.277

3.6.1 Values of k From the Expected Value of $\overline{x} + ks$ (Continued)

$$E[\overline{x} + ks] = \mu + K_p \sigma$$

	P							
n	.75000	.90000	.95000	.97500	.99000	.99900	.99990	.99999
91	.676	1.285	1.649	1.965	2.333	3.099	3.729	4.277
92	.676	1.285	1.649	1.965	2.333	3.099	3.729	4.277
93	.676	1.285	1.649	1.965	2.333	3.099	3.729	4.276
94	.676	1.285	1.649	1.965	2.333	3.099	3.729	4.276
95	.676	1.285	1.649	1.965	2.333	3.098	3.729	4.276
96	.676	1.285	1.649	1.965	2.332	3.098	3.729	4.276
97	.676	1.285	1.649	1.965	2.332	3.098	3.729	4.276
98	.676	1.285	1.649	1.965	2.332	3.098	3.729	4.276
99	.676	1.285	1.649	1.965	2.332	3.098	3.729	4.276
100	.676	1.285	1.649	1.965	2.332	3.098	3.728	4.276
101	.676	1.285	1.649	1.965	2.332	3.098	3.728	4.276
102	.676	1.285	1.649	1.965	2.332	3.098	3.728	4.275
103	.676	1.285	1.649	1.965	2.332	3.098	3.728	4.275
104	.676	1.285	1.649	1.965	2.332	3.098	3.728	4.275
105	.676	1.285	1.649	1.965	2.332	3.098	3.728	4.275
106	.676	1.285	1.649	1.965	2.332	3.098	3.728	4.275
107	.676	1.285	1.649	1.965	2.332	3.098	3.728	4.275
108	.676	1.285	1.649	1.965	2.332	3.097	3.728	4.275
109	.676	1.285	1.649	1.965	2.332	3.097	3.728	4.275
110	.676	1.284	1.649	1.964	2.332	3.097	3.728	4.275
111	.676	1.284	1.649	1.964	2.332	3.097	3.727	4.275
112	.676	1.284	1.649	1.964	2.332	3.097	3.727	4.275
113	.676	1.284	1.649	1.964	2.332	3.097	3.727	4.274
114	.676	1.284	1.648	1.964	2.332	3.097	3.727	4.274
115	.676	1.284	1.648	1.964	2.331	3.097	3.727	4.274
116	.676	1.284	1.648	1.964	2.331	3.097	3.727	4.274
117	.676	1.284	1.648	1.964	2.331	3.097	3.727	4.274
118	.676	1.284	1.648	1.964	2.331	3.097	3.727	4.274
119	.676	1.284	1.648	1.964	2.331	3.097	3.727	4.274
120	.676	1.284	1.648	1.964	2.331	3.097	3.727	4.274
121	.676	1.284	1.648	1.964	2.331	3.097	3.727	4.274
122	.676	1.284	1.648	1.964	2.331	3.097	3.727	4.274
123	.676	1.284	1.648	1.964	2.331	3.097	3.727	4.274
124	.676	1.284	1.648	1.964	2.331	3.097	3.727	4.274
125	.676	1.284	1.648	1.964	2.331	3.096	3.727	4.273
126	.676	1.284	1.648	1.964	2.331	3.096	3.726	4.273
127	.676	1.284	1.648	1.964	2.331	3.096	3.726	4.273
128	.676	1.284	1.648	1.964	2.331	3.096	3.726	4.273
129	.676	1.284	1.648	1.964	2.331	3.096	3.726	4.273
130	.676	1.284	1.648	1.964	2.331	3.096	3.726	4.273
131	.676	1.284	1.648	1.964	2.331	3.096	3.726	4.273
132	.676	1.284	1.648	1.964	2.331	3.096	3.726	4.273
133	.676	1.284	1.648	1.964	2.331	3.096	3.726	4.273
134	.676	1.284	1.648	1.964	2.331	3.096	3.726	4.273
135	.676	1.284	1.648	1.964	2.331	3.096	3.726	4.273

3.6.1 Values of k From the Expected Value of $\overline{x} + ks$ (Continued)

$$E[\overline{x} + ks] = \mu + K_p \sigma$$

	P							
n	.75000	.90000	.95000	.97500	.99000	.99900	.99990	.99999
136	.676	1.284	1.648	1.964	2.331	3.096	3.726	4.273
137	.676	1.284	1.648	1.964	2.331	3.096	3.726	4.273
138	.676	1.284	1.648	1.964	2.331	3.096	3.726	4.273
139	.676	1.284	1.648	1.964	2.331	3.096	3.726	4.273
140	.676	1.284	1.648	1.963	2.331	3.096	3.726	4.273
141	.676	1.284	1.648	1.963	2.331	3.096	3.726	4.273
142	.676	1.284	1.648	1.963	2.330	3.096	3.726	4.272
143	.676	1.284	1.648	1.963	2.330	3.096	3.726	4.272
144	.676	1.284	1.648	1.963	2.330	3.096	3.726	4.272
145	.676	1.284	1.648	1.963	2.330	3.096	3.725	4.272
146	.676	1.284	1.648	1.963	2.330	3.096	3.725	4.272
147	.676	1.284	1.648	1.963	2.330	3.096	3.725	4.272
148	.676	1.284	1.648	1.963	2.330	3.095	3.725	4.272
149	.676	1.284	1.648	1.963	2.330	3.095	3.725	4.272
150	.676	1.284	1.648	1.963	2.330	3.095	3.725	4.272
151	.676	1.284	1.648	1.963	2.330	3.095	3.725	4.272
152	.676	1.284	1.648	1.963	2.330	3.095	3.725	4.272
153	.676	1.284	1.648	1.963	2.330	3.095	3.725	4.272
154	.676	1.284	1.648	1.963	2.330	3.095	3.725	4.272
155	.676	1.284	1.648	1.963	2.330	3.095	3.725	4.272
156	.676	1.284	1.648	1.963	2.330	3.095	3.725	4.272
157	.676	1.284	1.647	1.963	2.330	3.095	3.725	4.272
158	.676	1.284	1.647	1.963	2.330	3.095	3.725	4.272
159	.676	1.284	1.647	1.963	2.330	3.095	3.725	4.272
160	.676	1.284	1.647	1.963	2.330	3.095	3.725	4.272
161	.676	1.284	1.647	1.963	2.330	3.095	3.725	4.272
162	.676	1.284	1.647	1.963	2.330	3.095	3.725	4.272
163	.676	1.284	1.647	1.963	2.330	3.095	3.725	4.271
164	.676	1.284	1.647	1.963	2.330	3.095	3.725	4.271
165	.676	1.284	1.647	1.963	2.330	3.095	3.725	4.271
166	.676	1.283	1.647	1.963	2.330	3.095	3.725	4.271
167	.676	1.283	1.647	1.963	2.330	3.095	3.725	4.271
168	.676	1.283	1.647	1.963	2.330	3.095	3.725	4.271
169	.675	1.283	1.647	1.963	2.330	3.095	3.725	4.271
170	.675	1.283	1.647	1.963	2.330	3.095	3.725	4.271
171	.675	1.283	1.647	1.963	2.330	3.095	3.724	4.271
172	.675	1.283	1.647	1.963	2.330	3.095	3.724	4.271
173	.675	1.283	1.647	1.963	2.330	3.095	3.724	4.271
174	.675	1.283	1.647	1.963	2.330	3.095	3.724	4.271
175	.675	1.283	1.647	1.963	2.330	3.095	3.724	4.271
176	.675	1.283	1.647	1.963	2.330	3.095	3.724	4.271
177	.675	1.283	1.647	1.963	2.330	3.095	3.724	4.271
178	.675	1.283	1.647	1.963	2.330	3.095	3.724	4.271
179	.675	1.283	1.647	1.963	2.330	3.095	3.724	4.271
180	.675	1.283	1.647	1.963	2.330	3.095	3.724	4.271

3.6.1 Values of k From the Expected Value of $\overline{x} + ks$ (Continued)

$$E[\overline{x} + ks] = \mu + K_p \sigma$$

	P							
n	.75000	.90000	.95000	.97500	.99000	.99900	.99990	.99999
181	.675	1.283	1.647	1.963	2.330	3.095	3.724	4.271
182	.675	1.283	1.647	1.963	2.330	3.095	3.724	4.271
183	.675	1.283	1.647	1.963	2.330	3.094	3.724	4.271
184	.675	1.283	1.647	1.963	2.330	3.094	3.724	4.271
185	.675	1.283	1.647	1.963	2.330	3.094	3.724	4.271
186	.675	1.283	1.647	1.963	2.329	3.094	3.724	4.271
187	.675	1.283	1.647	1.963	2.329	3.094	3.724	4.271
188	.675	1.283	1.647	1.963	2.329	3.094	3.724	4.271
189	.675	1.283	1.647	1.963	2.329	3.094	3.724	4.271
190	.675	1.283	1.647	1.963	2.329	3.094	3.724	4.271
191	.675	1.283	1.647	1.963	2.329	3.094	3.724	4.271
192	.675	1.283	1.647	1.963	2.329	3.094	3.724	4.270
193	.675	1.283	1.647	1.963	2.329	3.094	3.724	4.270
194	.675	1.283	1.647	1.963	2.329	3.094	3.724	4.270
195	.675	1.283	1.647	1.962	2.329	3.094	3.724	4.270
196	.675	1.283	1.647	1.962	2.329	3.094	3.724	4.270
197	.675	1.283	1.647	1.962	2.329	3.094	3.724	4.270
198	.675	1.283	1.647	1.962	2.329	3.094	3.724	4.270
199	.675	1.283	1.647	1.962	2.329	3.094	3.724	4.270
200	.675	1.283	1.647	1.962	2.329	3.094	3.724	4.270
205	.675	1.283	1.647	1.962	2.329	3.094	3.724	4.270
210	.675	1.283	1.647	1.962	2.329	3.094	3.723	4.270
215	.675	1.283	1.647	1.962	2.329	3.094	3.723	4.270
220	.675	1.283	1.647	1.962	2.329	3.094	3.723	4.270
225	.675	1.283	1.647	1.962	2.329	3.094	3.723	4.270
230	.675	1.283	1.647	1.962	2.329	3.094	3.723	4.270
235	.675	1.283	1.647	1.962	2.329	3.094	3.723	4.269
240	.675	1.283	1.647	1.962	2.329	3.093	3.723	4.269
245	.675	1.283	1.647	1.962	2.329	3.093	3.723	4.269
250	.675	1.283	1.647	1.962	2.329	3.093	3.723	4.269
255	.675	1.283	1.646	1.962	2.329	3.093	3.723	4.269
260	.675	1.283	1.646	1.962	2.329	3.093	3.723	4.269
265	.675	1.283	1.646	1.962	2.329	3.093	3.723	4.269
270	.675	1.283	1.646	1.962	2.329	3.093	3.722	4.269
275	.675	1.283	1.646	1.962	2.328	3.093	3.722	4.269
280	.675	1.283	1.646	1.962	2.328	3.093	3.722	4.269
285	.675	1.283	1.646	1.962	2.328	3.093	3.722	4.269
290	.675	1.283	1.646	1.962	2.328	3.093	3.722	4.269
295	.675	1.283	1.646	1.962	2.328	3.093	3.722	4.269
300	.675	1.283	1.646	1.962	2.328	3.093	3.722	4.268
305	.675	1.283	1.646	1.962	2.328	3.093	3.722	4.268
310	.675	1.283	1.646	1.962	2.328	3.093	3.722	4.268
315	.675	1.283	1.646	1.962	2.328	3.093	3.722	4.268
320	.675	1.283	1.646	1.962	2.328	3.093	3.722	4.268
325	.675	1.283	1.646	1.961	2.328	3.093	3.722	4.268

3.6.1 Values of k From the Expected Value of $\overline{x} + ks$ (Continued)

$$E[\overline{x} + ks] = \mu + K_p \sigma$$

	P							
n	.75000	.90000	.95000	.97500	.99000	.99900	.99990	.99999
330	.675	1.283	1.646	1.961	2.328	3.093	3.722	4.268
335	.675	1.283	1.646	1.961	2.328	3.093	3.722	4.268
340	.675	1.282	1.646	1.961	2.328	3.093	3.722	4.268
345	.675	1.282	1.646	1.961	2.328	3.092	3.722	4.268
350	.675	1.282	1.646	1.961	2.328	3.092	3.722	4.268
355	.675	1.282	1.646	1.961	2.328	3.092	3.722	4.268
360	.675	1.282	1.646	1.961	2.328	3.092	3.722	4.268
365	.675	1.282	1.646	1.961	2.328	3.092	3.722	4.268
370	.675	1.282	1.646	1.961	2.328	3.092	3.722	4.268
375	.675	1.282	1.646	1.961	2.328	3.092	3.722	4.268
380	.675	1.282	1.646	1.961	2.328	3.092	3.721	4.268
385	.675	1.282	1.646	1.961	2.328	3.092	3.721	4.268
390	.675	1.282	1.646	1.961	2.328	3.092	3.721	4.268
395	.675	1.282	1.646	1.961	2.328	3.092	3.721	4.268
400	.675	1.282	1.646	1.961	2.328	3.092	3.721	4.268
425	.675	1.282	1.646	1.961	2.328	3.092	3.721	4.267
450	.675	1.282	1.646	1.961	2.328	3.092	3.721	4.267
475	.675	1.282	1.646	1.961	2.328	3.092	3.721	4.267
500	.675	1.282	1.646	1.961	2.328	3.092	3.721	4.267
525	.675	1.282	1.646	1.961	2.327	3.092	3.721	4.267
550	.675	1.282	1.646	1.961	2.327	3.092	3.721	4.267
575	.675	1.282	1.646	1.961	2.327	3.092	3.721	4.267
600	.675	1.282	1.646	1.961	2.327	3.092	3.721	4.267
625	.675	1.282	1.646	1.961	2.327	3.091	3.721	4.267
650	.675	1.282	1.645	1.961	2.327	3.091	3.720	4.267
675	.675	1.282	1.645	1.961	2.327	3.091	3.720	4.266
700	.675	1.282	1.645	1.961	2.327	3.091	3.720	4.266
725	.675	1.282	1.645	1.961	2.327	3.091	3.720	4.266
750	.675	1.282	1.645	1.961	2.327	3.091	3.720	4.266
775	.675	1.282	1.645	1.961	2.327	3.091	3.720	4.266
800	.675	1.282	1.645	1.961	2.327	3.091	3.720	4.266
825	.675	1.282	1.645	1.961	2.327	3.091	3.720	4.266
850	.675	1.282	1.645	1.961	2.327	3.091	3.720	4.266
875	.675	1.282	1.645	1.961	2.327	3.091	3.720	4.266
900	.675	1.282	1.645	1.961	2.327	3.091	3.720	4.266
925	.675	1.282	1.645	1.960	2.327	3.091	3.720	4.266
950	.675	1.282	1.645	1.960	2.327	3.091	3.720	4.266
975	.675	1.282	1.645	1.960	2.327	3.091	3.720	4.266
1000	.675	1.282	1.645	1.960	2.327	3.091	3.720	4.266
1500	.675	1.282	1.645	1.960	2.327	3.091	3.720	4.266
2000	.675	1.282	1.645	1.960	2.327	3.091	3.719	4.265
3000	.675	1.282	1.645	1.960	2.327	3.090	3.719	4.265
5000	.675	1.282	1.645	1.960	2.326	3.090	3.719	4.265
10000	.675	1.282	1.645	1.960	2.326	3.090	3.719	4.265
∞	.674	1.282	1.645	1.960	2.326	3.090	3.719	4.265

3.6.2 Standard Deviation of $\overline{x} + ks$ for k Computed From

Expected Value of $\overline{x} + ks$

	P							
n	.75000	.90000	.95000	.97500	.99000	.99900	.99990	.99999
2	.872	1.199	1.430	1.641	1.894	2.439	2.897	3.299
3	.676	.884	1.036	1.176	1.346	1.715	2.028	2.303
4	.575	.737	.855	.967	1.102	1.397	1.647	1.868
5	.510	.645	.746	.840	.956	1.208	1.422	1.611
6	.463	.582	.670	.754	.856	1.079	1.269	1.438
7	.427	.534	.614	.689	.782	.984	1.157	1.310
8	.398	.496	.570	.639	.724	.911	1.070	1.211
9	.375	.466	.534	.599	.678	.852	1.000	1.132
10	.355	.440	.504	.565	.639	.803	.943	1.066
11	.338	.418	.479	.536	.607	.761	.894	1.011
12	.323	.400	.457	.512	.578	.726	.852	.963
13	.310	.383	.438	.490	.554	.695	.815	.922
14	.299	.368	.421	.471	.532	.667	.783	.885
15	.288	.355	.406	.454	.513	.643	.754	.853
16	.279	.344	.393	.439	.496	.621	.729	.824
17	.271	.333	.380	.425	.480	.601	.705	.797
18	.263	.323	.369	.412	.466	.583	.684	.773
19	.256	.314	.359	.401	.453	.567	.665	.751
20	.249	.306	.349	.390	.441	.552	.647	.731
21	.243	.299	.341	.381	.430	.538	.631	.713
22	.238	.292	.333	.371	.419	.525	.615	.695
23	.232	.285	.325	.363	.410	.513	.601	.679
24	.227	.279	.318	.355	.401	.501	.588	.664
25	.223	.273	.311	.348	.392	.491	.575	.650
26	.218	.268	.305	.341	.384	.481	.564	.637
27	.214	.263	.299	.334	.377	.472	.553	.625
28	.210	.258	.294	.328	.370	.463	.542	.613
29	.207	.253	.288	.322	.363	.454	.533	.602
30	.203	.249	.284	.316	.357	.447	.523	.591
31	.200	.245	.279	.311	.351	.439	.514	.581
32	.197	.241	.274	.306	.345	.432	.506	.572
33	.194	.237	.270	.301	.340	.425	.498	.563
34	.191	.233	.266	.297	.335	.419	.490	.554
35	.188	.230	.262	.292	.330	.412	.483	.546
36	.185	.227	.258	.288	.325	.406	.476	.538
37	.183	.224	.255	.284	.320	.401	.470	.530
38	.180	.221	.251	.280	.316	.395	.463	.523
39	.178	.218	.248	.277	.312	.390	.457	.516
40	.176	.215	.245	.273	.308	.385	.451	.510
41	.174	.212	.242	.270	.304	.380	.445	.503
42	.171	.210	.239	.266	.300	.375	.440	.497
43	.169	.207	.236	.263	.297	.371	.435	.491
44	.167	.205	.233	.260	.293	.367	.430	.485
45	.166	.202	.231	.257	.290	.362	.425	.480

3.6.2 Standard Deviation of $\overline{x} + ks$ for k Computed From

Expected Value of $\overline{x} + ks$ (Continued)

	P							
n	.75000	.90000	.95000	.97500	.99000	.99900	.99990	.99999
46	.164	.200	.228	.254	.287	.358	.420	.474
47	.162	.198	.225	.252	.284	.354	.415	.469
48	.160	.196	.223	.249	.281	.351	.411	.464
49	.159	.194	.221	.246	.278	.347	.406	.459
50	.157	.192	.219	.244	.275	.343	.402	.454
51	.155	.190	.216	.241	.272	.340	.398	.450
52	.154	.188	.214	.239	.269	.337	.394	.445
53	.153	.186	.212	.237	.267	.333	.391	.441
54	.151	.185	.210	.234	.264	.330	.387	.437
55	.150	.183	.208	.232	.262	.327	.383	.433
56	.148	.181	.206	.230	.259	.324	.380	.429
57	.147	.180	.204	.228	.257	.321	.376	.425
58	.146	.178	.203	.226	.255	.318	.373	.421
59	.145	.177	.201	.224	.253	.316	.370	.418
60	.143	.175	.199	.222	.250	.313	.367	.414
61	.142	.174	.198	.220	.248	.310	.363	.411
62	.141	.172	.196	.219	.246	.308	.360	.407
63	.140	.171	.194	.217	.244	.305	.358	.404
64	.139	.169	.193	.215	.242	.303	.355	.401
65	.138	.168	.191	.213	.240	.300	.352	.398
66	.137	.167	.190	.212	.239	.298	.349	.394
67	.136	.166	.188	.210	.237	.296	.347	.391
68	.135	.164	.187	.209	.235	.294	.344	.389
69	.134	.163	.186	.207	.233	.291	.341	.386
70	.133	.162	.184	.205	.232	.289	.339	.383
71	.132	.161	.183	.204	.230	.287	.336	.380
72	.131	.160	.182	.203	.228	.285	.334	.377
73	.130	.159	.180	.201	.227	.283	.332	.375
74	.129	.157	.179	.200	.225	.281	.329	.372
75	.128	.156	.178	.198	.224	.279	.327	.370
76	.127	.155	.177	.197	.222	.278	.325	.367
77	.126	.154	.176	.196	.221	.276	.323	.365
78	.126	.153	.174	.195	.219	.274	.321	.362
79	.125	.152	.173	.193	.218	.272	.319	.360
80	.124	.151	.172	.192	.216	.270	.317	.358
81	.123	.150	.171	.191	.215	.269	.315	.356
82	.123	.150	.170	.190	.214	.267	.313	.353
83	.122	.149	.169	.189	.212	.265	.311	.351
84	.121	.148	.168	.187	.211	.264	.309	.349
85	.120	.147	.167	.186	.210	.262	.307	.347
86	.120	.146	.166	.185	.209	.261	.305	.345
87	.119	.145	.165	.184	.207	.259	.304	.343
88	.118	.144	.164	.183	.206	.258	.302	.341
89	.118	.144	.163	.182	.205	.256	.300	.339
90	.117	.143	.162	.181	.204	.255	.298	.337

3.6.2 Standard Deviation of $\bar{x} + ks$ for k Computed From

Expected Value of $\bar{x} + ks$ (Continued)

	P							
n	.75000	.90000	.95000	.97500	.99000	.99900	.99990	.99999
91	.116	.142	.161	.180	.203	.253	.297	.335
92	.116	.141	.161	.179	.202	.252	.295	.333
93	.115	.140	.160	.178	.201	.251	.293	.331
94	.114	.140	.159	.177	.200	.249	.292	.330
95	.114	.139	.158	.176	.198	.248	.290	.328
96	.113	.138	.157	.175	.197	.247	.289	.326
97	.113	.137	.156	.174	.196	.245	.287	.324
98	.112	.137	.156	.173	.195	.244	.286	.323
99	.111	.136	.155	.172	.194	.243	.284	.321
100	.111	.135	.154	.172	.193	.242	.283	.320
101	.110	.135	.153	.171	.192	.240	.281	.318
102	.110	.134	.152	.170	.191	.239	.280	.316
103	.109	.133	.152	.169	.191	.238	.279	.315
104	.109	.133	.151	.168	.190	.237	.277	.313
105	.108	.132	.150	.167	.189	.236	.276	.312
106	.108	.131	.149	.167	.188	.235	.275	.310
107	.107	.131	.149	.166	.187	.233	.273	.309
108	.107	.130	.148	.165	.186	.232	.272	.307
109	.106	.130	.147	.164	.185	.231	.271	.306
110	.106	.129	.147	.164	.184	.230	.270	.304
111	.105	.128	.146	.163	.183	.229	.268	.303
112	.105	.128	.145	.162	.183	.228	.267	.302
113	.104	.127	.145	.161	.182	.227	.266	.300
114	.104	.127	.144	.161	.181	.226	.265	.299
115	.103	.126	.143	.160	.180	.225	.264	.298
116	.103	.126	.143	.159	.179	.224	.262	.296
117	.103	.125	.142	.159	.179	.223	.261	.295
118	.102	.125	.142	.158	.178	.222	.260	.294
119	.102	.124	.141	.157	.177	.221	.259	.293
120	.101	.123	.140	.157	.176	.220	.258	.291
121	.101	.123	.140	.156	.176	.219	.257	.290
122	.100	.122	.139	.155	.175	.218	.256	.289
123	.100	.122	.139	.155	.174	.218	.255	.288
124	.100	.121	.138	.154	.174	.217	.254	.287
125	.099	.121	.138	.153	.173	.216	.253	.285
126	.099	.120	.137	.153	.172	.215	.252	.284
127	.098	.120	.136	.152	.171	.214	.251	.283
128	.098	.120	.136	.152	.171	.213	.250	.282
129	.098	.119	.135	.151	.170	.212	.249	.281
130	.097	.119	.135	.150	.169	.212	.248	.280
131	.097	.118	.134	.150	.169	.211	.247	.279
132	.097	.118	.134	.149	.168	.210	.246	.278
133	.096	.117	.133	.149	.168	.209	.245	.277
134	.096	.117	.133	.148	.167	.208	.244	.276
135	.095	.116	.132	.148	.166	.208	.243	.275

3.6.2 Standard Deviation of $\overline{x} + ks$ for k Computed From

Expected Value of $\overline{x} + ks$ (Continued)

	P							
n	.75000	.90000	.95000	.97500	.99000	.99900	.99990	.99999
136	.095	.116	.132	.147	.166	.207	.242	.274
137	.095	.116	.131	.146	.165	.206	.241	.273
138	.094	.115	.131	.146	.164	.205	.240	.272
139	.094	.115	.130	.145	.164	.205	.240	.271
140	.094	.114	.130	.145	.163	.204	.239	.270
141	.093	.114	.130	.144	.163	.203	.238	.269
142	.093	.113	.129	.144	.162	.202	.237	.268
143	.093	.113	.129	.143	.162	.202	.236	.267
144	.092	.113	.128	.143	.161	.201	.235	.266
145	.092	.112	.128	.142	.160	.200	.235	.265
146	.092	.112	.127	.142	.160	.200	.234	.264
147	.091	.112	.127	.141	.159	.199	.233	.263
148	.091	.111	.126	.141	.159	.198	.232	.262
149	.091	.111	.126	.140	.158	.198	.231	.261
150	.091	.110	.126	.140	.158	.197	.231	.260
151	.090	.110	.125	.139	.157	.196	.230	.260
152	.090	.110	.125	.139	.157	.196	.229	.259
153	.090	.109	.124	.139	.156	.195	.228	.258
154	.089	.109	.124	.138	.156	.194	.228	.257
155	.089	.109	.123	.138	.155	.194	.227	.256
156	.089	.108	.123	.137	.155	.193	.226	.255
157	.088	.108	.123	.137	.154	.192	.225	.254
158	.088	.108	.122	.136	.154	.192	.225	.254
159	.088	.107	.122	.136	.153	.191	.224	.253
160	.088	.107	.122	.135	.153	.191	.223	.252
161	.087	.107	.121	.135	.152	.190	.222	.251
162	.087	.106	.121	.135	.152	.189	.222	.250
163	.087	.106	.120	.134	.151	.189	.221	.250
164	.087	.106	.120	.134	.151	.188	.220	.249
165	.086	.105	.120	.133	.150	.188	.220	.248
166	.086	.105	.119	.133	.150	.187	.219	.247
167	.086	.105	.119	.133	.149	.187	.218	.247
168	.086	.104	.119	.132	.149	.186	.218	.246
169	.085	.104	.118	.132	.148	.185	.217	.245
170	.085	.104	.118	.131	.148	.185	.216	.244
171	.085	.103	.118	.131	.148	.184	.216	.244
172	.085	.103	.117	.131	.147	.184	.215	.243
173	.084	.103	.117	.130	.147	.183	.215	.242
174	.084	.102	.117	.130	.146	.183	.214	.242
175	.084	.102	.116	.129	.146	.182	.213	.241
176	.084	.102	.116	.129	.145	.182	.213	.240
177	.083	.102	.116	.129	.145	.181	.212	.240
178	.083	.101	.115	.128	.145	.181	.212	.239
179	.083	.101	.115	.128	.144	.180	.211	.238
180	.083	.101	.115	.128	.144	.180	.210	.238

3.6.2 Standard Deviation of $\overline{x} + ks$ for k Computed From

Expected Value of $\overline{x} + ks$ (Continued)

	P							
n	.75000	.90000	.95000	.97500	.99000	.99900	.99990	.99999
181	.082	.100	.114	.127	.143	.179	.210	.237
182	.082	.100	.114	.127	.143	.179	.209	.236
183	.082	.100	.114	.127	.143	.178	.209	.236
184	.082	.100	.113	.126	.142	.178	.208	.235
185	.082	.099	.113	.126	.142	.177	.207	.234
186	.081	.099	.113	.126	.142	.177	.207	.234
187	.081	.099	.112	.125	.141	.176	.206	.233
188	.081	.099	.112	.125	.141	.176	.206	.232
189	.081	.098	.112	.125	.140	.175	.205	.232
190	.080	.098	.111	.124	.140	.175	.205	.231
191	.080	.098	.111	.124	.140	.174	.204	.231
192	.080	.098	.111	.124	.139	.174	.204	.230
193	.080	.097	.111	.123	.139	.173	.203	.229
194	.080	.097	.110	.123	.139	.173	.203	.229
195	.079	.097	.110	.123	.138	.173	.202	.228
196	.079	.097	.110	.122	.138	.172	.202	.228
197	.079	.096	.109	.122	.137	.172	.201	.227
198	.079	.096	.109	.122	.137	.171	.200	.226
199	.079	.096	.109	.121	.137	.171	.200	.226
200	.078	.096	.109	.121	.136	.170	.199	.225
205	.077	.094	.107	.120	.135	.168	.197	.223
210	.076	.093	.106	.118	.133	.166	.195	.220
215	.076	.092	.105	.117	.132	.164	.192	.217
220	.075	.091	.104	.115	.130	.162	.190	.215
225	.074	.090	.102	.114	.129	.161	.188	.212
230	.073	.089	.101	.113	.127	.159	.186	.210
235	.072	.088	.100	.112	.126	.157	.184	.208
240	.072	.087	.099	.111	.125	.155	.182	.206
245	.071	.086	.098	.109	.123	.154	.180	.203
250	.070	.085	.097	.108	.122	.152	.178	.201
255	.069	.085	.096	.107	.121	.151	.177	.199
260	.069	.084	.095	.106	.120	.149	.175	.197
265	.068	.083	.094	.105	.118	.148	.173	.196
270	.067	.082	.093	.104	.117	.147	.172	.194
275	.067	.081	.093	.103	.116	.145	.170	.192
280	.066	.081	.092	.102	.115	.144	.168	.190
285	.066	.080	.091	.101	.114	.143	.167	.189
290	.065	.079	.090	.100	.113	.141	.166	.187
295	.065	.079	.089	.100	.112	.140	.164	.185
300	.064	.078	.089	.099	.111	.139	.163	.184
305	.063	.077	.088	.098	.110	.138	.161	.182
310	.063	.077	.087	.097	.109	.137	.160	.181
315	.062	.076	.087	.096	.109	.136	.159	.179
320	.062	.076	.086	.096	.108	.135	.158	.178
325	.061	.075	.085	.095	.107	.134	.156	.177

3.6.2 Standard Deviation of $\overline{x} + ks$ for k Computed From Expected Value of $\overline{x} + ks$ (Continued)

	P							
n	.75000	.90000	.95000	.97500	.99000	.99900	.99990	.99999
330	.061	.074	.085	.094	.106	.132	.155	.175
335	.061	.074	.084	.093	.105	.131	.154	.174
340	.060	.073	.083	.093	.105	.131	.153	.173
345	.060	.073	.083	.092	.104	.130	.152	.171
350	.059	.072	.082	.091	.103	.129	.151	.170
355	.059	.072	.081	.091	.102	.128	.150	.169
360	.058	.071	.081	.090	.102	.127	.149	.168
365	.058	.071	.080	.090	.101	.126	.147	.167
370	.058	.070	.080	.089	.100	.125	.146	.165
375	.057	.070	.079	.088	.100	.124	.145	.164
380	.057	.069	.079	.088	.099	.123	.145	.163
385	.056	.069	.078	.087	.098	.123	.144	.162
390	.056	.068	.078	.087	.098	.122	.143	.161
395	.056	.068	.077	.086	.097	.121	.142	.160
400	.055	.068	.077	.086	.096	.120	.141	.159
425	.054	.066	.074	.083	.093	.117	.137	.154
450	.052	.064	.072	.081	.091	.113	.133	.150
475	.051	.062	.070	.078	.088	.110	.129	.146
500	.050	.060	.069	.076	.086	.108	.126	.142
525	.048	.059	.067	.075	.084	.105	.123	.139
550	.047	.058	.065	.073	.082	.103	.120	.136
575	.046	.056	.064	.071	.080	.100	.117	.133
600	.045	.055	.063	.070	.079	.098	.115	.130
625	.044	.054	.061	.068	.077	.096	.113	.127
650	.043	.053	.060	.067	.076	.094	.110	.125
675	.043	.052	.059	.066	.074	.093	.108	.122
700	.042	.051	.058	.065	.073	.091	.106	.120
725	.041	.050	.057	.064	.072	.089	.105	.118
750	.040	.049	.056	.062	.070	.088	.103	.116
775	.040	.048	.055	.061	.069	.086	.101	.114
800	.039	.048	.054	.060	.068	.085	.100	.112
825	.039	.047	.053	.060	.067	.084	.098	.111
850	.038	.046	.053	.059	.066	.082	.097	.109
875	.037	.046	.052	.058	.065	.081	.095	.107
900	.037	.045	.051	.057	.064	.080	.094	.106
925	.036	.044	.050	.056	.063	.079	.093	.105
950	.036	.044	.050	.055	.062	.078	.091	.103
975	.035	.043	.049	.055	.062	.077	.090	.102
1000	.035	.043	.049	.054	.061	.076	.089	.101
1500	.029	.035	.040	.044	.050	.062	.073	.082
2000	.025	.030	.034	.038	.043	.054	.063	.071
3000	.020	.025	.028	.031	.035	.044	.051	.058
5000	.016	.019	.022	.024	.027	.034	.040	.045
10000	.011	.013	.015	.017	.019	.024	.028	.032
∞	.000	.000	.000	.000	.000	.000	.000	.000

3.7 Moments of Noncentral $\left(\frac{t}{\sqrt{n}}\right)$-Distribution

3.7.1 Mean of a Noncentral $\left(\frac{t}{\sqrt{n}}\right)$-Distribution

	P							
n	.75000	.90000	.95000	.97500	.99000	.99900	.99990	.99999
3	1.196	2.271	2.915	3.474	4.123	5.477	6.592	7.559
4	.932	1.771	2.273	2.709	3.215	4.271	5.140	5.894
5	.845	1.606	2.062	2.456	2.916	3.873	4.661	5.345
6	.802	1.524	1.956	2.331	2.767	3.676	4.423	5.073
7	.777	1.475	1.894	2.256	2.678	3.558	4.281	4.910
8	.759	1.443	1.852	2.207	2.619	3.479	4.187	4.802
9	.747	1.420	1.822	2.171	2.577	3.423	4.120	4.725
10	.738	1.402	1.800	2.145	2.546	3.381	4.070	4.667
11	.731	1.389	1.783	2.124	2.521	3.349	4.030	4.622
12	.725	1.378	1.769	2.108	2.502	3.323	3.999	4.586
13	.721	1.369	1.757	2.094	2.486	3.302	3.974	4.557
14	.717	1.362	1.748	2.083	2.472	3.284	3.952	4.532
15	.714	1.356	1.740	2.073	2.461	3.269	3.934	4.512
16	.711	1.350	1.733	2.065	2.451	3.256	3.919	4.494
17	.708	1.346	1.727	2.058	2.443	3.245	3.905	4.479
18	.706	1.342	1.722	2.052	2.436	3.235	3.894	4.465
19	.704	1.338	1.718	2.047	2.429	3.227	3.883	4.454
20	.703	1.335	1.714	2.042	2.424	3.219	3.874	4.443
21	.701	1.332	1.710	2.038	2.418	3.212	3.866	4.434
22	.700	1.330	1.707	2.034	2.414	3.206	3.859	4.425
23	.699	1.327	1.704	2.030	2.410	3.201	3.852	4.418
24	.698	1.325	1.701	2.027	2.406	3.196	3.846	4.411
25	.697	1.323	1.699	2.024	2.402	3.191	3.841	4.404
26	.696	1.322	1.696	2.021	2.399	3.187	3.835	4.398
27	.695	1.320	1.694	2.019	2.396	3.183	3.831	4.393
28	.694	1.319	1.692	2.017	2.394	3.180	3.826	4.388
29	.693	1.317	1.691	2.014	2.391	3.176	3.822	4.384
30	.693	1.316	1.689	2.013	2.389	3.173	3.819	4.379
31	.692	1.315	1.687	2.011	2.387	3.170	3.815	4.375
32	.691	1.314	1.686	2.009	2.385	3.168	3.812	4.372
33	.691	1.313	1.685	2.007	2.383	3.165	3.809	4.368
34	.690	1.312	1.683	2.006	2.381	3.163	3.806	4.365
35	.690	1.311	1.682	2.005	2.379	3.161	3.804	4.362
36	.689	1.310	1.681	2.003	2.378	3.158	3.801	4.359
37	.689	1.309	1.680	2.002	2.376	3.157	3.799	4.356
38	.689	1.308	1.679	2.001	2.375	3.155	3.797	4.354
39	.688	1.308	1.678	2.000	2.374	3.153	3.794	4.351
40	.688	1.307	1.677	1.999	2.372	3.151	3.792	4.349
41	.687	1.306	1.677	1.998	2.371	3.150	3.791	4.347
42	.687	1.306	1.676	1.997	2.370	3.148	3.789	4.345
43	.687	1.305	1.675	1.996	2.369	3.147	3.787	4.343
44	.687	1.304	1.674	1.995	2.368	3.145	3.785	4.341
45	.686	1.304	1.674	1.994	2.367	3.144	3.784	4.339

3.7.1 Mean of a Noncentral $\left(\frac{t}{\sqrt{n}}\right)$-Distribution (Continued)

	P							
n	.75000	.90000	.95000	.97500	.99000	.99900	.99990	.99999
46	.686	1.303	1.673	1.993	2.366	3.143	3.782	4.338
47	.686	1.303	1.672	1.993	2.365	3.142	3.781	4.336
48	.685	1.302	1.672	1.992	2.364	3.141	3.780	4.334
49	.685	1.302	1.671	1.991	2.364	3.140	3.778	4.333
50	.685	1.302	1.671	1.991	2.363	3.139	3.777	4.332
51	.685	1.301	1.670	1.990	2.362	3.138	3.776	4.330
52	.685	1.301	1.670	1.989	2.361	3.137	3.775	4.329
53	.684	1.300	1.669	1.989	2.361	3.136	3.774	4.328
54	.684	1.300	1.669	1.988	2.360	3.135	3.773	4.326
55	.684	1.300	1.668	1.988	2.359	3.134	3.772	4.325
56	.684	1.299	1.668	1.987	2.359	3.133	3.771	4.324
57	.684	1.299	1.667	1.987	2.358	3.132	3.770	4.323
58	.684	1.299	1.667	1.986	2.358	3.132	3.769	4.322
59	.683	1.298	1.667	1.986	2.357	3.131	3.768	4.321
60	.683	1.298	1.666	1.985	2.356	3.130	3.767	4.320
61	.683	1.298	1.666	1.985	2.356	3.130	3.766	4.319
62	.683	1.298	1.665	1.984	2.355	3.129	3.766	4.318
63	.683	1.297	1.665	1.984	2.355	3.128	3.765	4.317
64	.683	1.297	1.665	1.984	2.355	3.128	3.764	4.317
65	.683	1.297	1.664	1.983	2.354	3.127	3.763	4.316
66	.682	1.297	1.664	1.983	2.354	3.126	3.763	4.315
67	.682	1.296	1.664	1.983	2.353	3.126	3.762	4.314
68	.682	1.296	1.664	1.982	2.353	3.125	3.761	4.313
69	.682	1.296	1.663	1.982	2.352	3.125	3.761	4.313
70	.682	1.296	1.663	1.982	2.352	3.124	3.760	4.312
71	.682	1.295	1.663	1.981	2.352	3.124	3.759	4.311
72	.682	1.295	1.662	1.981	2.351	3.123	3.759	4.311
73	.682	1.295	1.662	1.981	2.351	3.123	3.758	4.310
74	.682	1.295	1.662	1.980	2.351	3.122	3.758	4.309
75	.681	1.295	1.662	1.980	2.350	3.122	3.757	4.309
76	.681	1.295	1.662	1.980	2.350	3.122	3.757	4.308
77	.681	1.294	1.661	1.980	2.350	3.121	3.756	4.308
78	.681	1.294	1.661	1.979	2.349	3.121	3.756	4.307
79	.681	1.294	1.661	1.979	2.349	3.120	3.755	4.306
80	.681	1.294	1.661	1.979	2.349	3.120	3.755	4.306
81	.681	1.294	1.660	1.979	2.348	3.120	3.754	4.305
82	.681	1.294	1.660	1.978	2.348	3.119	3.754	4.305
83	.681	1.293	1.660	1.978	2.348	3.119	3.753	4.304
84	.681	1.293	1.660	1.978	2.348	3.119	3.753	4.304
85	.681	1.293	1.660	1.978	2.347	3.118	3.753	4.303
86	.681	1.293	1.660	1.977	2.347	3.118	3.752	4.303
87	.680	1.293	1.659	1.977	2.347	3.118	3.752	4.303
88	.680	1.293	1.659	1.977	2.347	3.117	3.751	4.302
89	.680	1.293	1.659	1.977	2.346	3.117	3.751	4.302
90	.680	1.292	1.659	1.977	2.346	3.117	3.751	4.301

3.7.1 Mean of a Noncentral $\left(\frac{t}{\sqrt{n}}\right)$-Distribution (Continued)

	P							
n	.75000	.90000	.95000	.97500	.99000	.99900	.99990	.99999
91	.680	1.292	1.659	1.976	2.346	3.116	3.750	4.301
92	.680	1.292	1.659	1.976	2.346	3.116	3.750	4.300
93	.680	1.292	1.658	1.976	2.346	3.116	3.750	4.300
94	.680	1.292	1.658	1.976	2.345	3.115	3.749	4.300
95	.680	1.292	1.658	1.976	2.345	3.115	3.749	4.299
96	.680	1.292	1.658	1.976	2.345	3.115	3.749	4.299
97	.680	1.292	1.658	1.975	2.345	3.115	3.748	4.299
98	.680	1.292	1.658	1.975	2.345	3.114	3.748	4.298
99	.680	1.291	1.658	1.975	2.344	3.114	3.748	4.298
100	.680	1.291	1.657	1.975	2.344	3.114	3.747	4.298
101	.680	1.291	1.657	1.975	2.344	3.114	3.747	4.297
102	.680	1.291	1.657	1.975	2.344	3.113	3.747	4.297
103	.680	1.291	1.657	1.975	2.344	3.113	3.747	4.297
104	.679	1.291	1.657	1.974	2.343	3.113	3.746	4.296
105	.679	1.291	1.657	1.974	2.343	3.113	3.746	4.296
106	.679	1.291	1.657	1.974	2.343	3.113	3.746	4.296
107	.679	1.291	1.657	1.974	2.343	3.112	3.746	4.295
108	.679	1.291	1.656	1.974	2.343	3.112	3.745	4.295
109	.679	1.291	1.656	1.974	2.343	3.112	3.745	4.295
110	.679	1.290	1.656	1.974	2.343	3.112	3.745	4.295
111	.679	1.290	1.656	1.973	2.342	3.112	3.745	4.294
112	.679	1.290	1.656	1.973	2.342	3.111	3.744	4.294
113	.679	1.290	1.656	1.973	2.342	3.111	3.744	4.294
114	.679	1.290	1.656	1.973	2.342	3.111	3.744	4.293
115	.679	1.290	1.656	1.973	2.342	3.111	3.744	4.293
116	.679	1.290	1.656	1.973	2.342	3.111	3.743	4.293
117	.679	1.290	1.656	1.973	2.342	3.110	3.743	4.293
118	.679	1.290	1.655	1.973	2.341	3.110	3.743	4.292
119	.679	1.290	1.655	1.973	2.341	3.110	3.743	4.292
120	.679	1.290	1.655	1.972	2.341	3.110	3.743	4.292
121	.679	1.290	1.655	1.972	2.341	3.110	3.742	4.292
122	.679	1.290	1.655	1.972	2.341	3.110	3.742	4.292
123	.679	1.289	1.655	1.972	2.341	3.109	3.742	4.291
124	.679	1.289	1.655	1.972	2.341	3.109	3.742	4.291
125	.679	1.289	1.655	1.972	2.341	3.109	3.742	4.291
126	.679	1.289	1.655	1.972	2.340	3.109	3.742	4.291
127	.679	1.289	1.655	1.972	2.340	3.109	3.741	4.290
128	.679	1.289	1.655	1.972	2.340	3.109	3.741	4.290
129	.678	1.289	1.655	1.972	2.340	3.108	3.741	4.290
130	.678	1.289	1.654	1.971	2.340	3.108	3.741	4.290
131	.678	1.289	1.654	1.971	2.340	3.108	3.741	4.290
132	.678	1.289	1.654	1.971	2.340	3.108	3.740	4.290
133	.678	1.289	1.654	1.971	2.340	3.108	3.740	4.289
134	.678	1.289	1.654	1.971	2.340	3.108	3.740	4.289
135	.678	1.289	1.654	1.971	2.339	3.108	3.740	4.289

3.7.1 Mean of a Noncentral $\left(\frac{t}{\sqrt{n}}\right)$-Distribution (Continued)

	P							
n	.75000	.90000	.95000	.97500	.99000	.99900	.99990	.99999
136	.678	1.289	1.654	1.971	2.339	3.108	3.740	4.289
137	.678	1.289	1.654	1.971	2.339	3.107	3.740	4.289
138	.678	1.289	1.654	1.971	2.339	3.107	3.740	4.288
139	.678	1.289	1.654	1.971	2.339	3.107	3.739	4.288
140	.678	1.289	1.654	1.971	2.339	3.107	3.739	4.288
141	.678	1.288	1.654	1.971	2.339	3.107	3.739	4.288
142	.678	1.288	1.654	1.970	2.339	3.107	3.739	4.288
143	.678	1.288	1.654	1.970	2.339	3.107	3.739	4.288
144	.678	1.288	1.654	1.970	2.339	3.107	3.739	4.287
145	.678	1.288	1.653	1.970	2.339	3.106	3.739	4.287
146	.678	1.288	1.653	1.970	2.338	3.106	3.738	4.287
147	.678	1.288	1.653	1.970	2.338	3.106	3.738	4.287
148	.678	1.288	1.653	1.970	2.338	3.106	3.738	4.287
149	.678	1.288	1.653	1.970	2.338	3.106	3.738	4.287
150	.678	1.288	1.653	1.970	2.338	3.106	3.738	4.287
151	.678	1.288	1.653	1.970	2.338	3.106	3.738	4.286
152	.678	1.288	1.653	1.970	2.338	3.106	3.738	4.286
153	.678	1.288	1.653	1.970	2.338	3.106	3.737	4.286
154	.678	1.288	1.653	1.970	2.338	3.105	3.737	4.286
155	.678	1.288	1.653	1.970	2.338	3.105	3.737	4.286
156	.678	1.288	1.653	1.970	2.338	3.105	3.737	4.286
157	.678	1.288	1.653	1.969	2.338	3.105	3.737	4.286
158	.678	1.288	1.653	1.969	2.338	3.105	3.737	4.285
159	.678	1.288	1.653	1.969	2.337	3.105	3.737	4.285
160	.678	1.288	1.653	1.969	2.337	3.105	3.737	4.285
161	.678	1.288	1.653	1.969	2.337	3.105	3.737	4.285
162	.678	1.288	1.653	1.969	2.337	3.105	3.736	4.285
163	.678	1.288	1.653	1.969	2.337	3.105	3.736	4.285
164	.678	1.287	1.652	1.969	2.337	3.105	3.736	4.285
165	.678	1.287	1.652	1.969	2.337	3.104	3.736	4.285
166	.678	1.287	1.652	1.969	2.337	3.104	3.736	4.284
167	.678	1.287	1.652	1.969	2.337	3.104	3.736	4.284
168	.678	1.287	1.652	1.969	2.337	3.104	3.736	4.284
169	.678	1.287	1.652	1.969	2.337	3.104	3.736	4.284
170	.678	1.287	1.652	1.969	2.337	3.104	3.736	4.284
171	.677	1.287	1.652	1.969	2.337	3.104	3.736	4.284
172	.677	1.287	1.652	1.969	2.337	3.104	3.735	4.284
173	.677	1.287	1.652	1.969	2.337	3.104	3.735	4.284
174	.677	1.287	1.652	1.969	2.336	3.104	3.735	4.283
175	.677	1.287	1.652	1.968	2.336	3.104	3.735	4.283
176	.677	1.287	1.652	1.968	2.336	3.104	3.735	4.283
177	.677	1.287	1.652	1.968	2.336	3.103	3.735	4.283
178	.677	1.287	1.652	1.968	2.336	3.103	3.735	4.283
179	.677	1.287	1.652	1.968	2.336	3.103	3.735	4.283
180	.677	1.287	1.652	1.968	2.336	3.103	3.735	4.283

3.7.1 Mean of a Noncentral $\left(\frac{t}{\sqrt{n}}\right)$-Distribution (Continued)

	P							
n	.75000	.90000	.95000	.97500	.99000	.99900	.99990	.99999
181	.677	1.287	1.652	1.968	2.336	3.103	3.735	4.283
182	.677	1.287	1.652	1.968	2.336	3.103	3.735	4.283
183	.677	1.287	1.652	1.968	2.336	3.103	3.734	4.283
184	.677	1.287	1.652	1.968	2.336	3.103	3.734	4.282
185	.677	1.287	1.652	1.968	2.336	3.103	3.734	4.282
186	.677	1.287	1.652	1.968	2.336	3.103	3.734	4.282
187	.677	1.287	1.652	1.968	2.336	3.103	3.734	4.282
188	.677	1.287	1.651	1.968	2.336	3.103	3.734	4.282
189	.677	1.287	1.651	1.968	2.336	3.103	3.734	4.282
190	.677	1.287	1.651	1.968	2.336	3.103	3.734	4.282
191	.677	1.287	1.651	1.968	2.336	3.102	3.734	4.282
192	.677	1.287	1.651	1.968	2.336	3.102	3.734	4.282
193	.677	1.287	1.651	1.968	2.335	3.102	3.734	4.282
194	.677	1.287	1.651	1.968	2.335	3.102	3.734	4.282
195	.677	1.287	1.651	1.968	2.335	3.102	3.733	4.281
196	.677	1.287	1.651	1.968	2.335	3.102	3.733	4.281
197	.677	1.286	1.651	1.968	2.335	3.102	3.733	4.281
198	.677	1.286	1.651	1.967	2.335	3.102	3.733	4.281
199	.677	1.286	1.651	1.967	2.335	3.102	3.733	4.281
200	.677	1.286	1.651	1.967	2.335	3.102	3.733	4.281
205	.677	1.286	1.651	1.967	2.335	3.102	3.733	4.281
210	.677	1.286	1.651	1.967	2.335	3.101	3.732	4.280
215	.677	1.286	1.651	1.967	2.335	3.101	3.732	4.280
220	.677	1.286	1.651	1.967	2.334	3.101	3.732	4.280
225	.677	1.286	1.650	1.967	2.334	3.101	3.732	4.279
230	.677	1.286	1.650	1.966	2.334	3.100	3.731	4.279
235	.677	1.286	1.650	1.966	2.334	3.100	3.731	4.279
240	.677	1.286	1.650	1.966	2.334	3.100	3.731	4.278
245	.677	1.286	1.650	1.966	2.334	3.100	3.730	4.278
250	.677	1.285	1.650	1.966	2.333	3.100	3.730	4.278
255	.676	1.285	1.650	1.966	2.333	3.099	3.730	4.278
260	.676	1.285	1.650	1.966	2.333	3.099	3.730	4.277
265	.676	1.285	1.650	1.966	2.333	3.099	3.730	4.277
270	.676	1.285	1.649	1.965	2.333	3.099	3.729	4.277
275	.676	1.285	1.649	1.965	2.333	3.099	3.729	4.277
280	.676	1.285	1.649	1.965	2.333	3.099	3.729	4.276
285	.676	1.285	1.649	1.965	2.333	3.098	3.729	4.276
290	.676	1.285	1.649	1.965	2.332	3.098	3.729	4.276
295	.676	1.285	1.649	1.965	2.332	3.098	3.729	4.276
300	.676	1.285	1.649	1.965	2.332	3.098	3.728	4.276
305	.676	1.285	1.649	1.965	2.332	3.098	3.728	4.275
310	.676	1.285	1.649	1.965	2.332	3.098	3.728	4.275
315	.676	1.285	1.649	1.965	2.332	3.098	3.728	4.275
320	.676	1.285	1.649	1.965	2.332	3.098	3.728	4.275
325	.676	1.285	1.649	1.965	2.332	3.097	3.728	4.275

3.7.1 Mean of a Noncentral $\left(\frac{t}{\sqrt{n}}\right)$-Distribution (Continued)

	P							
n	.75000	.90000	.95000	.97500	.99000	.99900	.99990	.99999
330	.676	1.284	1.649	1.964	2.332	3.097	3.728	4.275
335	.676	1.284	1.649	1.964	2.332	3.097	3.727	4.274
340	.676	1.284	1.649	1.964	2.332	3.097	3.727	4.274
345	.676	1.284	1.648	1.964	2.331	3.097	3.727	4.274
350	.676	1.284	1.648	1.964	2.331	3.097	3.727	4.274
355	.676	1.284	1.648	1.964	2.331	3.097	3.727	4.274
360	.676	1.284	1.648	1.964	2.331	3.097	3.727	4.274
365	.676	1.284	1.648	1.964	2.331	3.097	3.727	4.274
370	.676	1.284	1.648	1.964	2.331	3.097	3.727	4.274
375	.676	1.284	1.648	1.964	2.331	3.096	3.726	4.273
380	.676	1.284	1.648	1.964	2.331	3.096	3.726	4.273
385	.676	1.284	1.648	1.964	2.331	3.096	3.726	4.273
390	.676	1.284	1.648	1.964	2.331	3.096	3.726	4.273
395	.676	1.284	1.648	1.964	2.331	3.096	3.726	4.273
400	.676	1.284	1.648	1.964	2.331	3.096	3.726	4.273
425	.676	1.284	1.648	1.963	2.330	3.096	3.726	4.272
450	.676	1.284	1.648	1.963	2.330	3.095	3.725	4.272
475	.676	1.284	1.647	1.963	2.330	3.095	3.725	4.272
500	.676	1.283	1.647	1.963	2.330	3.095	3.725	4.271
525	.675	1.283	1.647	1.963	2.330	3.095	3.724	4.271
550	.675	1.283	1.647	1.963	2.330	3.094	3.724	4.271
575	.675	1.283	1.647	1.963	2.329	3.094	3.724	4.270
600	.675	1.283	1.647	1.962	2.329	3.094	3.724	4.270
625	.675	1.283	1.647	1.962	2.329	3.094	3.723	4.270
650	.675	1.283	1.647	1.962	2.329	3.094	3.723	4.270
675	.675	1.283	1.647	1.962	2.329	3.094	3.723	4.270
700	.675	1.283	1.647	1.962	2.329	3.094	3.723	4.269
725	.675	1.283	1.647	1.962	2.329	3.093	3.723	4.269
750	.675	1.283	1.647	1.962	2.329	3.093	3.723	4.269
775	.675	1.283	1.646	1.962	2.329	3.093	3.723	4.269
800	.675	1.283	1.646	1.962	2.329	3.093	3.723	4.269
825	.675	1.283	1.646	1.962	2.328	3.093	3.722	4.269
850	.675	1.283	1.646	1.962	2.328	3.093	3.722	4.269
875	.675	1.283	1.646	1.962	2.328	3.093	3.722	4.269
900	.675	1.283	1.646	1.962	2.328	3.093	3.722	4.268
925	.675	1.283	1.646	1.962	2.328	3.093	3.722	4.268
950	.675	1.283	1.646	1.962	2.328	3.093	3.722	4.268
975	.675	1.283	1.646	1.961	2.328	3.093	3.722	4.268
1000	.675	1.283	1.646	1.961	2.328	3.093	3.722	4.268
1500	.675	1.282	1.646	1.961	2.328	3.092	3.721	4.267
2000	.675	1.282	1.645	1.961	2.327	3.091	3.720	4.266
3000	.675	1.282	1.645	1.960	2.327	3.091	3.720	4.266
5000	.675	1.282	1.645	1.960	2.327	3.091	3.720	4.266
10000	.675	1.282	1.645	1.960	2.327	3.090	3.719	4.265
∞	.674	1.282	1.645	1.960	2.326	3.090	3.719	4.265

3.7.2 Standard Deviation of a Noncentral $\left(\frac{t}{\sqrt{n}}\right)$-Distribution

	P							
n	.75000	.90000	.95000	.97500	.99000	.99900	.99990	.99999
4	1.239	1.894	2.328	2.717	3.177	4.152	4.963	5.671
5	.976	1.548	1.920	2.251	2.641	3.464	4.147	4.743
6	.882	1.444	1.804	2.123	2.497	3.285	3.937	4.506
7	.834	1.397	1.754	2.069	2.437	3.212	3.854	4.412
8	.804	1.371	1.727	2.040	2.407	3.176	3.812	4.365
9	.784	1.354	1.710	2.023	2.388	3.155	3.788	4.338
10	.770	1.343	1.699	2.011	2.376	3.141	3.772	4.321
11	.759	1.334	1.691	2.003	2.368	3.132	3.762	4.310
12	.750	1.328	1.685	1.997	2.362	3.125	3.755	4.302
13	.743	1.323	1.681	1.993	2.357	3.120	3.749	4.296
14	.737	1.319	1.677	1.989	2.354	3.116	3.745	4.292
15	.732	1.316	1.674	1.986	2.351	3.113	3.742	4.288
16	.728	1.313	1.671	1.984	2.348	3.111	3.739	4.286
17	.724	1.311	1.669	1.982	2.347	3.109	3.737	4.283
18	.721	1.309	1.667	1.980	2.345	3.107	3.736	4.282
19	.718	1.307	1.666	1.979	2.343	3.106	3.734	4.280
20	.716	1.305	1.665	1.977	2.342	3.105	3.733	4.279
21	.714	1.304	1.663	1.976	2.341	3.103	3.732	4.278
22	.712	1.303	1.662	1.975	2.340	3.103	3.731	4.277
23	.710	1.302	1.661	1.975	2.339	3.102	3.730	4.276
24	.708	1.301	1.660	1.974	2.339	3.101	3.729	4.275
25	.707	1.300	1.660	1.973	2.338	3.100	3.729	4.274
26	.705	1.299	1.659	1.972	2.337	3.100	3.728	4.274
27	.704	1.298	1.658	1.972	2.337	3.099	3.728	4.273
28	.703	1.298	1.658	1.971	2.336	3.099	3.727	4.273
29	.702	1.297	1.657	1.971	2.336	3.098	3.727	4.272
30	.701	1.296	1.657	1.970	2.336	3.098	3.726	4.272
31	.700	1.296	1.656	1.970	2.335	3.098	3.726	4.272
32	.699	1.295	1.656	1.970	2.335	3.097	3.726	4.271
33	.698	1.295	1.656	1.969	2.335	3.097	3.725	4.271
34	.698	1.294	1.655	1.969	2.334	3.097	3.725	4.271
35	.697	1.294	1.655	1.969	2.334	3.097	3.725	4.271
36	.696	1.294	1.655	1.968	2.334	3.096	3.725	4.270
37	.696	1.293	1.654	1.968	2.333	3.096	3.724	4.270
38	.695	1.293	1.654	1.968	2.333	3.096	3.724	4.270
39	.695	1.293	1.654	1.968	2.333	3.096	3.724	4.270
40	.694	1.292	1.653	1.967	2.333	3.096	3.724	4.270
41	.693	1.292	1.653	1.967	2.333	3.095	3.724	4.269
42	.693	1.292	1.653	1.967	2.332	3.095	3.724	4.269
43	.693	1.291	1.653	1.967	2.332	3.095	3.723	4.269
44	.692	1.291	1.653	1.967	2.332	3.095	3.723	4.269
45	.692	1.291	1.652	1.966	2.332	3.095	3.723	4.269

3.7.2 Standard Deviation of a Noncentral $\left(\frac{t}{\sqrt{n}}\right)$-Distribution (Continued)

	P							
n	.75000	.90000	.95000	.97500	.99000	.99900	.99990	.99999
46	.691	1.291	1.652	1.966	2.332	3.095	3.723	4.269
47	.691	1.291	1.652	1.966	2.332	3.095	3.723	4.269
48	.691	1.290	1.652	1.966	2.332	3.095	3.723	4.268
49	.690	1.290	1.652	1.966	2.331	3.094	3.723	4.268
50	.690	1.290	1.652	1.966	2.331	3.094	3.723	4.268
51	.690	1.290	1.651	1.966	2.331	3.094	3.723	4.268
52	.689	1.290	1.651	1.965	2.331	3.094	3.722	4.268
53	.689	1.289	1.651	1.965	2.331	3.094	3.722	4.268
54	.689	1.289	1.651	1.965	2.331	3.094	3.722	4.268
55	.688	1.289	1.651	1.965	2.331	3.094	3.722	4.268
56	.688	1.289	1.651	1.965	2.331	3.094	3.722	4.268
57	.688	1.289	1.651	1.965	2.331	3.094	3.722	4.268
58	.688	1.289	1.651	1.965	2.331	3.094	3.722	4.268
59	.687	1.289	1.650	1.965	2.330	3.094	3.722	4.268
60	.687	1.288	1.650	1.965	2.330	3.093	3.722	4.268
61	.687	1.288	1.650	1.965	2.330	3.093	3.722	4.268
62	.687	1.288	1.650	1.964	2.330	3.093	3.722	4.267
63	.687	1.288	1.650	1.964	2.330	3.093	3.722	4.267
64	.686	1.288	1.650	1.964	2.330	3.093	3.722	4.267
65	.686	1.288	1.650	1.964	2.330	3.093	3.722	4.267
66	.686	1.288	1.650	1.964	2.330	3.093	3.722	4.267
67	.686	1.288	1.650	1.964	2.330	3.093	3.722	4.267
68	.686	1.288	1.650	1.964	2.330	3.093	3.721	4.267
69	.686	1.288	1.650	1.964	2.330	3.093	3.721	4.267
70	.685	1.287	1.650	1.964	2.330	3.093	3.721	4.267
71	.685	1.287	1.649	1.964	2.330	3.093	3.721	4.267
72	.685	1.287	1.649	1.964	2.330	3.093	3.721	4.267
73	.685	1.287	1.649	1.964	2.330	3.093	3.721	4.267
74	.685	1.287	1.649	1.964	2.330	3.093	3.721	4.267
75	.685	1.287	1.649	1.964	2.330	3.093	3.721	4.267
76	.684	1.287	1.649	1.964	2.329	3.093	3.721	4.267
77	.684	1.287	1.649	1.964	2.329	3.093	3.721	4.267
78	.684	1.287	1.649	1.963	2.329	3.093	3.721	4.267
79	.684	1.287	1.649	1.963	2.329	3.093	3.721	4.267
80	.684	1.287	1.649	1.963	2.329	3.093	3.721	4.267
81	.684	1.287	1.649	1.963	2.329	3.093	3.721	4.267
82	.684	1.287	1.649	1.963	2.329	3.093	3.721	4.267
83	.684	1.286	1.649	1.963	2.329	3.092	3.721	4.267
84	.684	1.286	1.649	1.963	2.329	3.092	3.721	4.267
85	.683	1.286	1.649	1.963	2.329	3.092	3.721	4.267
86	.683	1.286	1.649	1.963	2.329	3.092	3.721	4.267
87	.683	1.286	1.649	1.963	2.329	3.092	3.721	4.267
88	.683	1.286	1.648	1.963	2.329	3.092	3.721	4.267
89	.683	1.286	1.648	1.963	2.329	3.092	3.721	4.267
90	.683	1.286	1.648	1.963	2.329	3.092	3.721	4.267

3.7.2 Standard Deviation of a Noncentral $\left(\frac{t}{\sqrt{n}}\right)$-Distribution (Continued)

	P							
n	.75000	.90000	.95000	.97500	.99000	.99900	.99990	.99999
91	.683	1.286	1.648	1.963	2.329	3.092	3.721	4.266
92	.683	1.286	1.648	1.963	2.329	3.092	3.721	4.266
93	.683	1.286	1.648	1.963	2.329	3.092	3.721	4.266
94	.683	1.286	1.648	1.963	2.329	3.092	3.721	4.266
95	.682	1.286	1.648	1.963	2.329	3.092	3.721	4.266
96	.682	1.286	1.648	1.963	2.329	3.092	3.721	4.266
97	.682	1.286	1.648	1.963	2.329	3.092	3.721	4.266
98	.682	1.286	1.648	1.963	2.329	3.092	3.721	4.266
99	.682	1.286	1.648	1.963	2.329	3.092	3.721	4.266
100	.682	1.286	1.648	1.963	2.329	3.092	3.721	4.266
101	.682	1.286	1.648	1.963	2.329	3.092	3.721	4.266
102	.682	1.286	1.648	1.963	2.329	3.092	3.721	4.266
103	.682	1.285	1.648	1.963	2.329	3.092	3.721	4.266
104	.682	1.285	1.648	1.963	2.329	3.092	3.721	4.266
105	.682	1.285	1.648	1.963	2.329	3.092	3.720	4.266
106	.682	1.285	1.648	1.963	2.329	3.092	3.720	4.266
107	.682	1.285	1.648	1.962	2.329	3.092	3.720	4.266
108	.681	1.285	1.648	1.962	2.328	3.092	3.720	4.266
109	.681	1.285	1.648	1.962	2.328	3.092	3.720	4.266
110	.681	1.285	1.648	1.962	2.328	3.092	3.720	4.266
111	.681	1.285	1.648	1.962	2.328	3.092	3.720	4.266
112	.681	1.285	1.648	1.962	2.328	3.092	3.720	4.266
113	.681	1.285	1.648	1.962	2.328	3.092	3.720	4.266
114	.681	1.285	1.648	1.962	2.328	3.092	3.720	4.266
115	.681	1.285	1.648	1.962	2.328	3.092	3.720	4.266
116	.681	1.285	1.648	1.962	2.328	3.092	3.720	4.266
117	.681	1.285	1.648	1.962	2.328	3.092	3.720	4.266
118	.681	1.285	1.648	1.962	2.328	3.092	3.720	4.266
119	.681	1.285	1.648	1.962	2.328	3.092	3.720	4.266
120	.681	1.285	1.647	1.962	2.328	3.092	3.720	4.266
121	.681	1.285	1.647	1.962	2.328	3.092	3.720	4.266
122	.681	1.285	1.647	1.962	2.328	3.092	3.720	4.266
123	.681	1.285	1.647	1.962	2.328	3.092	3.720	4.266
124	.681	1.285	1.647	1.962	2.328	3.092	3.720	4.266
125	.681	1.285	1.647	1.962	2.328	3.092	3.720	4.266
126	.680	1.285	1.647	1.962	2.328	3.092	3.720	4.266
127	.680	1.285	1.647	1.962	2.328	3.092	3.720	4.266
128	.680	1.285	1.647	1.962	2.328	3.092	3.720	4.266
129	.680	1.285	1.647	1.962	2.328	3.092	3.720	4.266
130	.680	1.285	1.647	1.962	2.328	3.092	3.720	4.266
131	.680	1.285	1.647	1.962	2.328	3.092	3.720	4.266
132	.680	1.285	1.647	1.962	2.328	3.092	3.720	4.266
133	.680	1.285	1.647	1.962	2.328	3.092	3.720	4.266
134	.680	1.285	1.647	1.962	2.328	3.092	3.720	4.266
135	.680	1.285	1.647	1.962	2.328	3.092	3.720	4.266

3.7.2 Standard Deviation of a Noncentral $\left(\frac{t}{\sqrt{n}}\right)$-Distribution (Continued)

	P							
n	.75000	.90000	.95000	.97500	.99000	.99900	.99990	.99999
136	.680	1.284	1.647	1.962	2.328	3.092	3.720	4.266
137	.680	1.284	1.647	1.962	2.328	3.092	3.720	4.266
138	.680	1.284	1.647	1.962	2.328	3.092	3.720	4.266
139	.680	1.284	1.647	1.962	2.328	3.091	3.720	4.266
140	.680	1.284	1.647	1.962	2.328	3.091	3.720	4.266
141	.680	1.284	1.647	1.962	2.328	3.091	3.720	4.266
142	.680	1.284	1.647	1.962	2.328	3.091	3.720	4.266
143	.680	1.284	1.647	1.962	2.328	3.091	3.720	4.266
144	.680	1.284	1.647	1.962	2.328	3.091	3.720	4.266
145	.680	1.284	1.647	1.962	2.328	3.091	3.720	4.266
146	.680	1.284	1.647	1.962	2.328	3.091	3.720	4.266
147	.680	1.284	1.647	1.962	2.328	3.091	3.720	4.266
148	.680	1.284	1.647	1.962	2.328	3.091	3.720	4.266
149	.680	1.284	1.647	1.962	2.328	3.091	3.720	4.266
150	.679	1.284	1.647	1.962	2.328	3.091	3.720	4.266
151	.679	1.284	1.647	1.962	2.328	3.091	3.720	4.266
152	.679	1.284	1.647	1.962	2.328	3.091	3.720	4.266
153	.679	1.284	1.647	1.962	2.328	3.091	3.720	4.266
154	.679	1.284	1.647	1.962	2.328	3.091	3.720	4.266
155	.679	1.284	1.647	1.962	2.328	3.091	3.720	4.266
156	.679	1.284	1.647	1.962	2.328	3.091	3.720	4.266
157	.679	1.284	1.647	1.962	2.328	3.091	3.720	4.266
158	.679	1.284	1.647	1.962	2.328	3.091	3.720	4.266
159	.679	1.284	1.647	1.962	2.328	3.091	3.720	4.266
160	.679	1.284	1.647	1.962	2.328	3.091	3.720	4.266
161	.679	1.284	1.647	1.962	2.328	3.091	3.720	4.266
162	.679	1.284	1.647	1.962	2.328	3.091	3.720	4.266
163	.679	1.284	1.647	1.962	2.328	3.091	3.720	4.266
164	.679	1.284	1.647	1.962	2.328	3.091	3.720	4.266
165	.679	1.284	1.647	1.962	2.328	3.091	3.720	4.266
166	.679	1.284	1.647	1.962	2.328	3.091	3.720	4.266
167	.679	1.284	1.647	1.962	2.328	3.091	3.720	4.266
168	.679	1.284	1.647	1.962	2.328	3.091	3.720	4.266
169	.679	1.284	1.647	1.962	2.328	3.091	3.720	4.266
170	.679	1.284	1.647	1.962	2.328	3.091	3.720	4.266
171	.679	1.284	1.647	1.962	2.328	3.091	3.720	4.266
172	.679	1.284	1.647	1.961	2.328	3.091	3.720	4.266
173	.679	1.284	1.647	1.961	2.328	3.091	3.720	4.266
174	.679	1.284	1.647	1.961	2.328	3.091	3.720	4.266
175	.679	1.284	1.647	1.961	2.328	3.091	3.720	4.266
176	.679	1.284	1.647	1.961	2.328	3.091	3.720	4.266
177	.679	1.284	1.647	1.961	2.328	3.091	3.720	4.266
178	.679	1.284	1.647	1.961	2.328	3.091	3.720	4.266
179	.679	1.284	1.647	1.961	2.328	3.091	3.720	4.266
180	.679	1.284	1.647	1.961	2.328	3.091	3.720	4.266

3.7.2 Standard Deviation of a Noncentral $\left(\frac{t}{\sqrt{n}}\right)$-Distribution (Continued)

	P							
n	.75000	.90000	.95000	.97500	.99000	.99900	.99990	.99999
181	.679	1.284	1.647	1.961	2.328	3.091	3.720	4.266
182	.679	1.284	1.647	1.961	2.328	3.091	3.720	4.266
183	.679	1.284	1.647	1.961	2.328	3.091	3.720	4.266
184	.679	1.284	1.647	1.961	2.328	3.091	3.720	4.266
185	.679	1.284	1.647	1.961	2.328	3.091	3.720	4.266
186	.679	1.284	1.647	1.961	2.328	3.091	3.720	4.266
187	.678	1.284	1.647	1.961	2.328	3.091	3.720	4.266
188	.678	1.284	1.647	1.961	2.328	3.091	3.720	4.266
189	.678	1.284	1.647	1.961	2.328	3.091	3.720	4.266
190	.678	1.284	1.646	1.961	2.328	3.091	3.720	4.266
191	.678	1.284	1.646	1.961	2.328	3.091	3.720	4.266
192	.678	1.284	1.646	1.961	2.328	3.091	3.720	4.266
193	.678	1.284	1.646	1.961	2.328	3.091	3.720	4.266
194	.678	1.284	1.646	1.961	2.327	3.091	3.720	4.266
195	.678	1.284	1.646	1.961	2.327	3.091	3.720	4.266
196	.678	1.284	1.646	1.961	2.327	3.091	3.720	4.266
197	.678	1.284	1.646	1.961	2.327	3.091	3.720	4.266
198	.678	1.284	1.646	1.961	2.327	3.091	3.720	4.266
199	.678	1.284	1.646	1.961	2.327	3.091	3.720	4.266
200	.678	1.284	1.646	1.961	2.327	3.091	3.720	4.266
205	.678	1.283	1.646	1.961	2.327	3.091	3.720	4.266
210	.678	1.283	1.646	1.961	2.327	3.091	3.720	4.266
215	.678	1.283	1.646	1.961	2.327	3.091	3.720	4.265
220	.678	1.283	1.646	1.961	2.327	3.091	3.720	4.265
225	.678	1.283	1.646	1.961	2.327	3.091	3.720	4.265
230	.678	1.283	1.646	1.961	2.327	3.091	3.720	4.265
235	.678	1.283	1.646	1.961	2.327	3.091	3.720	4.265
240	.678	1.283	1.646	1.961	2.327	3.091	3.720	4.265
245	.678	1.283	1.646	1.961	2.327	3.091	3.720	4.265
250	.677	1.283	1.646	1.961	2.327	3.091	3.720	4.265
255	.677	1.283	1.646	1.961	2.327	3.091	3.720	4.265
260	.677	1.283	1.646	1.961	2.327	3.091	3.720	4.265
265	.677	1.283	1.646	1.961	2.327	3.091	3.720	4.265
270	.677	1.283	1.646	1.961	2.327	3.091	3.720	4.265
275	.677	1.283	1.646	1.961	2.327	3.091	3.720	4.265
280	.677	1.283	1.646	1.961	2.327	3.091	3.720	4.265
285	.677	1.283	1.646	1.961	2.327	3.091	3.720	4.265
290	.677	1.283	1.646	1.961	2.327	3.091	3.720	4.265
295	.677	1.283	1.646	1.961	2.327	3.091	3.719	4.265
300	.677	1.283	1.646	1.961	2.327	3.091	3.719	4.265
305	.677	1.283	1.646	1.961	2.327	3.091	3.719	4.265
310	.677	1.283	1.646	1.961	2.327	3.091	3.719	4.265
315	.677	1.283	1.646	1.961	2.327	3.091	3.719	4.265
320	.677	1.283	1.646	1.961	2.327	3.091	3.719	4.265
325	.677	1.283	1.646	1.961	2.327	3.091	3.719	4.265

3.7.2 Standard Deviation of a Noncentral $\left(\frac{t}{\sqrt{n}}\right)$-Distribution (Continued)

	P							
n	.75000	.90000	.95000	.97500	.99000	.99900	.99990	.99999
330	.677	1.283	1.646	1.961	2.327	3.091	3.719	4.265
335	.677	1.283	1.646	1.961	2.327	3.091	3.719	4.265
340	.677	1.283	1.646	1.961	2.327	3.091	3.719	4.265
345	.677	1.283	1.646	1.961	2.327	3.091	3.719	4.265
350	.677	1.283	1.646	1.961	2.327	3.091	3.719	4.265
355	.677	1.283	1.646	1.961	2.327	3.091	3.719	4.265
360	.677	1.283	1.646	1.961	2.327	3.091	3.719	4.265
365	.677	1.283	1.646	1.961	2.327	3.091	3.719	4.265
370	.677	1.283	1.646	1.961	2.327	3.091	3.719	4.265
375	.676	1.283	1.646	1.961	2.327	3.091	3.719	4.265
380	.676	1.283	1.646	1.961	2.327	3.091	3.719	4.265
385	.676	1.283	1.646	1.961	2.327	3.091	3.719	4.265
390	.676	1.283	1.646	1.961	2.327	3.091	3.719	4.265
395	.676	1.283	1.646	1.961	2.327	3.091	3.719	4.265
400	.676	1.283	1.646	1.961	2.327	3.091	3.719	4.265
425	.676	1.282	1.646	1.961	2.327	3.091	3.719	4.265
450	.676	1.282	1.646	1.961	2.327	3.091	3.719	4.265
475	.676	1.282	1.645	1.961	2.327	3.091	3.719	4.265
500	.676	1.282	1.645	1.960	2.327	3.091	3.719	4.265
525	.676	1.282	1.645	1.960	2.327	3.091	3.719	4.265
550	.676	1.282	1.645	1.960	2.327	3.091	3.719	4.265
575	.676	1.282	1.645	1.960	2.327	3.091	3.719	4.265
600	.676	1.282	1.645	1.960	2.327	3.091	3.719	4.265
625	.676	1.282	1.645	1.960	2.327	3.090	3.719	4.265
650	.676	1.282	1.645	1.960	2.327	3.090	3.719	4.265
675	.676	1.282	1.645	1.960	2.327	3.090	3.719	4.265
700	.676	1.282	1.645	1.960	2.327	3.090	3.719	4.265
725	.676	1.282	1.645	1.960	2.327	3.090	3.719	4.265
750	.675	1.282	1.645	1.960	2.327	3.090	3.719	4.265
775	.675	1.282	1.645	1.960	2.327	3.090	3.719	4.265
800	.675	1.282	1.645	1.960	2.327	3.090	3.719	4.265
825	.675	1.282	1.645	1.960	2.327	3.090	3.719	4.265
850	.675	1.282	1.645	1.960	2.327	3.090	3.719	4.265
875	.675	1.282	1.645	1.960	2.327	3.090	3.719	4.265
900	.675	1.282	1.645	1.960	2.327	3.090	3.719	4.265
925	.675	1.282	1.645	1.960	2.327	3.090	3.719	4.265
950	.675	1.282	1.645	1.960	2.327	3.090	3.719	4.265
975	.675	1.282	1.645	1.960	2.327	3.090	3.719	4.265
1000	.675	1.282	1.645	1.960	2.327	3.090	3.719	4.265
1500	.675	1.282	1.645	1.960	2.326	3.090	3.719	4.265
2000	.675	1.282	1.645	1.960	2.326	3.090	3.719	4.265
3000	.675	1.282	1.645	1.960	2.326	3.090	3.719	4.265
5000	.675	1.282	1.645	1.960	2.326	3.090	3.719	4.265
10000	.675	1.282	1.645	1.960	2.326	3.090	3.719	4.265
∞	.674	1.282	1.645	1.960	2.326	3.090	3.719	4.265

3.8 Moments of Noncentral t-Distribution

3.8.1 Mean of a Noncentral t-Distribution

	P							
n	.75000	.90000	.95000	.97500	.99000	.99900	.99990	.99999
3	2.071	3.934	5.050	6.017	7.142	9.487	11.417	13.093
4	1.864	3.542	4.546	5.417	6.430	8.541	10.279	11.788
5	1.890	3.592	4.610	5.493	6.520	8.660	10.423	11.952
6	1.965	3.734	4.792	5.710	6.778	9.003	10.835	12.426
7	2.054	3.903	5.010	5.970	7.086	9.413	11.328	12.990
8	2.148	4.081	5.238	6.241	7.408	9.841	11.843	13.581
9	2.242	4.259	5.466	6.514	7.731	10.270	12.360	14.174
10	2.334	4.435	5.692	6.782	8.050	10.693	12.869	14.758
11	2.424	4.606	5.912	7.045	8.362	11.107	13.367	15.329
12	2.512	4.774	6.127	7.301	8.666	11.511	13.853	15.887
13	2.598	4.937	6.337	7.550	8.962	11.905	14.327	16.430
14	2.682	5.096	6.540	7.793	9.250	12.288	14.788	16.959
15	2.763	5.251	6.739	8.030	9.531	12.661	15.237	17.474
16	2.843	5.402	6.933	8.261	9.805	13.025	15.675	17.976
17	2.920	5.549	7.122	8.486	10.073	13.380	16.103	18.466
18	2.996	5.693	7.307	8.706	10.334	13.727	16.520	18.945
19	3.070	5.833	7.487	8.921	10.589	14.066	16.928	19.412
20	3.142	5.971	7.663	9.131	10.838	14.397	17.327	19.870
21	3.213	6.105	7.836	9.337	11.082	14.721	17.717	20.317
22	3.283	6.237	8.005	9.539	11.322	15.039	18.099	20.756
23	3.350	6.366	8.171	9.736	11.556	15.351	18.474	21.186
24	3.417	6.493	8.333	9.930	11.786	15.656	18.842	21.607
25	3.483	6.617	8.493	10.120	12.012	15.956	19.203	22.021
26	3.547	6.739	8.650	10.307	12.233	16.250	19.557	22.428
27	3.610	6.859	8.804	10.490	12.451	16.540	19.905	22.827
28	3.672	6.977	8.955	10.671	12.666	16.824	20.248	23.220
29	3.733	7.093	9.104	10.848	12.876	17.104	20.585	23.606
30	3.793	7.208	9.251	11.023	13.084	17.380	20.916	23.986
31	3.853	7.320	9.395	11.195	13.288	17.651	21.243	24.361
32	3.911	7.431	9.538	11.365	13.489	17.919	21.565	24.730
33	3.969	7.540	9.678	11.532	13.688	18.182	21.882	25.093
34	4.025	7.648	9.816	11.697	13.883	18.442	22.194	25.452
35	4.081	7.754	9.953	11.859	14.076	18.698	22.503	25.806
36	4.136	7.859	10.087	12.020	14.266	18.951	22.807	26.155
37	4.191	7.963	10.220	12.178	14.454	19.200	23.107	26.499
38	4.245	8.065	10.351	12.334	14.640	19.447	23.404	26.839
39	4.298	8.166	10.481	12.488	14.823	19.690	23.697	27.175
40	4.350	8.265	10.609	12.641	15.004	19.931	23.986	27.506
41	4.402	8.364	10.735	12.791	15.183	20.168	24.272	27.834
42	4.453	8.461	10.860	12.940	15.359	20.403	24.554	28.158
43	4.504	8.558	10.984	13.088	15.534	20.635	24.834	28.479
44	4.554	8.653	11.106	13.233	15.707	20.865	25.110	28.796
45	4.604	8.747	11.227	13.377	15.878	21.092	25.383	29.109

	P							
n	.75000	.90000	.95000	.97500	.99000	.99900	.99990	.99999
46	4.653	8.840	11.346	13.520	16.047	21.317	25.654	29.419
47	4.701	8.932	11.465	13.661	16.215	21.539	25.922	29.726
48	4.749	9.024	11.582	13.801	16.380	21.759	26.187	30.030
49	4.797	9.114	11.698	13.939	16.545	21.977	26.449	30.331
50	4.844	9.204	11.813	14.076	16.707	22.193	26.709	30.629
51	4.891	9.292	11.927	14.211	16.868	22.407	26.966	30.924
52	4.937	9.380	12.039	14.346	17.027	22.619	27.221	31.216
53	4.983	9.467	12.151	14.479	17.185	22.828	27.473	31.506
54	5.028	9.553	12.262	14.611	17.342	23.036	27.724	31.793
55	5.073	9.639	12.371	14.741	17.497	23.242	27.972	32.077
56	5.118	9.724	12.480	14.871	17.651	23.447	28.217	32.359
57	5.162	9.808	12.588	14.999	17.803	23.649	28.461	32.639
58	5.206	9.891	12.695	15.127	17.954	23.850	28.703	32.916
59	5.249	9.973	12.801	15.253	18.104	24.049	28.942	33.191
60	5.292	10.055	12.906	15.378	18.253	24.247	29.180	33.463
61	5.335	10.137	13.010	15.503	18.400	24.443	29.416	33.734
62	5.377	10.217	13.114	15.626	18.547	24.637	29.650	34.002
63	5.419	10.297	13.216	15.748	18.692	24.830	29.882	34.268
64	5.461	10.377	13.318	15.870	18.836	25.021	30.112	34.532
65	5.503	10.455	13.419	15.990	18.979	25.211	30.341	34.794
66	5.544	10.533	13.520	16.110	19.121	25.400	30.568	35.054
67	5.585	10.611	13.619	16.228	19.262	25.587	30.793	35.313
68	5.625	10.688	13.718	16.346	19.402	25.772	31.017	35.569
69	5.665	10.765	13.816	16.463	19.541	25.957	31.238	35.824
70	5.705	10.841	13.914	16.579	19.678	26.140	31.459	36.076
71	5.745	10.916	14.011	16.695	19.815	26.322	31.678	36.327
72	5.785	10.991	14.107	16.809	19.951	26.503	31.895	36.577
73	5.824	11.065	14.202	16.923	20.086	26.682	32.111	36.824
74	5.863	11.139	14.297	17.036	20.221	26.860	32.326	37.070
75	5.901	11.213	14.391	17.148	20.354	27.037	32.539	37.315
76	5.940	11.286	14.485	17.260	20.486	27.213	32.750	37.557
77	5.978	11.358	14.578	17.371	20.618	27.388	32.961	37.799
78	6.016	11.430	14.670	17.481	20.749	27.562	33.170	38.038
79	6.053	11.502	14.762	17.590	20.879	27.734	33.377	38.277
80	6.091	11.573	14.854	17.699	21.008	27.906	33.584	38.513
81	6.128	11.644	14.944	17.807	21.136	28.076	33.789	38.749
82	6.165	11.714	15.034	17.915	21.264	28.246	33.993	38.982
83	6.202	11.784	15.124	18.022	21.390	28.414	34.196	39.215
84	6.238	11.853	15.213	18.128	21.516	28.582	34.397	39.446
85	6.275	11.922	15.302	18.233	21.642	28.748	34.598	39.676
86	6.311	11.991	15.390	18.338	21.766	28.914	34.797	39.904
87	6.347	12.059	15.478	18.443	21.890	29.078	34.995	40.131
88	6.382	12.127	15.565	18.547	22.013	29.242	35.192	40.357
89	6.418	12.194	15.651	18.650	22.136	29.405	35.388	40.582
90	6.453	12.262	15.738	18.752	22.258	29.566	35.583	40.805

	P							
n	.75000	.90000	.95000	.97500	.99000	.99900	.99990	.99999
91	6.488	12.328	15.823	18.854	22.379	29.727	35.776	41.027
92	6.523	12.395	15.908	18.956	22.500	29.888	35.969	41.248
93	6.558	12.461	15.993	19.057	22.619	30.047	36.161	41.468
94	6.593	12.526	16.078	19.158	22.739	30.205	36.351	41.687
95	6.627	12.592	16.161	19.257	22.857	30.363	36.541	41.904
96	6.661	12.657	16.245	19.357	22.975	30.520	36.730	42.121
97	6.695	12.722	16.328	19.456	23.093	30.676	36.917	42.336
98	6.729	12.786	16.410	19.554	23.210	30.831	37.104	42.550
99	6.763	12.850	16.493	19.652	23.326	30.985	37.290	42.763
100	6.797	12.914	16.574	19.750	23.442	31.139	37.475	42.975
101	6.830	12.977	16.656	19.847	23.557	31.292	37.659	43.186
102	6.863	13.040	16.737	19.943	23.671	31.444	37.842	43.396
103	6.896	13.103	16.817	20.039	23.785	31.595	38.024	43.605
104	6.929	13.165	16.898	20.135	23.899	31.746	38.206	43.813
105	6.962	13.228	16.978	20.230	24.012	31.896	38.386	44.020
106	6.994	13.290	17.057	20.325	24.124	32.045	38.566	44.227
107	7.027	13.351	17.136	20.419	24.236	32.194	38.745	44.432
108	7.059	13.413	17.215	20.513	24.347	32.342	38.923	44.636
109	7.091	13.474	17.293	20.606	24.458	32.489	39.100	44.839
110	7.123	13.534	17.371	20.699	24.568	32.636	39.276	45.041
111	7.155	13.595	17.449	20.792	24.678	32.782	39.452	45.243
112	7.187	13.655	17.526	20.884	24.788	32.927	39.627	45.443
113	7.218	13.715	17.603	20.976	24.897	33.072	39.801	45.643
114	7.250	13.775	17.680	21.067	25.005	33.216	39.974	45.842
115	7.281	13.834	17.756	21.158	25.113	33.359	40.147	46.040
116	7.312	13.894	17.832	21.248	25.220	33.502	40.319	46.237
117	7.343	13.953	17.908	21.339	25.327	33.644	40.490	46.433
118	7.374	14.011	17.983	21.428	25.434	33.786	40.660	46.628
119	7.405	14.070	18.058	21.518	25.540	33.927	40.830	46.823
120	7.436	14.128	18.133	21.607	25.646	34.067	40.999	47.017
121	7.466	14.186	18.207	21.696	25.751	34.207	41.167	47.210
122	7.497	14.244	18.282	21.784	25.856	34.346	41.335	47.402
123	7.527	14.301	18.355	21.872	25.960	34.485	41.502	47.593
124	7.557	14.359	18.429	21.959	26.064	34.623	41.668	47.784
125	7.587	14.416	18.502	22.047	26.168	34.761	41.833	47.974
126	7.617	14.472	18.575	22.134	26.271	34.898	41.998	48.163
127	7.647	14.529	18.648	22.220	26.374	35.034	42.163	48.351
128	7.676	14.585	18.720	22.306	26.476	35.170	42.326	48.539
129	7.706	14.642	18.792	22.392	26.578	35.306	42.489	48.726
130	7.735	14.698	18.864	22.478	26.680	35.441	42.652	48.912
131	7.765	14.753	18.936	22.563	26.781	35.575	42.814	49.098
132	7.794	14.809	19.007	22.648	26.882	35.709	42.975	49.283
133	7.823	14.864	19.078	22.733	26.982	35.842	43.135	49.467
134	7.852	14.919	19.149	22.817	27.082	35.975	43.295	49.650
135	7.881	14.974	19.219	22.901	27.182	36.108	43.455	49.833

	P							
n	.75000	.90000	.95000	.97500	.99000	.99900	.99990	.99999
136	7.910	15.029	19.290	22.985	27.282	36.240	43.614	50.015
137	7.939	15.084	19.360	23.068	27.381	36.371	43.772	50.197
138	7.967	15.138	19.429	23.151	27.479	36.502	43.930	50.377
139	7.996	15.192	19.499	23.234	27.577	36.633	44.087	50.558
140	8.024	15.246	19.568	23.317	27.675	36.763	44.243	50.737
141	8.052	15.300	19.637	23.399	27.773	36.893	44.399	50.916
142	8.081	15.353	19.706	23.481	27.870	37.022	44.555	51.094
143	8.109	15.407	19.774	23.562	27.967	37.150	44.710	51.272
144	8.137	15.460	19.843	23.644	28.064	37.279	44.864	51.449
145	8.165	15.513	19.911	23.725	28.160	37.407	45.018	51.626
146	8.192	15.566	19.978	23.806	28.256	37.534	45.171	51.801
147	8.220	15.618	20.046	23.886	28.351	37.661	45.324	51.977
148	8.248	15.671	20.113	23.967	28.447	37.787	45.476	52.151
149	8.275	15.723	20.180	24.047	28.542	37.914	45.628	52.325
150	8.303	15.775	20.247	24.126	28.636	38.039	45.779	52.499
151	8.330	15.827	20.314	24.206	28.731	38.165	45.930	52.672
152	8.357	15.879	20.381	24.285	28.825	38.289	46.080	52.844
153	8.384	15.931	20.447	24.364	28.918	38.414	46.230	53.016
154	8.412	15.982	20.513	24.443	29.012	38.538	46.380	53.187
155	8.439	16.033	20.579	24.521	29.105	38.662	46.528	53.358
156	8.465	16.085	20.644	24.599	29.198	38.785	46.677	53.528
157	8.492	16.136	20.710	24.677	29.290	38.908	46.825	53.698
158	8.519	16.186	20.775	24.755	29.382	39.030	46.972	53.867
159	8.546	16.237	20.840	24.832	29.474	39.153	47.119	54.035
160	8.572	16.287	20.905	24.910	29.566	39.274	47.266	54.203
161	8.599	16.338	20.969	24.986	29.657	39.396	47.412	54.371
162	8.625	16.388	21.034	25.063	29.748	39.517	47.557	54.538
163	8.651	16.438	21.098	25.140	29.839	39.637	47.702	54.704
164	8.678	16.488	21.162	25.216	29.930	39.758	47.847	54.870
165	8.704	16.538	21.226	25.292	30.020	39.877	47.991	55.036
166	8.730	16.587	21.289	25.368	30.110	39.997	48.135	55.201
167	8.756	16.637	21.353	25.443	30.200	40.116	48.279	55.365
168	8.782	16.686	21.416	25.519	30.289	40.235	48.422	55.529
169	8.808	16.735	21.479	25.594	30.378	40.353	48.564	55.693
170	8.834	16.784	21.542	25.669	30.467	40.472	48.707	55.856
171	8.859	16.833	21.605	25.744	30.556	40.589	48.848	56.018
172	8.885	16.882	21.667	25.818	30.644	40.707	48.990	56.180
173	8.910	16.930	21.730	25.892	30.733	40.824	49.131	56.342
174	8.936	16.979	21.792	25.966	30.820	40.941	49.271	56.503
175	8.961	17.027	21.854	26.040	30.908	41.057	49.411	56.664
176	8.987	17.075	21.916	26.114	30.996	41.173	49.551	56.824
177	9.012	17.123	21.977	26.187	31.083	41.289	49.690	56.984
178	9.037	17.171	22.039	26.261	31.170	41.405	49.829	57.143
179	9.062	17.219	22.100	26.334	31.256	41.520	49.968	57.302
180	9.087	17.266	22.161	26.406	31.343	41.635	50.106	57.461

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n	.75000	.90000	.95000	.97500	.99000	.99900	.99990	.99999
181	9.112	17.314	22.222	26.479	31.429	41.749	50.244	57.619
182	9.137	17.361	22.283	26.552	31.515	41.863	50.381	57.776
183	9.162	17.408	22.343	26.624	31.601	41.977	50.518	57.933
184	9.187	17.455	22.404	26.696	31.686	42.091	50.655	58.090
185	9.212	17.502	22.464	26.768	31.771	42.204	50.791	58.247
186	9.236	17.549	22.524	26.839	31.857	42.317	50.927	58.402
187	9.261	17.596	22.584	26.911	31.941	42.430	51.063	58.558
188	9.285	17.643	22.644	26.982	32.026	42.542	51.198	58.713
189	9.310	17.689	22.704	27.053	32.110	42.654	51.333	58.868
190	9.334	17.735	22.763	27.124	32.194	42.766	51.468	59.022
191	9.359	17.782	22.823	27.195	32.278	42.877	51.602	59.176
192	9.383	17.828	22.882	27.265	32.362	42.989	51.736	59.329
193	9.407	17.874	22.941	27.336	32.446	43.099	51.869	59.482
194	9.431	17.920	23.000	27.406	32.529	43.210	52.002	59.635
195	9.455	17.965	23.058	27.476	32.612	43.320	52.135	59.787
196	9.479	18.011	23.117	27.546	32.695	43.431	52.268	59.939
197	9.503	18.057	23.175	27.615	32.777	43.540	52.400	60.091
198	9.527	18.102	23.234	27.685	32.860	43.650	52.531	60.242
199	9.551	18.147	23.292	27.754	32.942	43.759	52.663	60.393
200	9.575	18.193	23.350	27.823	33.024	43.868	52.794	60.543
205	9.693	18.417	23.638	28.166	33.431	44.409	53.445	61.290
210	9.810	18.638	23.922	28.505	33.834	44.943	54.088	62.027
215	9.925	18.857	24.203	28.840	34.231	45.471	54.724	62.756
220	10.039	19.074	24.481	29.171	34.624	45.993	55.352	63.476
225	10.151	19.288	24.756	29.498	35.013	46.509	55.973	64.189
230	10.263	19.500	25.028	29.822	35.397	47.020	56.587	64.893
235	10.373	19.709	25.296	30.142	35.777	47.525	57.195	65.590
240	10.482	19.916	25.562	30.459	36.153	48.025	57.796	66.280
245	10.590	20.121	25.826	30.773	36.526	48.519	58.392	66.962
250	10.697	20.324	26.086	31.083	36.894	49.009	58.981	67.638
255	10.803	20.525	26.344	31.391	37.259	49.493	59.564	68.307
260	10.907	20.724	26.600	31.695	37.620	49.973	60.142	68.969
265	11.011	20.922	26.853	31.997	37.978	50.449	60.714	69.625
270	11.114	21.117	27.103	32.296	38.333	50.920	61.281	70.275
275	11.216	21.311	27.352	32.592	38.684	51.387	61.842	70.920
280	11.317	21.502	27.598	32.885	39.032	51.849	62.399	71.558
285	11.417	21.692	27.842	33.176	39.377	52.307	62.951	72.190
290	11.516	21.881	28.084	33.464	39.719	52.762	63.498	72.818
295	11.614	22.068	28.324	33.750	40.059	53.212	64.040	73.439
300	11.712	22.253	28.561	34.033	40.395	53.659	64.577	74.056
305	11.809	22.437	28.797	34.314	40.728	54.102	65.111	74.667
310	11.905	22.619	29.031	34.593	41.059	54.542	65.640	75.274
315	12.000	22.800	29.263	34.869	41.388	54.978	66.164	75.876
320	12.094	22.979	29.493	35.144	41.713	55.410	66.685	76.473
325	12.188	23.157	29.722	35.416	42.036	55.839	67.201	77.065

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n	.75000	.90000	.95000	.97500	.99000	.99900	.99990	.99999
330	12.281	23.334	29.949	35.686	42.357	56.265	67.714	77.653
335	12.373	23.509	30.174	35.954	42.675	56.688	68.223	78.236
340	12.465	23.683	30.397	36.220	42.991	57.108	68.727	78.815
345	12.555	23.856	30.619	36.484	43.304	57.524	69.229	79.390
350	12.646	24.027	30.839	36.747	43.616	57.938	69.726	79.961
355	12.735	24.198	31.057	37.007	43.925	58.348	70.221	80.527
360	12.824	24.367	31.274	37.266	44.232	58.756	70.711	81.090
365	12.913	24.535	31.490	37.522	44.537	59.161	71.199	81.649
370	13.001	24.701	31.704	37.778	44.839	59.563	71.683	82.204
375	13.088	24.867	31.917	38.031	45.140	59.962	72.163	82.755
380	13.174	25.032	32.128	38.283	45.439	60.359	72.641	83.303
385	13.260	25.195	32.338	38.533	45.736	60.753	73.115	83.847
390	13.346	25.358	32.546	38.781	46.031	61.145	73.587	84.388
395	13.431	25.519	32.753	39.028	46.323	61.534	74.055	84.925
400	13.515	25.679	32.959	39.273	46.615	61.921	74.521	85.459
425	13.930	26.467	33.970	40.477	48.044	63.820	76.805	88.079
450	14.332	27.231	34.951	41.647	49.432	65.663	79.024	90.623
475	14.723	27.975	35.906	42.784	50.782	67.457	81.183	93.099
500	15.105	28.700	36.835	43.892	52.097	69.204	83.285	95.509
525	15.477	29.406	37.742	44.973	53.380	70.908	85.336	97.861
550	15.840	30.096	38.628	46.028	54.632	72.572	87.338	100.157
575	16.195	30.771	39.494	47.060	55.857	74.198	89.296	102.402
600	16.542	31.431	40.341	48.069	57.055	75.790	91.211	104.599
625	16.883	32.077	41.171	49.058	58.229	77.349	93.087	106.751
650	17.216	32.711	41.984	50.027	59.379	78.877	94.926	108.860
675	17.543	33.333	42.782	50.978	60.508	80.376	96.731	110.929
700	17.864	33.943	43.565	51.911	61.616	81.848	98.502	112.960
725	18.180	34.543	44.335	52.828	62.704	83.293	100.241	114.955
750	18.490	35.132	45.091	53.730	63.774	84.714	101.952	116.916
775	18.795	35.712	45.835	54.616	64.826	86.112	103.634	118.845
800	19.095	36.282	46.567	55.488	65.861	87.487	105.289	120.743
825	19.391	36.843	47.288	56.347	66.880	88.841	106.918	122.611
850	19.682	37.396	47.998	57.193	67.884	90.175	108.523	124.452
875	19.969	37.941	48.697	58.026	68.873	91.489	110.105	126.266
900	20.252	38.479	49.387	58.848	69.849	92.784	111.664	128.054
925	20.530	39.009	50.067	59.658	70.811	94.062	113.201	129.817
950	20.806	39.531	50.738	60.458	71.760	95.323	114.718	131.557
975	21.077	40.047	51.400	61.247	72.696	96.567	116.216	133.274
1000	21.345	40.557	52.054	62.026	73.621	97.795	117.694	134.969
1500	26.136	49.659	63.737	75.947	90.144	119.744	144.109	165.261
2000	30.175	57.334	73.588	87.685	104.077	138.251	166.382	190.803
3000	36.953	70.211	90.115	107.378	127.451	169.301	203.750	233.656
5000	47.701	90.633	116.326	138.611	164.522	218.545	263.013	301.618
10000	67.454	128.165	164.498	196.011	232.652	309.047	371.930	426.521

3.8.2 Standard Deviation of a Noncentral t-Distribution

	P							
n	.75000	.90000	.95000	.97500	.99000	.99900	.99990	.99999
4	2.478	3.787	4.657	5.434	6.355	8.304	9.926	11.342
5	2.182	3.460	4.293	5.033	5.905	7.746	9.273	10.605
6	2.161	3.538	4.420	5.200	6.116	8.046	9.645	11.036
7	2.207	3.697	4.641	5.473	6.449	8.499	10.196	11.672
8	2.275	3.878	4.885	5.770	6.807	8.983	10.781	12.346
9	2.353	4.063	5.131	6.068	7.165	9.464	11.363	13.015
10	2.434	4.246	5.373	6.360	7.514	9.933	11.929	13.666
11	2.516	4.426	5.609	6.644	7.854	10.387	12.478	14.295
12	2.597	4.601	5.838	6.919	8.182	10.825	13.007	14.903
13	2.678	4.771	6.059	7.185	8.499	11.250	13.519	15.491
14	2.757	4.936	6.274	7.443	8.807	11.660	14.014	16.059
15	2.835	5.096	6.483	7.693	9.105	12.057	14.493	16.609
16	2.911	5.252	6.685	7.936	9.394	12.443	14.958	17.143
17	2.986	5.404	6.882	8.172	9.675	12.818	15.409	17.661
18	3.059	5.552	7.074	8.401	9.949	13.182	15.849	18.165
19	3.131	5.696	7.261	8.625	10.215	13.537	16.277	18.656
20	3.201	5.838	7.444	8.844	10.475	13.884	16.694	19.135
21	3.270	5.975	7.622	9.057	10.729	14.222	17.101	19.602
22	3.338	6.110	7.797	9.265	10.977	14.552	17.499	20.059
23	3.404	6.242	7.968	9.470	11.220	14.876	17.889	20.506
24	3.470	6.372	8.135	9.669	11.457	15.192	18.270	20.943
25	3.534	6.499	8.299	9.865	11.690	15.502	18.643	21.372
26	3.597	6.623	8.459	10.057	11.919	15.806	19.010	21.792
27	3.659	6.746	8.617	10.246	12.143	16.105	19.369	22.204
28	3.720	6.866	8.772	10.431	12.363	16.398	19.722	22.609
29	3.780	6.984	8.925	10.613	12.580	16.686	20.069	23.007
30	3.839	7.100	9.075	10.792	12.793	16.969	20.410	23.399
31	3.898	7.215	9.222	10.968	13.002	17.248	20.746	23.783
32	3.955	7.327	9.367	11.142	13.208	17.522	21.076	24.162
33	4.012	7.438	9.510	11.313	13.411	17.792	21.401	24.535
34	4.068	7.547	9.651	11.481	13.611	18.058	21.721	24.903
35	4.123	7.655	9.790	11.647	13.808	18.320	22.037	25.265
36	4.178	7.761	9.927	11.810	14.002	18.578	22.348	25.622
37	4.232	7.866	10.062	11.971	14.194	18.833	22.655	25.974
38	4.285	7.970	10.196	12.131	14.383	19.085	22.958	26.321
39	4.337	8.072	10.327	12.288	14.570	19.333	23.257	26.664
40	4.389	8.173	10.457	12.443	14.754	19.578	23.552	27.003
41	4.440	8.273	10.586	12.596	14.936	19.821	23.844	27.337
42	4.491	8.371	10.713	12.747	15.116	20.060	24.132	27.668
43	4.541	8.469	10.838	12.897	15.294	20.296	24.416	27.994
44	4.591	8.565	10.962	13.045	15.470	20.530	24.698	28.317
45	4.640	8.660	11.084	13.191	15.644	20.761	24.976	28.636

3.8.2 Standard Deviation of a Noncentral t-Distribution (Continued)

	P							
n	.75000	.90000	.95000	.97500	.99000	.99900	.99990	.99999
46	4.689	8.754	11.206	13.336	15.815	20.990	25.251	28.952
47	4.737	8.847	11.326	13.479	15.985	21.216	25.523	29.264
48	4.785	8.940	11.444	13.621	16.154	21.439	25.793	29.573
49	4.832	9.031	11.562	13.761	16.320	21.661	26.059	29.879
50	4.878	9.121	11.678	13.900	16.485	21.880	26.323	30.181
51	4.925	9.211	11.793	14.037	16.648	22.097	26.584	30.481
52	4.971	9.299	11.907	14.173	16.810	22.312	26.843	30.778
53	5.016	9.387	12.020	14.308	16.970	22.525	27.099	31.072
54	5.061	9.474	12.132	14.442	17.129	22.736	27.353	31.363
55	5.106	9.560	12.243	14.574	17.286	22.945	27.605	31.651
56	5.150	9.646	12.353	14.705	17.442	23.152	27.854	31.937
57	5.194	9.731	12.462	14.835	17.596	23.357	28.101	32.221
58	5.237	9.815	12.570	14.964	17.749	23.560	28.346	32.502
59	5.281	9.898	12.677	15.092	17.901	23.762	28.589	32.780
60	5.323	9.980	12.783	15.218	18.051	23.962	28.830	33.056
61	5.366	10.062	12.889	15.344	18.200	24.160	29.069	33.330
62	5.408	10.143	12.993	15.468	18.348	24.357	29.305	33.602
63	5.450	10.224	13.097	15.592	18.495	24.552	29.540	33.871
64	5.491	10.304	13.200	15.715	18.641	24.746	29.773	34.139
65	5.533	10.383	13.302	15.836	18.786	24.938	30.005	34.404
66	5.574	10.462	13.403	15.957	18.929	25.129	30.234	34.667
67	5.614	10.540	13.504	16.077	19.071	25.318	30.462	34.929
68	5.655	10.618	13.603	16.196	19.213	25.506	30.688	35.188
69	5.695	10.695	13.702	16.314	19.353	25.692	30.913	35.445
70	5.734	10.771	13.801	16.431	19.492	25.878	31.136	35.701
71	5.774	10.847	13.898	16.548	19.631	26.061	31.357	35.955
72	5.813	10.923	13.995	16.663	19.768	26.244	31.577	36.207
73	5.852	10.998	14.092	16.778	19.904	26.425	31.795	36.457
74	5.891	11.072	14.187	16.892	20.040	26.605	32.011	36.706
75	5.929	11.146	14.282	17.006	20.174	26.784	32.227	36.952
76	5.967	11.219	14.377	17.118	20.308	26.962	32.441	37.198
77	6.005	11.292	14.470	17.230	20.441	27.138	32.653	37.441
78	6.043	11.365	14.564	17.341	20.573	27.313	32.864	37.683
79	6.081	11.437	14.656	17.451	20.704	27.488	33.074	37.924
80	6.118	11.508	14.748	17.561	20.834	27.661	33.282	38.163
81	6.155	11.579	14.839	17.670	20.963	27.833	33.489	38.401
82	6.192	11.650	14.930	17.779	21.092	28.004	33.695	38.637
83	6.228	11.720	15.021	17.886	21.220	28.174	33.900	38.871
84	6.265	11.790	15.110	17.993	21.347	28.343	34.103	39.104
85	6.301	11.859	15.200	18.100	21.473	28.511	34.305	39.336
86	6.337	11.928	15.288	18.205	21.599	28.678	34.506	39.567
87	6.373	11.997	15.377	18.311	21.724	28.844	34.706	39.796
88	6.408	12.065	15.464	18.415	21.848	29.009	34.905	40.024
89	6.443	12.133	15.551	18.519	21.971	29.173	35.102	40.250
90	6.479	12.201	15.638	18.623	22.094	29.336	35.299	40.476

3.8.2 Standard Deviation of a Noncentral t-Distribution (Continued)

	P							
n	.75000	.90000	.95000	.97500	.99000	.99900	.99990	.99999
91	6.514	12.268	15.724	18.725	22.216	29.498	35.494	40.700
92	6.548	12.335	15.810	18.828	22.338	29.660	35.688	40.922
93	6.583	12.401	15.896	18.929	22.459	29.820	35.881	41.144
94	6.617	12.467	15.980	19.031	22.579	29.980	36.074	41.364
95	6.652	12.533	16.065	19.131	22.698	30.139	36.265	41.584
96	6.686	12.598	16.149	19.231	22.817	30.297	36.455	41.802
97	6.720	12.663	16.232	19.331	22.935	30.454	36.644	42.019
98	6.753	12.728	16.315	19.430	23.053	30.610	36.832	42.235
99	6.787	12.792	16.398	19.529	23.170	30.766	37.020	42.449
100	6.820	12.856	16.480	19.627	23.287	30.920	37.206	42.663
101	6.854	12.920	16.562	19.724	23.403	31.074	37.391	42.876
102	6.887	12.983	16.644	19.821	23.518	31.228	37.576	43.087
103	6.920	13.046	16.725	19.918	23.633	31.380	37.759	43.298
104	6.953	13.109	16.805	20.014	23.747	31.532	37.942	43.507
105	6.985	13.171	16.886	20.110	23.860	31.683	38.124	43.716
106	7.018	13.234	16.966	20.205	23.974	31.833	38.305	43.923
107	7.050	13.295	17.045	20.300	24.086	31.983	38.485	44.130
108	7.082	13.357	17.124	20.394	24.198	32.132	38.664	44.336
109	7.114	13.418	17.203	20.488	24.310	32.280	38.843	44.540
110	7.146	13.479	17.282	20.582	24.421	32.428	39.020	44.744
111	7.178	13.540	17.360	20.675	24.531	32.575	39.197	44.947
112	7.209	13.601	17.437	20.768	24.641	32.721	39.373	45.149
113	7.241	13.661	17.515	20.860	24.751	32.866	39.548	45.349
114	7.272	13.721	17.592	20.952	24.860	33.011	39.723	45.550
115	7.303	13.781	17.669	21.043	24.969	33.156	39.896	45.749
116	7.334	13.840	17.745	21.134	25.077	33.299	40.069	45.947
117	7.365	13.899	17.821	21.225	25.184	33.442	40.242	46.145
118	7.396	13.958	17.897	21.315	25.292	33.585	40.413	46.341
119	7.427	14.017	17.972	21.405	25.398	33.727	40.584	46.537
120	7.457	14.075	18.047	21.495	25.505	33.868	40.754	46.732
121	7.488	14.134	18.122	21.584	25.611	34.009	40.923	46.926
122	7.518	14.192	18.197	21.673	25.716	34.149	41.092	47.120
123	7.548	14.249	18.271	21.761	25.821	34.288	41.260	47.312
124	7.578	14.307	18.345	21.849	25.926	34.427	41.427	47.504
125	7.608	14.364	18.418	21.937	26.030	34.566	41.593	47.695
126	7.638	14.421	18.492	22.024	26.134	34.704	41.759	47.885
127	7.668	14.478	18.565	22.111	26.237	34.841	41.925	48.075
128	7.698	14.535	18.637	22.198	26.340	34.978	42.089	48.264
129	7.727	14.591	18.710	22.284	26.442	35.114	42.253	48.452
130	7.756	14.647	18.782	22.370	26.544	35.250	42.417	48.639
131	7.786	14.703	18.854	22.456	26.646	35.385	42.579	48.826
132	7.815	14.759	18.925	22.541	26.747	35.519	42.741	49.012
133	7.844	14.814	18.997	22.627	26.848	35.654	42.903	49.197
134	7.873	14.870	19.068	22.711	26.949	35.787	43.064	49.381
135	7.902	14.925	19.139	22.796	27.049	35.920	43.224	49.565

3.8.2 Standard Deviation of a Noncentral t-Distribution (Continued)

	P							
n	.75000	.90000	.95000	.97500	.99000	.99900	.99990	.99999
136	7.930	14.980	19.209	22.880	27.149	36.053	43.384	49.748
137	7.959	15.034	19.279	22.964	27.249	36.185	43.543	49.931
138	7.987	15.089	19.349	23.047	27.348	36.317	43.701	50.113
139	8.016	15.143	19.419	23.130	27.446	36.448	43.859	50.294
140	8.044	15.197	19.489	23.213	27.545	36.579	44.017	50.474
141	8.072	15.251	19.558	23.296	27.643	36.709	44.174	50.654
142	8.101	15.305	19.627	23.378	27.741	36.839	44.330	50.833
143	8.129	15.359	19.696	23.460	27.838	36.968	44.486	51.012
144	8.156	15.412	19.764	23.542	27.935	37.097	44.641	51.190
145	8.184	15.465	19.833	23.623	28.032	37.226	44.795	51.367
146	8.212	15.518	19.901	23.704	28.128	37.354	44.949	51.544
147	8.240	15.571	19.969	23.785	28.224	37.482	45.103	51.720
148	8.267	15.624	20.036	23.866	28.320	37.609	45.256	51.896
149	8.295	15.676	20.104	23.946	28.415	37.735	45.409	52.071
150	8.322	15.728	20.171	24.026	28.510	37.862	45.561	52.245
151	8.349	15.780	20.238	24.106	28.605	37.988	45.712	52.419
152	8.377	15.832	20.305	24.186	28.699	38.113	45.863	52.592
153	8.404	15.884	20.371	24.265	28.794	38.238	46.014	52.765
154	8.431	15.936	20.437	24.344	28.887	38.363	46.164	52.937
155	8.458	15.987	20.503	24.423	28.981	38.487	46.313	53.108
156	8.484	16.039	20.569	24.501	29.074	38.611	46.462	53.279
157	8.511	16.090	20.635	24.579	29.167	38.734	46.611	53.450
158	8.538	16.141	20.700	24.657	29.260	38.857	46.759	53.619
159	8.565	16.191	20.766	24.735	29.352	38.980	46.907	53.789
160	8.591	16.242	20.831	24.813	29.444	39.102	47.054	53.958
161	8.617	16.292	20.896	24.890	29.536	39.224	47.201	54.126
162	8.644	16.343	20.960	24.967	29.627	39.346	47.347	54.294
163	8.670	16.393	21.025	25.044	29.718	39.467	47.493	54.461
164	8.696	16.443	21.089	25.120	29.809	39.588	47.638	54.628
165	8.722	16.493	21.153	25.197	29.900	39.708	47.783	54.794
166	8.748	16.543	21.217	25.273	29.990	39.828	47.928	54.960
167	8.774	16.592	21.280	25.349	30.080	39.948	48.072	55.125
168	8.800	16.642	21.344	25.424	30.170	40.067	48.215	55.289
169	8.826	16.691	21.407	25.500	30.260	40.186	48.359	55.454
170	8.852	16.740	21.470	25.575	30.349	40.305	48.501	55.617
171	8.877	16.789	21.533	25.650	30.438	40.423	48.644	55.781
172	8.903	16.838	21.596	25.725	30.527	40.541	48.786	55.944
173	8.929	16.886	21.658	25.799	30.615	40.659	48.927	56.106
174	8.954	16.935	21.721	25.874	30.704	40.776	49.068	56.268
175	8.979	16.983	21.783	25.948	30.792	40.893	49.209	56.429
176	9.005	17.032	21.845	26.022	30.879	41.010	49.349	56.590
177	9.030	17.080	21.907	26.095	30.967	41.126	49.489	56.751
178	9.055	17.128	21.968	26.169	31.054	41.242	49.629	56.911
179	9.080	17.176	22.030	26.242	31.141	41.357	49.768	57.070
180	9.105	17.223	22.091	26.315	31.228	41.473	49.907	57.229

3.8.2 Standard Deviation of a Noncentral t-Distribution (Continued)

	P							
n	.75000	.90000	.95000	.97500	.99000	.99900	.99990	.99999
181	9.130	17.271	22.152	26.388	31.314	41.588	50.045	57.388
182	9.155	17.319	22.213	26.461	31.401	41.702	50.183	57.546
183	9.180	17.366	22.274	26.533	31.487	41.817	50.321	57.704
184	9.204	17.413	22.335	26.606	31.573	41.931	50.458	57.861
185	9.229	17.460	22.395	26.678	31.658	42.044	50.595	58.018
186	9.254	17.507	22.456	26.750	31.744	42.158	50.731	58.175
187	9.278	17.554	22.516	26.821	31.829	42.271	50.867	58.331
188	9.303	17.601	22.576	26.893	31.914	42.384	51.003	58.487
189	9.327	17.647	22.636	26.964	31.998	42.496	51.139	58.642
190	9.352	17.694	22.695	27.035	32.083	42.608	51.274	58.797
191	9.376	17.740	22.755	27.106	32.167	42.720	51.408	58.951
192	9.400	17.786	22.814	27.177	32.251	42.832	51.543	59.105
193	9.424	17.832	22.873	27.248	32.335	42.943	51.677	59.259
194	9.448	17.878	22.933	27.318	32.418	43.054	51.810	59.412
195	9.472	17.924	22.991	27.388	32.502	43.165	51.944	59.565
196	9.496	17.970	23.050	27.458	32.585	43.276	52.077	59.718
197	9.520	18.016	23.109	27.528	32.668	43.386	52.209	59.870
198	9.544	18.061	23.167	27.598	32.750	43.496	52.342	60.022
199	9.568	18.107	23.226	27.667	32.833	43.605	52.473	60.173
200	9.592	18.152	23.284	27.737	32.915	43.715	52.605	60.324
205	9.709	18.377	23.572	28.081	33.324	44.257	53.258	61.073
210	9.826	18.599	23.858	28.421	33.727	44.794	53.904	61.813
215	9.941	18.818	24.139	28.757	34.126	45.323	54.541	62.544
220	10.055	19.035	24.418	29.089	34.520	45.847	55.172	63.267
225	10.167	19.250	24.693	29.417	34.910	46.365	55.795	63.982
230	10.278	19.462	24.966	29.742	35.295	46.877	56.411	64.689
235	10.388	19.672	25.235	30.063	35.677	47.383	57.021	65.388
240	10.497	19.879	25.502	30.381	36.054	47.885	57.624	66.080
245	10.605	20.085	25.766	30.695	36.427	48.381	58.221	66.764
250	10.712	20.288	26.027	31.006	36.797	48.872	58.812	67.442
255	10.818	20.490	26.286	31.314	37.163	49.358	59.397	68.113
260	10.922	20.689	26.542	31.620	37.525	49.839	59.976	68.777
265	11.026	20.886	26.795	31.922	37.884	50.316	60.550	69.435
270	11.128	21.082	27.047	32.221	38.239	50.788	61.118	70.087
275	11.230	21.276	27.295	32.518	38.591	51.256	61.681	70.733
280	11.331	21.468	27.542	32.812	38.940	51.720	62.240	71.373
285	11.431	21.658	27.787	33.103	39.286	52.179	62.793	72.007
290	11.530	21.847	28.029	33.392	39.629	52.635	63.341	72.636
295	11.628	22.034	28.269	33.679	39.969	53.086	63.884	73.259
300	11.726	22.220	28.508	33.963	40.306	53.534	64.423	73.877
305	11.822	22.404	28.744	34.244	40.641	53.978	64.958	74.490
310	11.918	22.586	28.978	34.523	40.972	54.419	65.488	75.098
315	12.013	22.768	29.211	34.801	41.301	54.856	66.014	75.701
320	12.107	22.947	29.441	35.075	41.627	55.289	66.536	76.300
325	12.201	23.125	29.670	35.348	41.951	55.719	67.053	76.893

3.8.2 Standard Deviation of a Noncentral t-Distribution (Continued)

	P							
n	.75000	.90000	.95000	.97500	.99000	.99900	.99990	.99999
330	12.294	23.302	29.897	35.619	42.272	56.146	67.567	77.482
335	12.386	23.478	30.123	35.887	42.591	56.570	68.077	78.067
340	12.477	23.652	30.346	36.154	42.908	56.990	68.583	78.647
345	12.568	23.825	30.568	36.419	43.222	57.408	69.085	79.224
350	12.658	23.997	30.789	36.681	43.534	57.822	69.584	79.795
355	12.748	24.167	31.008	36.942	43.843	58.233	70.079	80.363
360	12.837	24.336	31.225	37.201	44.151	58.642	70.571	80.927
365	12.925	24.505	31.441	37.459	44.456	59.048	71.059	81.487
370	13.013	24.672	31.655	37.714	44.760	59.450	71.544	82.043
375	13.100	24.837	31.868	37.968	45.061	59.851	72.026	82.596
380	13.186	25.002	32.080	38.220	45.360	60.248	72.504	83.144
385	13.272	25.166	32.290	38.470	45.657	60.643	72.980	83.689
390	13.358	25.329	32.499	38.719	45.953	61.036	73.452	84.231
395	13.443	25.490	32.706	38.967	46.246	61.426	73.921	84.769
400	13.527	25.651	32.912	39.212	46.538	61.813	74.387	85.304
425	13.941	26.439	33.924	40.418	47.969	63.715	76.676	87.929
450	14.343	27.204	34.907	41.589	49.360	65.562	78.899	90.478
475	14.734	27.949	35.863	42.728	50.712	67.358	81.060	92.957
500	15.115	28.674	36.794	43.838	52.028	69.107	83.166	95.371
525	15.487	29.381	37.702	44.920	53.313	70.813	85.219	97.726
550	15.850	30.072	38.588	45.976	54.567	72.479	87.225	100.026
575	16.205	30.747	39.455	47.009	55.793	74.108	89.185	102.274
600	16.552	31.407	40.303	48.020	56.993	75.702	91.103	104.473
625	16.892	32.054	41.134	49.009	58.167	77.262	92.981	106.627
650	17.225	32.689	41.948	49.980	59.319	78.792	94.822	108.739
675	17.552	33.311	42.746	50.931	60.449	80.293	96.628	110.810
700	17.873	33.921	43.530	51.865	61.558	81.766	98.401	112.843
725	18.189	34.521	44.300	52.783	62.647	83.213	100.143	114.840
750	18.499	35.111	45.057	53.685	63.718	84.635	101.854	116.803
775	18.804	35.691	45.802	54.572	64.771	86.034	103.538	118.734
800	19.104	36.262	46.534	55.445	65.807	87.411	105.195	120.634
825	19.399	36.823	47.255	56.305	66.827	88.766	106.825	122.504
850	19.690	37.377	47.966	57.151	67.832	90.101	108.432	124.346
875	19.977	37.922	48.666	57.985	68.822	91.416	110.015	126.161
900	20.259	38.460	49.356	58.807	69.798	92.712	111.575	127.951
925	20.538	38.990	50.036	59.618	70.760	93.991	113.114	129.716
950	20.813	39.513	50.708	60.418	71.710	95.253	114.632	131.457
975	21.085	40.029	51.370	61.208	72.647	96.498	116.131	133.175
1000	21.353	40.539	52.024	61.988	73.572	97.727	117.610	134.871
1500	26.142	49.644	63.713	75.916	90.105	119.688	144.040	165.182
2000	30.181	57.321	73.567	87.658	104.042	138.203	166.323	190.734
3000	36.957	70.201	90.098	107.356	127.423	169.262	203.701	233.600
5000	47.704	90.625	116.313	138.594	164.501	218.515	262.976	301.575
10000	67.456	128.159	164.488	195.999	232.637	309.025	371.903	426.490

4. TABLES OF VALUES OF k FOR VARIOUS VALUES OF n.

Values of k are given which make the following probability statement true:

$$\Pr\left\{ \Pr(X \leq \bar{x} + ks) \geq P \right\} = \gamma,$$

where $\bar{x}$ is based on n observations and s has f degrees of freedom. That is, at least a proportion P of a normal distribution is below $\bar{x} + ks$ with probability equal to γ.

The quantity k is defined equivalently in terms of the noncentral t-distribution by the equations appearing in the heading of each table.

4.1 Values of k for $\gamma = .90$

4.1.1 Values of k for $\gamma = .90$ and $n = 1$

$$\Pr\left\{T_f \leq k\sqrt{n} \,\middle|\, K_p\sqrt{n}\right\} = \gamma$$

	P							
f	.75000	.90000	.95000	.97500	.99000	.99900	.99990	.99999
1	6.494	10.532	13.220	15.641	18.513	24.574	29.579	33.925
2	3.304	4.800	5.769	6.640	7.681	9.911	11.783	13.423
3	2.723	3.817	4.515	5.140	5.885	7.487	8.838	10.026
4	2.489	3.429	4.022	4.551	5.181	6.535	7.677	8.684
5	2.363	3.223	3.761	4.240	4.809	6.029	7.059	7.967
6	2.286	3.096	3.600	4.048	4.579	5.715	6.675	7.521
7	2.233	3.010	3.491	3.917	4.422	5.502	6.413	7.215
8	2.194	2.947	3.412	3.823	4.310	5.348	6.222	6.993
9	2.165	2.900	3.353	3.752	4.224	5.230	6.077	6.823
10	2.143	2.863	3.306	3.697	4.157	5.138	5.963	6.690
11	2.124	2.834	3.269	3.652	4.104	5.064	5.872	6.582
12	2.109	2.810	3.238	3.615	4.059	5.003	5.796	6.493
13	2.097	2.789	3.213	3.585	4.022	4.952	5.732	6.418
14	2.086	2.772	3.191	3.559	3.991	4.909	5.678	6.355
15	2.077	2.757	3.172	3.536	3.964	4.871	5.632	6.300
16	2.069	2.745	3.156	3.517	3.941	4.839	5.591	6.252
17	2.062	2.733	3.142	3.500	3.920	4.811	5.555	6.210
18	2.056	2.723	3.129	3.485	3.902	4.785	5.524	6.172
19	2.050	2.715	3.118	3.471	3.886	4.763	5.496	6.139
20	2.045	2.707	3.108	3.459	3.872	4.743	5.470	6.109
21	2.041	2.699	3.099	3.449	3.859	4.724	5.448	6.082
22	2.037	2.693	3.091	3.439	3.847	4.708	5.427	6.058
23	2.033	2.687	3.083	3.430	3.836	4.693	5.408	6.035
24	2.030	2.682	3.077	3.422	3.826	4.679	5.391	6.015
25	2.027	2.677	3.070	3.414	3.817	4.667	5.375	5.996
26	2.024	2.672	3.065	3.407	3.809	4.655	5.360	5.978
27	2.022	2.668	3.059	3.401	3.801	4.644	5.347	5.962
28	2.019	2.664	3.054	3.395	3.794	4.634	5.334	5.947
29	2.017	2.661	3.050	3.390	3.787	4.625	5.323	5.934
30	2.015	2.657	3.046	3.385	3.781	4.617	5.312	5.921
31	2.013	2.654	3.042	3.380	3.776	4.609	5.302	5.909
32	2.011	2.651	3.038	3.375	3.770	4.601	5.292	5.897
33	2.009	2.649	3.035	3.371	3.765	4.594	5.283	5.887
34	2.008	2.646	3.031	3.367	3.760	4.587	5.275	5.877
35	2.006	2.644	3.028	3.364	3.756	4.581	5.267	5.867
36	2.005	2.641	3.025	3.360	3.752	4.575	5.260	5.858
37	2.003	2.639	3.023	3.357	3.748	4.570	5.252	5.850
38	2.002	2.637	3.020	3.354	3.744	4.564	5.246	5.842
39	2.001	2.635	3.018	3.351	3.741	4.559	5.239	5.834
40	2.000	2.633	3.015	3.348	3.737	4.555	5.233	5.827
41	1.999	2.632	3.013	3.345	3.734	4.550	5.228	5.820
42	1.998	2.630	3.011	3.343	3.731	4.546	5.222	5.814
43	1.997	2.628	3.009	3.341	3.728	4.542	5.217	5.807
44	1.996	2.627	3.007	3.338	3.725	4.538	5.212	5.801
45	1.995	2.625	3.005	3.336	3.723	4.534	5.207	5.796

4.1.1 Values of k for $\gamma = .90$ and $n = 1$ (Continued)

$$Pr\left\{T_f \leq k\sqrt{n} \,\middle|\, K_p\sqrt{n}\right\} = \gamma$$

	P							
f	.75000	.90000	.95000	.97500	.99000	.99900	.99990	.99999
46	1.994	2.624	3.003	3.334	3.720	4.530	5.203	5.790
47	1.993	2.623	3.002	3.332	3.718	4.527	5.199	5.785
48	1.992	2.621	3.000	3.330	3.715	4.524	5.194	5.780
49	1.992	2.620	2.999	3.328	3.713	4.521	5.190	5.775
50	1.991	2.619	2.997	3.326	3.711	4.518	5.187	5.771
51	1.990	2.618	2.996	3.325	3.709	4.515	5.183	5.766
52	1.990	2.617	2.994	3.323	3.707	4.512	5.179	5.762
53	1.989	2.616	2.993	3.322	3.705	4.509	5.176	5.758
54	1.988	2.615	2.992	3.320	3.703	4.507	5.173	5.754
55	1.988	2.614	2.991	3.319	3.701	4.504	5.170	5.750
56	1.987	2.613	2.989	3.317	3.700	4.502	5.167	5.747
57	1.987	2.612	2.988	3.316	3.698	4.500	5.164	5.743
58	1.986	2.611	2.987	3.315	3.697	4.497	5.161	5.740
59	1.986	2.610	2.986	3.313	3.695	4.495	5.158	5.737
60	1.985	2.610	2.985	3.312	3.694	4.493	5.155	5.733
61	1.985	2.609	2.984	3.311	3.692	4.491	5.153	5.730
62	1.984	2.608	2.983	3.310	3.691	4.489	5.150	5.727
63	1.984	2.607	2.982	3.309	3.689	4.487	5.148	5.725
64	1.983	2.607	2.981	3.308	3.688	4.485	5.146	5.722
65	1.983	2.606	2.981	3.307	3.687	4.484	5.143	5.719
66	1.982	2.605	2.980	3.306	3.686	4.482	5.141	5.716
67	1.982	2.605	2.979	3.305	3.684	4.480	5.139	5.714
68	1.982	2.604	2.978	3.304	3.683	4.479	5.137	5.711
69	1.981	2.603	2.977	3.303	3.682	4.477	5.135	5.709
70	1.981	2.603	2.977	3.302	3.681	4.476	5.133	5.707
71	1.980	2.602	2.976	3.301	3.680	4.474	5.131	5.704
72	1.980	2.602	2.975	3.300	3.679	4.473	5.130	5.702
73	1.980	2.601	2.975	3.299	3.678	4.471	5.128	5.700
74	1.979	2.601	2.974	3.299	3.677	4.470	5.126	5.698
75	1.979	2.600	2.973	3.298	3.676	4.469	5.124	5.696
80	1.978	2.598	2.970	3.294	3.672	4.463	5.117	5.687
85	1.976	2.596	2.968	3.291	3.668	4.457	5.110	5.678
90	1.975	2.594	2.965	3.288	3.665	4.452	5.104	5.671
95	1.974	2.592	2.963	3.286	3.662	4.448	5.098	5.665
100	1.973	2.591	2.961	3.284	3.659	4.444	5.093	5.659
110	1.972	2.588	2.958	3.280	3.654	4.438	5.085	5.649
120	1.970	2.586	2.956	3.277	3.650	4.432	5.078	5.640
130	1.969	2.584	2.953	3.274	3.647	4.428	5.072	5.633
140	1.968	2.583	2.951	3.272	3.644	4.424	5.067	5.627
150	1.968	2.582	2.950	3.270	3.642	4.420	5.062	5.621
200	1.965	2.577	2.944	3.262	3.633	4.408	5.047	5.603
300	1.962	2.572	2.938	3.255	3.625	4.396	5.031	5.584
500	1.959	2.569	2.933	3.250	3.618	4.386	5.019	5.569
1000	1.958	2.566	2.930	3.246	3.613	4.379	5.010	5.558
∞	1.956	2.563	2.926	3.242	3.608	4.372	5.001	5.546

4.1.2 Values of k for $\gamma = .90$ and $n = 2$

$$\Pr\left\{T_f \le k\sqrt{n} \,\middle|\, K_p\sqrt{n}\right\} = \gamma$$

	P							
f	.75000	.90000	.95000	.97500	.99000	.99900	.99990	.99999
1	5.842	10.253	13.090	15.586	18.500	24.582	29.587	33.932
2	2.808	4.405	5.431	6.345	7.427	9.716	11.621	13.281
3	2.273	3.426	4.161	4.817	5.596	7.253	8.637	9.848
4	2.060	3.042	3.663	4.218	4.876	6.279	7.454	8.484
5	1.946	2.838	3.400	3.900	4.493	5.758	6.820	7.751
6	1.876	2.713	3.237	3.703	4.256	5.434	6.423	7.291
7	1.828	2.628	3.127	3.570	4.094	5.212	6.151	6.975
8	1.794	2.567	3.047	3.473	3.977	5.051	5.952	6.744
9	1.768	2.520	2.987	3.399	3.888	4.927	5.800	6.567
10	1.747	2.484	2.940	3.342	3.818	4.830	5.680	6.427
11	1.731	2.455	2.902	3.296	3.761	4.752	5.583	6.313
12	1.718	2.431	2.870	3.258	3.715	4.687	5.503	6.219
13	1.706	2.411	2.844	3.226	3.676	4.633	5.435	6.139
14	1.697	2.394	2.822	3.199	3.643	4.586	5.377	6.071
15	1.689	2.380	2.803	3.176	3.615	4.546	5.327	6.012
16	1.681	2.367	2.786	3.155	3.590	4.511	5.283	5.961
17	1.675	2.356	2.772	3.138	3.568	4.481	5.245	5.916
18	1.670	2.346	2.759	3.122	3.549	4.454	5.211	5.875
19	1.665	2.337	2.748	3.108	3.532	4.429	5.180	5.839
20	1.660	2.329	2.737	3.095	3.516	4.407	5.153	5.806
21	1.656	2.322	2.728	3.084	3.502	4.388	5.128	5.777
22	1.653	2.316	2.720	3.074	3.490	4.370	5.105	5.750
23	1.650	2.310	2.712	3.065	3.478	4.354	5.085	5.726
24	1.647	2.305	2.705	3.056	3.468	4.339	5.066	5.703
25	1.644	2.300	2.699	3.048	3.458	4.325	5.048	5.682
26	1.641	2.296	2.693	3.041	3.449	4.312	5.032	5.663
27	1.639	2.292	2.688	3.035	3.441	4.300	5.017	5.646
28	1.637	2.288	2.683	3.028	3.434	4.290	5.003	5.629
29	1.635	2.284	2.678	3.023	3.427	4.279	4.991	5.614
30	1.633	2.281	2.674	3.017	3.420	4.270	4.979	5.599
31	1.631	2.278	2.670	3.012	3.414	4.261	4.967	5.586
32	1.630	2.275	2.666	3.008	3.408	4.253	4.957	5.573
33	1.628	2.272	2.662	3.003	3.403	4.245	4.947	5.561
34	1.627	2.270	2.659	2.999	3.398	4.238	4.938	5.550
35	1.625	2.267	2.656	2.995	3.393	4.231	4.929	5.540
36	1.624	2.265	2.653	2.992	3.388	4.224	4.920	5.530
37	1.623	2.263	2.650	2.988	3.384	4.218	4.913	5.520
38	1.622	2.261	2.647	2.985	3.380	4.212	4.905	5.511
39	1.621	2.259	2.645	2.982	3.376	4.207	4.898	5.503
40	1.620	2.257	2.642	2.979	3.373	4.202	4.891	5.495
41	1.619	2.255	2.640	2.976	3.369	4.197	4.885	5.487
42	1.618	2.254	2.638	2.973	3.366	4.192	4.879	5.480
43	1.617	2.252	2.636	2.971	3.363	4.187	4.873	5.473
44	1.616	2.251	2.634	2.968	3.360	4.183	4.867	5.466
45	1.615	2.249	2.632	2.966	3.357	4.179	4.862	5.460

4.1.2 Values of k for $\gamma = .90$ and $n = 2$ (Continued)

$$\Pr\left\{T_f \leq k\sqrt{n} \,\middle|\, K_p\sqrt{n}\right\} = \gamma$$

	P							
f	.75000	.90000	.95000	.97500	.99000	.99900	.99990	.99999
46	1.615	2.248	2.630	2.964	3.354	4.175	4.857	5.454
47	1.614	2.247	2.629	2.962	3.352	4.171	4.852	5.448
48	1.613	2.245	2.627	2.960	3.349	4.167	4.847	5.442
49	1.612	2.244	2.625	2.958	3.347	4.164	4.843	5.437
50	1.612	2.243	2.624	2.956	3.344	4.161	4.839	5.431
51	1.611	2.242	2.622	2.954	3.342	4.157	4.835	5.426
52	1.611	2.241	2.621	2.953	3.340	4.154	4.831	5.422
53	1.610	2.240	2.620	2.951	3.338	4.151	4.827	5.417
54	1.609	2.239	2.618	2.949	3.336	4.148	4.823	5.413
55	1.609	2.238	2.617	2.948	3.334	4.146	4.819	5.408
56	1.608	2.237	2.616	2.946	3.332	4.143	4.816	5.404
57	1.608	2.236	2.615	2.945	3.331	4.140	4.813	5.400
58	1.607	2.235	2.614	2.944	3.329	4.138	4.810	5.396
59	1.607	2.234	2.613	2.942	3.327	4.136	4.806	5.393
60	1.607	2.234	2.612	2.941	3.326	4.133	4.803	5.389
61	1.606	2.233	2.611	2.940	3.324	4.131	4.801	5.385
62	1.606	2.232	2.610	2.938	3.323	4.129	4.798	5.382
63	1.605	2.231	2.609	2.937	3.321	4.127	4.795	5.379
64	1.605	2.231	2.608	2.936	3.320	4.125	4.792	5.376
65	1.604	2.230	2.607	2.935	3.318	4.123	4.790	5.372
66	1.604	2.229	2.606	2.934	3.317	4.121	4.787	5.369
67	1.604	2.229	2.605	2.933	3.316	4.119	4.785	5.367
68	1.603	2.228	2.604	2.932	3.315	4.117	4.783	5.364
69	1.603	2.228	2.604	2.931	3.313	4.115	4.780	5.361
70	1.603	2.227	2.603	2.930	3.312	4.114	4.778	5.358
71	1.602	2.226	2.602	2.929	3.311	4.112	4.776	5.356
72	1.602	2.226	2.601	2.928	3.310	4.110	4.774	5.353
73	1.602	2.225	2.601	2.927	3.309	4.109	4.772	5.351
74	1.602	2.225	2.600	2.927	3.308	4.107	4.770	5.348
75	1.601	2.224	2.599	2.926	3.307	4.106	4.768	5.346
80	1.600	2.222	2.596	2.922	3.302	4.099	4.759	5.335
85	1.599	2.220	2.594	2.919	3.298	4.093	4.751	5.326
90	1.598	2.218	2.591	2.916	3.294	4.088	4.745	5.317
95	1.597	2.217	2.589	2.913	3.291	4.083	4.738	5.310
100	1.596	2.215	2.587	2.911	3.288	4.079	4.733	5.303
110	1.595	2.213	2.584	2.907	3.283	4.071	4.723	5.291
120	1.594	2.211	2.581	2.903	3.279	4.065	4.715	5.281
130	1.593	2.209	2.579	2.900	3.275	4.060	4.708	5.273
140	1.592	2.207	2.577	2.898	3.272	4.055	4.702	5.266
150	1.591	2.206	2.575	2.896	3.270	4.051	4.697	5.259
200	1.588	2.201	2.569	2.888	3.260	4.038	4.679	5.238
300	1.586	2.197	2.563	2.881	3.251	4.024	4.661	5.216
500	1.584	2.193	2.558	2.875	3.244	4.013	4.647	5.198
1000	1.582	2.190	2.555	2.871	3.238	4.005	4.636	5.184
∞	1.581	2.188	2.551	2.866	3.233	3.996	4.625	5.171

4.1.3 Values of k for $\gamma = .90$ and $n = 3$

$$\Pr\left\{T_f \le k\sqrt{n} \,\middle|\, K_p\sqrt{n}\right\} = \gamma$$

	P							
f	.75000	.90000	.95000	.97500	.99000	.99900	.99990	.99999
1	5.616	10.204	13.080	15.587	18.504	24.585	29.590	33.935
2	2.603	4.258	5.311	6.244	7.340	9.651	11.566	13.234
3	2.082	3.271	4.027	4.699	5.492	7.171	8.568	9.787
4	1.875	2.885	3.523	4.091	4.762	6.187	7.376	8.414
5	1.766	2.680	3.256	3.767	4.373	5.660	6.734	7.675
6	1.698	2.554	3.090	3.567	4.131	5.330	6.332	7.210
7	1.652	2.468	2.978	3.430	3.965	5.103	6.055	6.889
8	1.619	2.406	2.896	3.331	3.845	4.938	5.852	6.654
9	1.594	2.359	2.835	3.256	3.753	4.811	5.697	6.473
10	1.574	2.322	2.786	3.196	3.681	4.711	5.574	6.330
11	1.559	2.293	2.747	3.149	3.623	4.630	5.473	6.213
12	1.546	2.269	2.715	3.109	3.575	4.563	5.390	6.116
13	1.535	2.248	2.688	3.076	3.534	4.507	5.320	6.034
14	1.526	2.231	2.666	3.048	3.500	4.458	5.260	5.964
15	1.518	2.217	2.646	3.024	3.470	4.417	5.208	5.903
16	1.511	2.204	2.629	3.003	3.444	4.380	5.163	5.849
17	1.505	2.192	2.614	2.985	3.422	4.348	5.123	5.802
18	1.500	2.183	2.601	2.969	3.402	4.320	5.087	5.760
19	1.495	2.174	2.589	2.954	3.384	4.294	5.055	5.722
20	1.491	2.166	2.578	2.941	3.368	4.271	5.026	5.688
21	1.487	2.159	2.569	2.929	3.353	4.250	5.000	5.658
22	1.484	2.152	2.560	2.919	3.340	4.232	4.976	5.629
23	1.481	2.146	2.552	2.909	3.328	4.214	4.955	5.604
24	1.478	2.141	2.545	2.900	3.317	4.199	4.935	5.580
25	1.475	2.136	2.539	2.892	3.307	4.184	4.916	5.558
26	1.473	2.131	2.533	2.884	3.297	4.171	4.899	5.538
27	1.470	2.127	2.527	2.877	3.289	4.158	4.884	5.519
28	1.468	2.123	2.522	2.871	3.281	4.147	4.869	5.502
29	1.466	2.120	2.517	2.865	3.273	4.136	4.855	5.486
30	1.465	2.116	2.512	2.859	3.266	4.126	4.843	5.471
31	1.463	2.113	2.508	2.854	3.260	4.116	4.831	5.456
32	1.461	2.110	2.504	2.849	3.254	4.108	4.819	5.443
33	1.460	2.108	2.501	2.845	3.248	4.099	4.809	5.430
34	1.459	2.105	2.497	2.840	3.243	4.092	4.799	5.418
35	1.457	2.102	2.494	2.836	3.238	4.084	4.790	5.407
36	1.456	2.100	2.491	2.832	3.233	4.077	4.781	5.397
37	1.455	2.098	2.488	2.829	3.228	4.071	4.772	5.386
38	1.454	2.096	2.485	2.825	3.224	4.064	4.764	5.377
39	1.453	2.094	2.482	2.822	3.220	4.058	4.757	5.368
40	1.452	2.092	2.480	2.819	3.216	4.053	4.750	5.359
41	1.451	2.090	2.478	2.816	3.212	4.047	4.743	5.351
42	1.450	2.089	2.475	2.813	3.209	4.042	4.736	5.343
43	1.449	2.087	2.473	2.811	3.206	4.038	4.730	5.336
44	1.448	2.086	2.471	2.808	3.202	4.033	4.724	5.328
45	1.448	2.084	2.469	2.806	3.199	4.028	4.718	5.322

4.1.3 Values of k for $\gamma = .90$ and $n = 3$ (Continued)

$$\Pr\left\{T_f \leq k\sqrt{n} \,\middle|\, K_p\sqrt{n}\right\} = \gamma$$

	P							
f	.75000	.90000	.95000	.97500	.99000	.99900	.99990	.99999
46	1.447	2.083	2.467	2.803	3.196	4.024	4.713	5.315
47	1.446	2.081	2.466	2.801	3.194	4.020	4.707	5.309
48	1.445	2.080	2.464	2.799	3.191	4.016	4.702	5.303
49	1.445	2.079	2.462	2.797	3.188	4.012	4.698	5.297
50	1.444	2.078	2.461	2.795	3.186	4.009	4.693	5.291
51	1.444	2.077	2.459	2.793	3.184	4.005	4.689	5.286
52	1.443	2.076	2.458	2.791	3.181	4.002	4.684	5.281
53	1.442	2.075	2.456	2.790	3.179	3.999	4.680	5.276
54	1.442	2.074	2.455	2.788	3.177	3.996	4.676	5.271
55	1.441	2.073	2.454	2.786	3.175	3.993	4.672	5.266
56	1.441	2.072	2.452	2.785	3.173	3.990	4.669	5.262
57	1.440	2.071	2.451	2.783	3.171	3.987	4.665	5.257
58	1.440	2.070	2.450	2.782	3.169	3.985	4.662	5.253
59	1.440	2.069	2.449	2.780	3.168	3.982	4.658	5.249
60	1.439	2.068	2.448	2.779	3.166	3.979	4.655	5.245
61	1.439	2.068	2.447	2.778	3.164	3.977	4.652	5.241
62	1.438	2.067	2.446	2.776	3.163	3.975	4.649	5.238
63	1.438	2.066	2.445	2.775	3.161	3.972	4.646	5.234
64	1.438	2.065	2.444	2.774	3.160	3.970	4.643	5.231
65	1.437	2.065	2.443	2.773	3.158	3.968	4.640	5.227
66	1.437	2.064	2.442	2.772	3.157	3.966	4.638	5.224
67	1.437	2.063	2.441	2.771	3.156	3.964	4.635	5.221
68	1.436	2.063	2.440	2.770	3.154	3.962	4.632	5.218
69	1.436	2.062	2.440	2.769	3.153	3.960	4.630	5.215
70	1.436	2.062	2.439	2.768	3.152	3.958	4.628	5.212
71	1.435	2.061	2.438	2.767	3.151	3.957	4.625	5.209
72	1.435	2.060	2.437	2.766	3.149	3.955	4.623	5.207
73	1.435	2.060	2.437	2.765	3.148	3.953	4.621	5.204
74	1.434	2.059	2.436	2.764	3.147	3.951	4.619	5.201
75	1.434	2.059	2.435	2.763	3.146	3.950	4.617	5.199
80	1.433	2.056	2.432	2.759	3.141	3.942	4.607	5.187
85	1.432	2.054	2.429	2.756	3.137	3.936	4.598	5.177
90	1.431	2.053	2.427	2.753	3.133	3.930	4.591	5.167
95	1.430	2.051	2.425	2.750	3.129	3.925	4.584	5.159
100	1.429	2.049	2.423	2.747	3.126	3.920	4.578	5.152
110	1.428	2.047	2.419	2.743	3.121	3.912	4.567	5.139
120	1.427	2.045	2.416	2.739	3.116	3.905	4.558	5.128
130	1.426	2.043	2.414	2.736	3.112	3.900	4.551	5.118
140	1.425	2.041	2.412	2.734	3.109	3.895	4.544	5.110
150	1.424	2.040	2.410	2.731	3.106	3.890	4.539	5.104
200	1.422	2.035	2.404	2.724	3.096	3.875	4.519	5.079
300	1.419	2.031	2.397	2.716	3.086	3.860	4.499	5.055
500	1.417	2.027	2.392	2.709	3.078	3.848	4.483	5.035
1000	1.416	2.024	2.389	2.705	3.072	3.839	4.471	5.020
∞	1.414	2.021	2.385	2.700	3.066	3.830	4.459	5.005

4.1.4 Values of k for $\gamma = .90$ and $n = 4$

$$\Pr\left\{T_f \leq k\sqrt{n} \,\middle|\, K_p\sqrt{n}\right\} = \gamma$$

	P							
f	.75000	.90000	.95000	.97500	.99000	.99900	.99990	.99999
1	5.510	10.193	13.081	15.589	18.506	24.587	29.591	33.936
2	2.488	4.182	5.251	6.193	7.297	9.619	11.539	13.210
3	1.972	3.188	3.957	4.637	5.438	7.129	8.533	9.756
4	1.769	2.798	3.447	4.023	4.703	6.140	7.336	8.379
5	1.661	2.591	3.177	3.696	4.309	5.608	6.691	7.636
6	1.594	2.463	3.009	3.492	4.064	5.275	6.285	7.168
7	1.549	2.377	2.895	3.353	3.895	5.045	6.005	6.844
8	1.516	2.314	2.812	3.252	3.773	4.877	5.800	6.607
9	1.492	2.267	2.749	3.175	3.679	4.749	5.642	6.424
10	1.473	2.229	2.699	3.115	3.606	4.647	5.517	6.279
11	1.457	2.199	2.659	3.066	3.546	4.564	5.415	6.160
12	1.444	2.175	2.627	3.026	3.497	4.496	5.331	6.062
13	1.434	2.154	2.599	2.992	3.455	4.438	5.259	5.978
14	1.425	2.137	2.576	2.963	3.420	4.388	5.198	5.907
15	1.417	2.122	2.556	2.938	3.389	4.345	5.145	5.844
16	1.410	2.109	2.538	2.917	3.363	4.308	5.098	5.790
17	1.404	2.097	2.523	2.898	3.339	4.275	5.057	5.741
18	1.399	2.087	2.509	2.881	3.318	4.246	5.020	5.698
19	1.395	2.078	2.497	2.866	3.300	4.219	4.987	5.660
20	1.390	2.070	2.486	2.852	3.283	4.195	4.957	5.625
21	1.387	2.063	2.476	2.840	3.268	4.174	4.930	5.593
22	1.383	2.056	2.468	2.829	3.254	4.154	4.906	5.564
23	1.380	2.050	2.459	2.819	3.242	4.137	4.883	5.538
24	1.377	2.045	2.452	2.810	3.230	4.120	4.863	5.513
25	1.375	2.040	2.445	2.801	3.220	4.105	4.844	5.491
26	1.372	2.035	2.439	2.794	3.210	4.091	4.826	5.470
27	1.370	2.031	2.433	2.786	3.201	4.078	4.810	5.450
28	1.368	2.027	2.428	2.780	3.193	4.066	4.795	5.432
29	1.366	2.023	2.423	2.774	3.185	4.055	4.780	5.416
30	1.365	2.020	2.418	2.768	3.178	4.044	4.767	5.400
31	1.363	2.016	2.414	2.762	3.171	4.035	4.755	5.385
32	1.361	2.013	2.410	2.757	3.165	4.025	4.743	5.371
33	1.360	2.011	2.406	2.752	3.159	4.017	4.732	5.358
34	1.359	2.008	2.402	2.748	3.153	4.009	4.722	5.346
35	1.357	2.005	2.399	2.744	3.148	4.001	4.712	5.334
36	1.356	2.003	2.396	2.740	3.143	3.994	4.702	5.323
37	1.355	2.001	2.393	2.736	3.138	3.987	4.694	5.312
38	1.354	1.999	2.390	2.732	3.134	3.980	4.685	5.302
39	1.353	1.997	2.387	2.729	3.129	3.974	4.677	5.293
40	1.352	1.995	2.385	2.726	3.125	3.968	4.670	5.284
41	1.351	1.993	2.382	2.723	3.122	3.962	4.663	5.275
42	1.350	1.991	2.380	2.720	3.118	3.957	4.656	5.267
43	1.349	1.990	2.378	2.717	3.114	3.952	4.649	5.259
44	1.349	1.988	2.376	2.714	3.111	3.947	4.643	5.252
45	1.348	1.987	2.374	2.712	3.108	3.942	4.637	5.244

4.1.4 Values of k for $\gamma = .90$ and $n = 4$ (Continued)

$$\Pr\left\{T_f \leq k\sqrt{n} \,\middle|\, K_p\sqrt{n}\right\} = \gamma$$

	P							
f	.75000	.90000	.95000	.97500	.99000	.99900	.99990	.99999
46	1.347	1.985	2.372	2.709	3.105	3.938	4.631	5.237
47	1.346	1.984	2.370	2.707	3.102	3.934	4.626	5.231
48	1.346	1.983	2.368	2.705	3.099	3.930	4.620	5.224
49	1.345	1.981	2.366	2.703	3.096	3.926	4.615	5.218
50	1.345	1.980	2.365	2.701	3.094	3.922	4.610	5.212
51	1.344	1.979	2.363	2.699	3.091	3.918	4.606	5.207
52	1.343	1.978	2.362	2.697	3.089	3.915	4.601	5.201
53	1.343	1.977	2.360	2.695	3.087	3.911	4.597	5.196
54	1.342	1.976	2.359	2.693	3.085	3.908	4.593	5.191
55	1.342	1.975	2.357	2.692	3.082	3.905	4.588	5.186
56	1.341	1.974	2.356	2.690	3.080	3.902	4.585	5.181
57	1.341	1.973	2.355	2.688	3.078	3.899	4.581	5.177
58	1.340	1.972	2.354	2.687	3.076	3.896	4.577	5.172
59	1.340	1.971	2.353	2.685	3.075	3.893	4.574	5.168
60	1.340	1.970	2.351	2.684	3.073	3.891	4.570	5.164
61	1.339	1.970	2.350	2.683	3.071	3.888	4.567	5.160
62	1.339	1.969	2.349	2.681	3.069	3.886	4.564	5.156
63	1.338	1.968	2.348	2.680	3.068	3.883	4.561	5.152
64	1.338	1.967	2.347	2.679	3.066	3.881	4.558	5.149
65	1.338	1.967	2.346	2.678	3.065	3.879	4.555	5.145
66	1.337	1.966	2.345	2.676	3.063	3.876	4.552	5.142
67	1.337	1.965	2.344	2.675	3.062	3.874	4.549	5.138
68	1.337	1.965	2.344	2.674	3.060	3.872	4.546	5.135
69	1.336	1.964	2.343	2.673	3.059	3.870	4.544	5.132
70	1.336	1.963	2.342	2.672	3.058	3.868	4.541	5.129
71	1.336	1.963	2.341	2.671	3.057	3.866	4.539	5.126
72	1.335	1.962	2.340	2.670	3.055	3.865	4.536	5.123
73	1.335	1.962	2.340	2.669	3.054	3.863	4.534	5.120
74	1.335	1.961	2.339	2.668	3.053	3.861	4.532	5.117
75	1.335	1.961	2.338	2.667	3.052	3.859	4.529	5.115
80	1.333	1.958	2.335	2.663	3.046	3.851	4.519	5.102
85	1.332	1.956	2.332	2.659	3.042	3.845	4.510	5.091
90	1.331	1.954	2.329	2.656	3.038	3.838	4.502	5.081
95	1.331	1.953	2.327	2.653	3.034	3.833	4.495	5.072
100	1.330	1.951	2.325	2.651	3.031	3.828	4.488	5.064
110	1.328	1.948	2.321	2.646	3.025	3.819	4.477	5.051
120	1.327	1.946	2.318	2.642	3.020	3.812	4.467	5.039
130	1.326	1.944	2.316	2.639	3.016	3.806	4.459	5.029
140	1.326	1.943	2.314	2.636	3.013	3.800	4.452	5.020
150	1.325	1.941	2.312	2.634	3.010	3.796	4.446	5.013
200	1.322	1.937	2.305	2.626	2.999	3.780	4.425	4.987
300	1.320	1.932	2.299	2.617	2.988	3.764	4.403	4.960
500	1.318	1.928	2.293	2.611	2.980	3.751	4.386	4.939
1000	1.317	1.925	2.290	2.606	2.974	3.741	4.373	4.922
∞	1.315	1.922	2.286	2.601	2.967	3.731	4.360	4.906

4.1.5 Values of k for $\gamma = .90$ and $n = 5$

$$\Pr\left\{T_f \leq k\sqrt{n} \,\middle|\, K_p\sqrt{n}\right\} = \gamma$$

	P							
f	.75000	.90000	.95000	.97500	.99000	.99900	.99990	.99999
1	5.453	10.191	13.082	15.591	18.507	24.588	29.592	33.937
2	2.415	4.136	5.215	6.162	7.271	9.599	11.523	13.196
3	1.900	3.135	3.913	4.599	5.406	7.104	8.512	9.738
4	1.698	2.742	3.400	3.981	4.666	6.111	7.311	8.358
5	1.591	2.534	3.127	3.651	4.270	5.577	6.664	7.612
6	1.524	2.405	2.957	3.445	4.022	5.241	6.256	7.142
7	1.480	2.317	2.841	3.305	3.852	5.010	5.975	6.817
8	1.447	2.254	2.757	3.202	3.727	4.840	5.768	6.578
9	1.423	2.206	2.693	3.124	3.632	4.710	5.608	6.394
10	1.404	2.168	2.643	3.062	3.558	4.607	5.482	6.247
11	1.388	2.137	2.602	3.013	3.497	4.523	5.379	6.128
12	1.376	2.112	2.569	2.972	3.447	4.453	5.293	6.028
13	1.365	2.091	2.541	2.937	3.404	4.394	5.221	5.944
14	1.356	2.074	2.517	2.908	3.368	4.344	5.158	5.871
15	1.349	2.058	2.496	2.882	3.337	4.300	5.104	5.808
16	1.342	2.045	2.478	2.860	3.310	4.262	5.057	5.753
17	1.336	2.033	2.463	2.841	3.286	4.228	5.015	5.703
18	1.331	2.023	2.449	2.823	3.264	4.198	4.978	5.660
19	1.326	2.014	2.436	2.808	3.245	4.171	4.944	5.620
20	1.322	2.006	2.425	2.794	3.228	4.147	4.914	5.585
21	1.318	1.998	2.415	2.782	3.213	4.125	4.886	5.552
22	1.315	1.992	2.406	2.770	3.198	4.105	4.861	5.523
23	1.312	1.985	2.398	2.760	3.186	4.087	4.838	5.496
24	1.309	1.980	2.390	2.750	3.174	4.070	4.817	5.471
25	1.307	1.975	2.383	2.742	3.163	4.054	4.797	5.448
26	1.304	1.970	2.377	2.734	3.153	4.040	4.779	5.427
27	1.302	1.966	2.371	2.726	3.144	4.026	4.763	5.407
28	1.300	1.962	2.365	2.719	3.135	4.014	4.747	5.388
29	1.298	1.958	2.360	2.713	3.127	4.002	4.732	5.371
30	1.297	1.954	2.355	2.707	3.120	3.992	4.719	5.355
31	1.295	1.951	2.351	2.701	3.113	3.981	4.706	5.340
32	1.293	1.948	2.347	2.696	3.106	3.972	4.694	5.325
33	1.292	1.945	2.343	2.691	3.100	3.963	4.682	5.312
34	1.291	1.942	2.339	2.686	3.094	3.955	4.672	5.299
35	1.289	1.940	2.335	2.682	3.088	3.947	4.661	5.287
36	1.288	1.937	2.332	2.678	3.083	3.939	4.652	5.276
37	1.287	1.935	2.329	2.674	3.078	3.932	4.643	5.265
38	1.286	1.933	2.326	2.670	3.074	3.925	4.634	5.254
39	1.285	1.931	2.323	2.667	3.069	3.919	4.626	5.245
40	1.284	1.929	2.321	2.663	3.065	3.913	4.618	5.235
41	1.283	1.927	2.318	2.660	3.061	3.907	4.611	5.226
42	1.282	1.925	2.316	2.657	3.057	3.901	4.604	5.218
43	1.281	1.924	2.313	2.654	3.054	3.896	4.597	5.210
44	1.281	1.922	2.311	2.652	3.050	3.891	4.590	5.202
45	1.280	1.921	2.309	2.649	3.047	3.886	4.584	5.195

4.1.5 Values of k for $\gamma = .90$ and $n = 5$ (Continued)

$$\Pr\left\{T_f \leq k\sqrt{n} \,\middle|\, K_p\sqrt{n}\right\} = \gamma$$

	P							
f	.75000	.90000	.95000	.97500	.99000	.99900	.99990	.99999
46	1.279	1.919	2.307	2.646	3.044	3.881	4.578	5.187
47	1.279	1.918	2.305	2.644	3.041	3.877	4.572	5.180
48	1.278	1.916	2.303	2.642	3.038	3.872	4.567	5.174
49	1.277	1.915	2.302	2.639	3.035	3.868	4.562	5.168
50	1.277	1.914	2.300	2.637	3.032	3.864	4.556	5.161
51	1.276	1.913	2.298	2.635	3.030	3.861	4.552	5.156
52	1.276	1.912	2.297	2.633	3.027	3.857	4.547	5.150
53	1.275	1.911	2.295	2.631	3.025	3.853	4.542	5.144
54	1.274	1.910	2.294	2.630	3.023	3.850	4.538	5.139
55	1.274	1.908	2.292	2.628	3.020	3.847	4.534	5.134
56	1.274	1.908	2.291	2.626	3.018	3.844	4.530	5.129
57	1.273	1.907	2.290	2.625	3.016	3.840	4.526	5.124
58	1.273	1.906	2.289	2.623	3.014	3.838	4.522	5.120
59	1.272	1.905	2.287	2.621	3.012	3.835	4.518	5.115
60	1.272	1.904	2.286	2.620	3.010	3.832	4.515	5.111
61	1.271	1.903	2.285	2.619	3.009	3.829	4.511	5.107
62	1.271	1.902	2.284	2.617	3.007	3.827	4.508	5.103
63	1.271	1.902	2.283	2.616	3.005	3.824	4.505	5.099
64	1.270	1.901	2.282	2.615	3.004	3.822	4.501	5.095
65	1.270	1.900	2.281	2.613	3.002	3.819	4.498	5.092
66	1.270	1.899	2.280	2.612	3.000	3.817	4.495	5.088
67	1.269	1.899	2.279	2.611	2.999	3.815	4.492	5.084
68	1.269	1.898	2.278	2.610	2.998	3.813	4.490	5.081
69	1.269	1.897	2.277	2.609	2.996	3.811	4.487	5.078
70	1.268	1.897	2.276	2.608	2.995	3.809	4.484	5.075
71	1.268	1.896	2.276	2.607	2.993	3.807	4.482	5.071
72	1.268	1.896	2.275	2.606	2.992	3.805	4.479	5.068
73	1.267	1.895	2.274	2.605	2.991	3.803	4.477	5.065
74	1.267	1.895	2.273	2.604	2.990	3.801	4.474	5.063
75	1.267	1.894	2.273	2.603	2.988	3.799	4.472	5.060
80	1.266	1.892	2.269	2.598	2.983	3.791	4.461	5.047
85	1.265	1.889	2.266	2.594	2.978	3.784	4.452	5.035
90	1.264	1.887	2.263	2.591	2.974	3.777	4.443	5.025
95	1.263	1.886	2.261	2.588	2.970	3.771	4.436	5.015
100	1.262	1.884	2.259	2.585	2.966	3.766	4.429	5.007
110	1.261	1.881	2.255	2.581	2.960	3.757	4.417	4.992
120	1.260	1.879	2.252	2.577	2.955	3.749	4.407	4.980
130	1.259	1.877	2.249	2.573	2.951	3.743	4.398	4.970
140	1.258	1.876	2.247	2.570	2.947	3.737	4.391	4.961
150	1.257	1.874	2.245	2.568	2.944	3.732	4.384	4.953
200	1.255	1.869	2.238	2.559	2.933	3.715	4.362	4.925
300	1.252	1.864	2.232	2.551	2.922	3.698	4.339	4.897
500	1.250	1.861	2.226	2.544	2.913	3.684	4.320	4.873
1000	1.249	1.858	2.222	2.538	2.906	3.674	4.306	4.856
∞	1.248	1.855	2.218	2.533	2.899	3.663	4.292	4.838

4.1.6 Values of k for $\gamma = .90$ and $n = 6$

$$\Pr\left\{T_f \le k\sqrt{n} \,\middle|\, K_p\sqrt{n}\right\} = \gamma$$

	P							
f	.75000	.90000	.95000	.97500	.99000	.99900	.99990	.99999
1	5.420	10.191	13.083	15.592	18.508	24.588	29.593	33.937
2	2.363	4.105	5.190	6.141	7.254	9.586	11.512	13.187
3	1.849	3.099	3.883	4.573	5.384	7.087	8.498	9.726
4	1.647	2.704	3.367	3.953	4.641	6.092	7.295	8.343
5	1.540	2.494	3.092	3.620	4.243	5.556	6.646	7.596
6	1.474	2.364	2.921	3.413	3.993	5.218	6.237	7.125
7	1.429	2.275	2.804	3.271	3.821	4.986	5.954	6.799
8	1.397	2.211	2.718	3.167	3.696	4.815	5.746	6.558
9	1.373	2.162	2.654	3.088	3.600	4.683	5.586	6.373
10	1.353	2.124	2.603	3.026	3.524	4.579	5.458	6.226
11	1.338	2.093	2.561	2.975	3.463	4.495	5.354	6.105
12	1.326	2.068	2.527	2.933	3.412	4.424	5.268	6.005
13	1.315	2.046	2.499	2.898	3.369	4.364	5.194	5.920
14	1.306	2.028	2.475	2.868	3.332	4.313	5.132	5.847
15	1.298	2.013	2.454	2.842	3.300	4.269	5.077	5.783
16	1.292	1.999	2.435	2.820	3.272	4.230	5.029	5.727
17	1.286	1.987	2.419	2.800	3.248	4.196	4.986	5.677
18	1.281	1.977	2.405	2.782	3.226	4.165	4.948	5.633
19	1.276	1.968	2.392	2.766	3.207	4.138	4.914	5.593
20	1.272	1.959	2.381	2.752	3.189	4.113	4.883	5.557
21	1.268	1.952	2.371	2.740	3.173	4.091	4.855	5.524
22	1.265	1.945	2.361	2.728	3.159	4.070	4.830	5.494
23	1.262	1.939	2.353	2.717	3.146	4.051	4.807	5.467
24	1.259	1.933	2.345	2.708	3.134	4.034	4.785	5.442
25	1.257	1.928	2.338	2.699	3.122	4.018	4.765	5.418
26	1.254	1.923	2.331	2.690	3.112	4.004	4.747	5.397
27	1.252	1.918	2.325	2.683	3.103	3.990	4.730	5.376
28	1.250	1.914	2.320	2.676	3.094	3.977	4.714	5.358
29	1.248	1.910	2.314	2.669	3.086	3.965	4.699	5.340
30	1.247	1.907	2.309	2.663	3.078	3.954	4.685	5.323
31	1.245	1.903	2.305	2.657	3.071	3.944	4.672	5.308
32	1.243	1.900	2.301	2.652	3.064	3.934	4.659	5.293
33	1.242	1.897	2.297	2.647	3.057	3.925	4.648	5.280
34	1.241	1.895	2.293	2.642	3.051	3.916	4.637	5.267
35	1.239	1.892	2.289	2.637	3.046	3.908	4.626	5.254
36	1.238	1.889	2.286	2.633	3.040	3.900	4.616	5.243
37	1.237	1.887	2.283	2.629	3.035	3.893	4.607	5.231
38	1.236	1.885	2.280	2.625	3.031	3.886	4.598	5.221
39	1.235	1.883	2.277	2.622	3.026	3.879	4.590	5.211
40	1.234	1.881	2.274	2.618	3.022	3.873	4.582	5.201
41	1.233	1.879	2.271	2.615	3.018	3.867	4.574	5.192
42	1.232	1.877	2.269	2.612	3.014	3.861	4.567	5.184
43	1.232	1.875	2.267	2.609	3.010	3.856	4.560	5.175
44	1.231	1.874	2.264	2.606	3.006	3.851	4.553	5.167
45	1.230	1.872	2.262	2.603	3.003	3.846	4.547	5.160

4.1.6 Values of k for $\gamma = .90$ and $n = 6$ (Continued)

$$\Pr\left\{T_f \le k\sqrt{n} \,\middle|\, K_p\sqrt{n}\right\} = \gamma$$

	P							
f	.75000	.90000	.95000	.97500	.99000	.99900	.99990	.99999
46	1.229	1.871	2.260	2.601	3.000	3.841	4.540	5.152
47	1.229	1.869	2.258	2.598	2.997	3.836	4.535	5.145
48	1.228	1.868	2.256	2.596	2.994	3.832	4.529	5.138
49	1.227	1.867	2.254	2.594	2.991	3.827	4.523	5.132
50	1.227	1.865	2.253	2.591	2.988	3.823	4.518	5.126
51	1.226	1.864	2.251	2.589	2.985	3.819	4.513	5.120
52	1.226	1.863	2.249	2.587	2.983	3.816	4.508	5.114
53	1.225	1.862	2.248	2.585	2.980	3.812	4.504	5.108
54	1.225	1.861	2.246	2.583	2.978	3.808	4.499	5.103
55	1.224	1.860	2.245	2.582	2.976	3.805	4.495	5.097
56	1.224	1.859	2.244	2.580	2.973	3.802	4.491	5.092
57	1.223	1.858	2.242	2.578	2.971	3.799	4.486	5.088
58	1.223	1.857	2.241	2.576	2.969	3.796	4.483	5.083
59	1.222	1.856	2.240	2.575	2.967	3.793	4.479	5.078
60	1.222	1.855	2.239	2.573	2.965	3.790	4.475	5.074
61	1.221	1.854	2.237	2.572	2.963	3.787	4.471	5.069
62	1.221	1.854	2.236	2.571	2.962	3.784	4.468	5.065
63	1.221	1.853	2.235	2.569	2.960	3.782	4.465	5.061
64	1.220	1.852	2.234	2.568	2.958	3.779	4.461	5.057
65	1.220	1.851	2.233	2.567	2.956	3.777	4.458	5.053
66	1.220	1.851	2.232	2.565	2.955	3.774	4.455	5.050
67	1.219	1.850	2.231	2.564	2.953	3.772	4.452	5.046
68	1.219	1.849	2.230	2.563	2.952	3.770	4.449	5.043
69	1.219	1.849	2.229	2.562	2.950	3.768	4.446	5.039
70	1.218	1.848	2.229	2.561	2.949	3.765	4.444	5.036
71	1.218	1.847	2.228	2.559	2.948	3.763	4.441	5.033
72	1.218	1.847	2.227	2.558	2.946	3.761	4.438	5.030
73	1.217	1.846	2.226	2.557	2.945	3.759	4.436	5.027
74	1.217	1.846	2.225	2.556	2.944	3.758	4.433	5.024
75	1.217	1.845	2.224	2.555	2.942	3.756	4.431	5.021
80	1.216	1.843	2.221	2.551	2.937	3.747	4.420	5.007
85	1.215	1.840	2.218	2.547	2.932	3.740	4.410	4.995
90	1.214	1.838	2.215	2.543	2.927	3.733	4.401	4.984
95	1.213	1.837	2.213	2.540	2.923	3.727	4.393	4.975
100	1.212	1.835	2.210	2.537	2.919	3.721	4.386	4.966
110	1.211	1.832	2.207	2.533	2.913	3.712	4.373	4.951
120	1.210	1.830	2.203	2.528	2.908	3.704	4.363	4.938
130	1.209	1.828	2.201	2.525	2.903	3.697	4.354	4.927
140	1.208	1.826	2.198	2.522	2.900	3.691	4.346	4.917
150	1.207	1.825	2.196	2.519	2.896	3.686	4.340	4.909
200	1.205	1.820	2.189	2.510	2.885	3.668	4.316	4.880
300	1.202	1.815	2.182	2.501	2.873	3.650	4.292	4.850
500	1.201	1.811	2.177	2.494	2.864	3.636	4.272	4.826
1000	1.199	1.808	2.172	2.489	2.857	3.625	4.257	4.807
∞	1.198	1.805	2.168	2.483	2.850	3.613	4.242	4.788

4.1.7 Values of k for $\gamma = .90$ and $n = 7$

$$\Pr\left\{T_f \leq k\sqrt{n} \,\middle|\, K_p\sqrt{n}\right\} = \gamma$$

	P							
f	.75000	.90000	.95000	.97500	.99000	.99900	.99990	.99999
1	5.399	10.192	13.084	15.593	18.509	24.589	29.593	33.937
2	2.325	4.083	5.173	6.127	7.242	9.576	11.504	13.180
3	1.810	3.073	3.861	4.555	5.368	7.075	8.488	9.717
4	1.608	2.675	3.343	3.932	4.623	6.078	7.283	8.333
5	1.501	2.464	3.066	3.598	4.223	5.540	6.633	7.585
6	1.435	2.333	2.894	3.389	3.972	5.202	6.223	7.113
7	1.391	2.243	2.776	3.246	3.799	4.968	5.939	6.785
8	1.358	2.178	2.690	3.141	3.673	4.796	5.730	6.544
9	1.334	2.129	2.624	3.061	3.576	4.664	5.569	6.359
10	1.315	2.090	2.573	2.998	3.500	4.559	5.441	6.210
11	1.299	2.059	2.531	2.947	3.437	4.474	5.336	6.089
12	1.287	2.034	2.496	2.905	3.386	4.403	5.249	5.989
13	1.276	2.012	2.468	2.869	3.342	4.343	5.175	5.903
14	1.267	1.994	2.443	2.839	3.305	4.291	5.112	5.829
15	1.260	1.978	2.422	2.812	3.273	4.246	5.057	5.765
16	1.253	1.964	2.403	2.790	3.244	4.207	5.008	5.709
17	1.247	1.952	2.387	2.769	3.220	4.172	4.965	5.658
18	1.242	1.942	2.372	2.751	3.197	4.141	4.927	5.614
19	1.238	1.932	2.359	2.735	3.178	4.113	4.892	5.574
20	1.233	1.924	2.348	2.721	3.160	4.088	4.861	5.537
21	1.230	1.916	2.337	2.708	3.144	4.065	4.833	5.504
22	1.226	1.909	2.328	2.696	3.129	4.044	4.807	5.474
23	1.223	1.903	2.319	2.685	3.116	4.025	4.783	5.446
24	1.221	1.897	2.311	2.675	3.103	4.008	4.761	5.420
25	1.218	1.891	2.304	2.666	3.092	3.992	4.741	5.397
26	1.216	1.886	2.297	2.658	3.081	3.977	4.723	5.375
27	1.213	1.882	2.291	2.650	3.072	3.963	4.705	5.354
28	1.211	1.878	2.285	2.643	3.063	3.950	4.689	5.335
29	1.210	1.874	2.280	2.636	3.054	3.938	4.674	5.317
30	1.208	1.870	2.275	2.630	3.046	3.927	4.660	5.300
31	1.206	1.867	2.270	2.624	3.039	3.916	4.646	5.285
32	1.205	1.864	2.266	2.618	3.032	3.906	4.634	5.270
33	1.203	1.861	2.261	2.613	3.025	3.897	4.622	5.256
34	1.202	1.858	2.257	2.608	3.019	3.888	4.611	5.243
35	1.201	1.855	2.254	2.603	3.014	3.879	4.600	5.230
36	1.199	1.853	2.250	2.599	3.008	3.871	4.590	5.218
37	1.198	1.850	2.247	2.595	3.003	3.864	4.580	5.207
38	1.197	1.848	2.244	2.591	2.998	3.857	4.571	5.196
39	1.196	1.846	2.241	2.587	2.993	3.850	4.563	5.186
40	1.195	1.844	2.238	2.584	2.989	3.843	4.555	5.176
41	1.194	1.842	2.236	2.580	2.985	3.837	4.547	5.167
42	1.194	1.840	2.233	2.577	2.981	3.831	4.539	5.158
43	1.193	1.838	2.231	2.574	2.977	3.826	4.532	5.150
44	1.192	1.837	2.228	2.571	2.973	3.820	4.525	5.141
45	1.191	1.835	2.226	2.568	2.970	3.815	4.519	5.134

4.1.7 Values of k for $\gamma = .90$ and $n = 7$ (Continued)

$$\Pr\left\{T_f \leq k\sqrt{n} \,\middle|\, K_p\sqrt{n}\right\} = \gamma$$

	P							
f	.75000	.90000	.95000	.97500	.99000	.99900	.99990	.99999
46	1.190	1.834	2.224	2.566	2.966	3.810	4.512	5.126
47	1.190	1.832	2.222	2.563	2.963	3.806	4.506	5.119
48	1.189	1.831	2.220	2.561	2.960	3.801	4.501	5.112
49	1.189	1.829	2.218	2.558	2.957	3.797	4.495	5.105
50	1.188	1.828	2.216	2.556	2.954	3.792	4.490	5.099
51	1.187	1.827	2.215	2.554	2.951	3.788	4.484	5.093
52	1.187	1.826	2.213	2.552	2.949	3.785	4.479	5.087
53	1.186	1.825	2.212	2.550	2.946	3.781	4.475	5.081
54	1.186	1.823	2.210	2.548	2.944	3.777	4.470	5.076
55	1.185	1.822	2.209	2.546	2.941	3.774	4.466	5.070
56	1.185	1.821	2.207	2.544	2.939	3.770	4.461	5.065
57	1.184	1.820	2.206	2.543	2.937	3.767	4.457	5.060
58	1.184	1.819	2.204	2.541	2.935	3.764	4.453	5.055
59	1.183	1.819	2.203	2.539	2.933	3.761	4.449	5.050
60	1.183	1.818	2.202	2.538	2.931	3.758	4.445	5.046
61	1.183	1.817	2.201	2.536	2.929	3.755	4.442	5.041
62	1.182	1.816	2.200	2.535	2.927	3.752	4.438	5.037
63	1.182	1.815	2.198	2.533	2.925	3.750	4.435	5.033
64	1.181	1.814	2.197	2.532	2.923	3.747	4.431	5.029
65	1.181	1.814	2.196	2.531	2.922	3.744	4.428	5.025
66	1.181	1.813	2.195	2.529	2.920	3.742	4.425	5.021
67	1.180	1.812	2.194	2.528	2.918	3.740	4.422	5.018
68	1.180	1.812	2.193	2.527	2.917	3.737	4.419	5.014
69	1.180	1.811	2.192	2.526	2.915	3.735	4.416	5.010
70	1.180	1.810	2.192	2.524	2.914	3.733	4.413	5.007
71	1.179	1.810	2.191	2.523	2.912	3.731	4.410	5.004
72	1.179	1.809	2.190	2.522	2.911	3.729	4.408	5.000
73	1.179	1.808	2.189	2.521	2.910	3.727	4.405	4.997
74	1.178	1.808	2.188	2.520	2.908	3.725	4.402	4.994
75	1.178	1.807	2.187	2.519	2.907	3.723	4.400	4.991
80	1.177	1.805	2.184	2.515	2.901	3.714	4.388	4.977
85	1.176	1.802	2.181	2.510	2.896	3.706	4.378	4.965
90	1.175	1.800	2.178	2.507	2.891	3.699	4.369	4.954
95	1.174	1.799	2.175	2.504	2.887	3.693	4.361	4.944
100	1.173	1.797	2.173	2.501	2.883	3.687	4.353	4.935
110	1.172	1.794	2.169	2.496	2.877	3.677	4.340	4.919
120	1.171	1.792	2.166	2.491	2.871	3.669	4.330	4.906
130	1.170	1.790	2.163	2.488	2.867	3.662	4.320	4.895
140	1.169	1.788	2.160	2.485	2.863	3.656	4.312	4.885
150	1.168	1.787	2.158	2.482	2.859	3.650	4.305	4.876
200	1.166	1.781	2.151	2.473	2.847	3.632	4.281	4.846
300	1.164	1.776	2.144	2.463	2.835	3.613	4.255	4.815
500	1.162	1.772	2.138	2.456	2.825	3.598	4.235	4.789
1000	1.160	1.769	2.134	2.450	2.818	3.586	4.219	4.769
∞	1.159	1.766	2.129	2.444	2.811	3.575	4.203	4.749

4.1.8 Values of k for $\gamma = .90$ and $n = 8$

$$\Pr\left\{T_f \leq k\sqrt{n} \,\middle|\, K_p\sqrt{n}\right\} = \gamma$$

	P							
f	.75000	.90000	.95000	.97500	.99000	.99900	.99990	.99999
1	5.387	10.192	13.085	15.593	18.509	24.589	29.593	33.938
2	2.296	4.066	5.160	6.116	7.232	9.569	11.498	13.175
3	1.780	3.053	3.845	4.541	5.356	7.066	8.480	9.710
4	1.578	2.653	3.325	3.916	4.610	6.068	7.275	8.325
5	1.471	2.441	3.047	3.581	4.208	5.529	6.623	7.576
6	1.405	2.309	2.873	3.371	3.956	5.189	6.212	7.103
7	1.360	2.219	2.754	3.227	3.783	4.955	5.927	6.775
8	1.328	2.153	2.668	3.121	3.655	4.782	5.718	6.534
9	1.303	2.103	2.601	3.041	3.558	4.649	5.556	6.347
10	1.284	2.064	2.549	2.977	3.481	4.544	5.428	6.199
11	1.269	2.033	2.507	2.926	3.418	4.458	5.323	6.077
12	1.256	2.007	2.472	2.883	3.366	4.386	5.235	5.976
13	1.245	1.985	2.443	2.847	3.322	4.326	5.161	5.890
14	1.236	1.967	2.418	2.816	3.284	4.274	5.097	5.816
15	1.229	1.951	2.396	2.789	3.251	4.228	5.041	5.751
16	1.222	1.937	2.378	2.766	3.223	4.189	4.993	5.694
17	1.216	1.924	2.361	2.745	3.198	4.154	4.949	5.644
18	1.211	1.914	2.346	2.727	3.175	4.122	4.911	5.599
19	1.207	1.904	2.333	2.711	3.155	4.094	4.876	5.558
20	1.202	1.895	2.321	2.696	3.137	4.069	4.844	5.522
21	1.199	1.888	2.311	2.683	3.121	4.046	4.816	5.488
22	1.195	1.880	2.301	2.671	3.106	4.025	4.789	5.458
23	1.192	1.874	2.292	2.660	3.092	4.005	4.766	5.430
24	1.189	1.868	2.284	2.650	3.080	3.988	4.743	5.404
25	1.187	1.863	2.277	2.641	3.068	3.971	4.723	5.380
26	1.185	1.858	2.270	2.632	3.057	3.956	4.704	5.358
27	1.182	1.853	2.263	2.624	3.047	3.942	4.686	5.337
28	1.180	1.849	2.258	2.617	3.038	3.929	4.670	5.318
29	1.178	1.845	2.252	2.610	3.030	3.916	4.655	5.300
30	1.177	1.841	2.247	2.603	3.022	3.905	4.640	5.283
31	1.175	1.838	2.242	2.597	3.014	3.894	4.627	5.267
32	1.174	1.834	2.238	2.592	3.007	3.884	4.614	5.252
33	1.172	1.831	2.233	2.586	3.000	3.874	4.602	5.238
34	1.171	1.828	2.229	2.581	2.994	3.865	4.590	5.224
35	1.170	1.826	2.226	2.577	2.988	3.857	4.580	5.211
36	1.168	1.823	2.222	2.572	2.983	3.849	4.570	5.199
37	1.167	1.821	2.219	2.568	2.977	3.841	4.560	5.188
38	1.166	1.818	2.216	2.564	2.972	3.834	4.551	5.177
39	1.165	1.816	2.213	2.560	2.967	3.827	4.542	5.167
40	1.164	1.814	2.210	2.556	2.963	3.820	4.534	5.157
41	1.163	1.812	2.207	2.553	2.959	3.814	4.526	5.147
42	1.162	1.810	2.205	2.550	2.955	3.808	4.518	5.138
43	1.162	1.809	2.202	2.547	2.951	3.802	4.511	5.130
44	1.161	1.807	2.200	2.544	2.947	3.797	4.504	5.121
45	1.160	1.805	2.197	2.541	2.943	3.791	4.497	5.114

4.1.8 Values of k for $\gamma = .90$ and $n = 8$ (Continued)

$$\Pr\left\{T_f \le k\sqrt{n} \,\middle|\, K_p\sqrt{n}\right\} = \gamma$$

	P							
f	.75000	.90000	.95000	.97500	.99000	.99900	.99990	.99999
46	1.159	1.804	2.195	2.538	2.940	3.786	4.491	5.106
47	1.159	1.802	2.193	2.535	2.936	3.782	4.484	5.099
48	1.158	1.801	2.191	2.533	2.933	3.777	4.479	5.092
49	1.157	1.799	2.189	2.531	2.930	3.773	4.473	5.085
50	1.157	1.798	2.188	2.528	2.927	3.768	4.467	5.078
51	1.156	1.797	2.186	2.526	2.925	3.764	4.462	5.072
52	1.156	1.796	2.184	2.524	2.922	3.760	4.457	5.066
53	1.155	1.795	2.183	2.522	2.919	3.756	4.452	5.060
54	1.155	1.793	2.181	2.520	2.917	3.753	4.447	5.054
55	1.154	1.792	2.179	2.518	2.914	3.749	4.443	5.049
56	1.154	1.791	2.178	2.516	2.912	3.746	4.438	5.044
57	1.153	1.790	2.177	2.514	2.910	3.742	4.434	5.039
58	1.153	1.789	2.175	2.513	2.907	3.739	4.430	5.034
59	1.152	1.788	2.174	2.511	2.905	3.736	4.426	5.029
60	1.152	1.788	2.173	2.509	2.903	3.733	4.422	5.024
61	1.151	1.787	2.171	2.508	2.901	3.730	4.418	5.020
62	1.151	1.786	2.170	2.506	2.899	3.727	4.415	5.015
63	1.151	1.785	2.169	2.505	2.898	3.724	4.411	5.011
64	1.150	1.784	2.168	2.503	2.896	3.722	4.408	5.007
65	1.150	1.783	2.167	2.502	2.894	3.719	4.404	5.003
66	1.150	1.783	2.166	2.501	2.892	3.717	4.401	4.999
67	1.149	1.782	2.165	2.499	2.891	3.714	4.398	4.995
68	1.149	1.781	2.164	2.498	2.889	3.712	4.395	4.992
69	1.149	1.781	2.163	2.497	2.888	3.709	4.392	4.988
70	1.148	1.780	2.162	2.496	2.886	3.707	4.389	4.985
71	1.148	1.779	2.161	2.495	2.885	3.705	4.386	4.981
72	1.148	1.779	2.160	2.493	2.883	3.703	4.383	4.978
73	1.147	1.778	2.159	2.492	2.882	3.701	4.381	4.975
74	1.147	1.778	2.159	2.491	2.880	3.699	4.378	4.971
75	1.147	1.777	2.158	2.490	2.879	3.697	4.376	4.968
80	1.146	1.774	2.154	2.486	2.873	3.688	4.364	4.954
85	1.145	1.772	2.151	2.481	2.868	3.680	4.353	4.941
90	1.144	1.770	2.148	2.478	2.863	3.672	4.344	4.930
95	1.143	1.768	2.145	2.474	2.859	3.666	4.335	4.920
100	1.142	1.766	2.143	2.471	2.855	3.660	4.328	4.911
110	1.141	1.763	2.139	2.466	2.848	3.650	4.314	4.894
120	1.140	1.761	2.135	2.462	2.842	3.641	4.303	4.881
130	1.139	1.759	2.133	2.458	2.838	3.634	4.294	4.869
140	1.138	1.757	2.130	2.455	2.834	3.628	4.285	4.859
150	1.137	1.756	2.128	2.452	2.830	3.622	4.278	4.850
200	1.135	1.750	2.120	2.442	2.817	3.603	4.253	4.819
300	1.132	1.745	2.113	2.433	2.805	3.583	4.227	4.786
500	1.130	1.741	2.107	2.425	2.795	3.568	4.205	4.760
1000	1.129	1.738	2.102	2.419	2.787	3.556	4.189	4.739
∞	1.128	1.735	2.098	2.413	2.779	3.543	4.172	4.718

4.1.9 Values of k for $\gamma = .90$ and $n = 9$

$$\Pr\left\{T_f \leq k\sqrt{n} \,\middle|\, K_p\sqrt{n}\right\} = \gamma$$

	P							
f	.75000	.90000	.95000	.97500	.99000	.99900	.99990	.99999
1	5.379	10.193	13.085	15.594	18.510	24.589	29.594	33.938
2	2.273	4.053	5.149	6.107	7.225	9.564	11.494	13.171
3	1.756	3.037	3.832	4.530	5.347	7.059	8.474	9.705
4	1.553	2.636	3.311	3.904	4.599	6.059	7.268	8.319
5	1.446	2.422	3.031	3.567	4.196	5.519	6.615	7.569
6	1.380	2.290	2.857	3.357	3.944	5.179	6.204	7.096
7	1.335	2.199	2.737	3.212	3.769	4.944	5.919	6.768
8	1.302	2.133	2.650	3.106	3.641	4.771	5.708	6.525
9	1.278	2.083	2.583	3.025	3.543	4.638	5.546	6.339
10	1.259	2.043	2.531	2.960	3.466	4.532	5.417	6.190
11	1.243	2.011	2.488	2.908	3.402	4.445	5.312	6.068
12	1.231	1.985	2.453	2.865	3.350	4.373	5.224	5.966
13	1.220	1.963	2.423	2.829	3.306	4.312	5.149	5.880
14	1.211	1.944	2.398	2.798	3.268	4.260	5.085	5.805
15	1.203	1.928	2.376	2.771	3.235	4.214	5.029	5.740
16	1.197	1.914	2.357	2.747	3.206	4.174	4.980	5.683
17	1.191	1.902	2.340	2.726	3.180	4.139	4.937	5.633
18	1.186	1.891	2.325	2.708	3.158	4.107	4.898	5.587
19	1.181	1.881	2.312	2.691	3.137	4.079	4.863	5.547
20	1.177	1.872	2.300	2.676	3.119	4.053	4.831	5.510
21	1.173	1.864	2.289	2.663	3.102	4.030	4.802	5.476
22	1.170	1.857	2.279	2.651	3.087	4.009	4.776	5.445
23	1.167	1.851	2.270	2.640	3.073	3.989	4.751	5.417
24	1.164	1.845	2.262	2.629	3.061	3.971	4.729	5.391
25	1.161	1.839	2.255	2.620	3.049	3.955	4.708	5.367
26	1.159	1.834	2.248	2.611	3.038	3.939	4.689	5.344
27	1.157	1.829	2.241	2.603	3.028	3.925	4.672	5.324
28	1.155	1.825	2.235	2.595	3.019	3.912	4.655	5.304
29	1.153	1.821	2.230	2.588	3.010	3.899	4.639	5.286
30	1.151	1.817	2.224	2.582	3.002	3.888	4.625	5.269
31	1.149	1.814	2.220	2.576	2.994	3.877	4.611	5.253
32	1.148	1.810	2.215	2.570	2.987	3.866	4.598	5.237
33	1.146	1.807	2.211	2.565	2.980	3.857	4.586	5.223
34	1.145	1.804	2.207	2.560	2.974	3.848	4.574	5.210
35	1.144	1.802	2.203	2.555	2.968	3.839	4.564	5.197
36	1.143	1.799	2.199	2.550	2.962	3.831	4.553	5.185
37	1.142	1.797	2.196	2.546	2.957	3.823	4.543	5.173
38	1.140	1.794	2.193	2.542	2.951	3.815	4.534	5.162
39	1.139	1.792	2.190	2.538	2.947	3.808	4.525	5.151
40	1.138	1.790	2.187	2.534	2.942	3.802	4.517	5.141
41	1.138	1.788	2.184	2.531	2.938	3.795	4.509	5.132
42	1.137	1.786	2.181	2.527	2.933	3.789	4.501	5.123
43	1.136	1.784	2.179	2.524	2.929	3.783	4.494	5.114
44	1.135	1.782	2.176	2.521	2.925	3.778	4.486	5.106
45	1.134	1.781	2.174	2.518	2.922	3.772	4.480	5.098

4.1.9 Values of k for $\gamma = .90$ and $n = 9$ (Continued)

$$\Pr\left\{T_f \le k\sqrt{n} \,\middle|\, K_p\sqrt{n}\right\} = \gamma$$

	P							
f	.75000	.90000	.95000	.97500	.99000	.99900	.99990	.99999
46	1.134	1.779	2.172	2.515	2.918	3.767	4.473	5.090
47	1.133	1.778	2.170	2.513	2.915	3.762	4.467	5.082
48	1.132	1.776	2.168	2.510	2.912	3.758	4.461	5.075
49	1.132	1.775	2.166	2.508	2.909	3.753	4.455	5.068
50	1.131	1.774	2.164	2.505	2.906	3.749	4.450	5.062
51	1.130	1.772	2.162	2.503	2.903	3.744	4.444	5.055
52	1.130	1.771	2.160	2.501	2.900	3.740	4.439	5.049
53	1.129	1.770	2.159	2.499	2.897	3.736	4.434	5.043
54	1.129	1.769	2.157	2.497	2.895	3.733	4.429	5.038
55	1.128	1.768	2.156	2.495	2.892	3.729	4.425	5.032
56	1.128	1.767	2.154	2.493	2.890	3.726	4.420	5.027
57	1.127	1.766	2.153	2.491	2.888	3.722	4.416	5.021
58	1.127	1.765	2.151	2.489	2.885	3.719	4.411	5.016
59	1.126	1.764	2.150	2.488	2.883	3.716	4.407	5.012
60	1.126	1.763	2.149	2.486	2.881	3.713	4.403	5.007
61	1.126	1.762	2.147	2.484	2.879	3.710	4.400	5.002
62	1.125	1.761	2.146	2.483	2.877	3.707	4.396	4.998
63	1.125	1.760	2.145	2.481	2.875	3.704	4.392	4.993
64	1.124	1.759	2.144	2.480	2.873	3.701	4.389	4.989
65	1.124	1.759	2.143	2.479	2.872	3.698	4.385	4.985
66	1.124	1.758	2.142	2.477	2.870	3.696	4.382	4.981
67	1.123	1.757	2.141	2.476	2.868	3.693	4.379	4.977
68	1.123	1.756	2.140	2.475	2.866	3.691	4.376	4.974
69	1.123	1.756	2.139	2.473	2.865	3.689	4.373	4.970
70	1.123	1.755	2.138	2.472	2.863	3.686	4.370	4.966
71	1.122	1.754	2.137	2.471	2.862	3.684	4.367	4.963
72	1.122	1.754	2.136	2.470	2.860	3.682	4.364	4.960
73	1.122	1.753	2.135	2.469	2.859	3.680	4.361	4.956
74	1.121	1.753	2.134	2.468	2.858	3.678	4.359	4.953
75	1.121	1.752	2.133	2.467	2.856	3.676	4.356	4.950
80	1.120	1.749	2.130	2.462	2.850	3.666	4.344	4.935
85	1.119	1.747	2.126	2.457	2.844	3.658	4.333	4.923
90	1.118	1.745	2.123	2.454	2.840	3.651	4.324	4.911
95	1.117	1.743	2.121	2.450	2.835	3.644	4.315	4.900
100	1.116	1.741	2.118	2.447	2.831	3.638	4.307	4.891
110	1.115	1.738	2.114	2.442	2.824	3.627	4.293	4.874
120	1.114	1.736	2.111	2.437	2.818	3.619	4.282	4.860
130	1.113	1.734	2.108	2.433	2.814	3.611	4.272	4.848
140	1.112	1.732	2.105	2.430	2.809	3.605	4.264	4.838
150	1.111	1.730	2.103	2.427	2.806	3.599	4.256	4.829
200	1.109	1.725	2.095	2.417	2.793	3.579	4.230	4.797
300	1.106	1.720	2.087	2.407	2.780	3.559	4.203	4.763
500	1.105	1.715	2.081	2.399	2.769	3.543	4.181	4.735
1000	1.103	1.712	2.077	2.393	2.761	3.530	4.164	4.714
∞	1.102	1.709	2.072	2.387	2.754	3.517	4.146	4.692

4.1.10 Values of k for $\gamma = .90$ and $n = 10$

$$\Pr\left\{T_f \le k\sqrt{n} \,\middle|\, K_p\sqrt{n}\right\} = \gamma$$

f	P .75000	.90000	.95000	.97500	.99000	.99900	.99990	.99999
1	5.373	10.194	13.086	15.594	18.510	24.590	29.594	33.938
2	2.254	4.043	5.141	6.100	7.219	9.560	11.490	13.168
3	1.736	3.024	3.822	4.521	5.339	7.053	8.469	9.701
4	1.533	2.622	3.299	3.894	4.590	6.053	7.262	8.314
5	1.425	2.407	3.019	3.556	4.187	5.512	6.609	7.564
6	1.359	2.274	2.844	3.345	3.933	5.171	6.197	7.090
7	1.314	2.183	2.723	3.199	3.759	4.936	5.911	6.761
8	1.281	2.116	2.635	3.093	3.630	4.762	5.701	6.519
9	1.257	2.066	2.568	3.011	3.532	4.629	5.538	6.332
10	1.237	2.026	2.515	2.947	3.454	4.522	5.409	6.182
11	1.222	1.994	2.472	2.894	3.390	4.435	5.303	6.060
12	1.209	1.967	2.437	2.851	3.337	4.363	5.215	5.958
13	1.199	1.945	2.407	2.814	3.292	4.302	5.140	5.871
14	1.190	1.926	2.381	2.783	3.254	4.249	5.076	5.797
15	1.182	1.910	2.359	2.755	3.221	4.203	5.019	5.732
16	1.175	1.895	2.340	2.732	3.192	4.163	4.970	5.674
17	1.169	1.883	2.323	2.711	3.166	4.127	4.926	5.624
18	1.164	1.872	2.308	2.692	3.143	4.095	4.887	5.578
19	1.159	1.862	2.295	2.675	3.122	4.067	4.852	5.537
20	1.155	1.853	2.282	2.660	3.104	4.041	4.820	5.500
21	1.152	1.845	2.271	2.646	3.087	4.017	4.791	5.466
22	1.148	1.838	2.262	2.634	3.072	3.996	4.764	5.435
23	1.145	1.831	2.252	2.623	3.058	3.976	4.740	5.407
24	1.142	1.825	2.244	2.612	3.045	3.958	4.717	5.380
25	1.140	1.820	2.236	2.603	3.033	3.941	4.697	5.356
26	1.137	1.814	2.229	2.594	3.022	3.926	4.677	5.334
27	1.135	1.810	2.223	2.586	3.012	3.911	4.659	5.313
28	1.133	1.805	2.217	2.578	3.002	3.898	4.643	5.293
29	1.131	1.801	2.211	2.571	2.994	3.885	4.627	5.275
30	1.129	1.797	2.206	2.564	2.985	3.873	4.612	5.257
31	1.128	1.794	2.201	2.558	2.977	3.862	4.598	5.241
32	1.126	1.790	2.196	2.552	2.970	3.852	4.585	5.226
33	1.125	1.787	2.192	2.547	2.963	3.842	4.573	5.211
34	1.123	1.784	2.188	2.542	2.957	3.833	4.561	5.198
35	1.122	1.781	2.184	2.537	2.951	3.824	4.550	5.185
36	1.121	1.779	2.180	2.532	2.945	3.816	4.540	5.172
37	1.120	1.776	2.177	2.528	2.939	3.808	4.530	5.161
38	1.119	1.774	2.173	2.523	2.934	3.800	4.521	5.150
39	1.118	1.772	2.170	2.520	2.929	3.793	4.512	5.139
40	1.117	1.770	2.167	2.516	2.925	3.786	4.503	5.129
41	1.116	1.767	2.164	2.512	2.920	3.780	4.495	5.119
42	1.115	1.766	2.162	2.509	2.916	3.774	4.487	5.110
43	1.114	1.764	2.159	2.506	2.912	3.768	4.480	5.101
44	1.113	1.762	2.157	2.502	2.908	3.762	4.472	5.093
45	1.113	1.760	2.154	2.499	2.904	3.757	4.465	5.085

4.1.10 **Values of k for $\gamma = .90$ and $n = 10$ (Continued)**

$$Pr\left\{T_f \leq k\sqrt{n} \,\middle|\, K_p\sqrt{n}\right\} = \gamma$$

	P							
f	.75000	.90000	.95000	.97500	.99000	.99900	.99990	.99999
46	1.112	1.759	2.152	2.497	2.900	3.751	4.459	5.077
47	1.111	1.757	2.150	2.494	2.897	3.746	4.453	5.069
48	1.110	1.756	2.148	2.491	2.894	3.742	4.446	5.062
49	1.110	1.754	2.146	2.489	2.891	3.737	4.441	5.055
50	1.109	1.753	2.144	2.486	2.888	3.733	4.435	5.048
51	1.109	1.752	2.142	2.484	2.885	3.728	4.429	5.042
52	1.108	1.750	2.140	2.482	2.882	3.724	4.424	5.036
53	1.108	1.749	2.139	2.480	2.879	3.720	4.419	5.030
54	1.107	1.748	2.137	2.478	2.876	3.716	4.414	5.024
55	1.107	1.747	2.136	2.476	2.874	3.713	4.410	5.018
56	1.106	1.746	2.134	2.474	2.871	3.709	4.405	5.013
57	1.106	1.745	2.133	2.472	2.869	3.706	4.401	5.007
58	1.105	1.744	2.131	2.470	2.867	3.702	4.396	5.002
59	1.105	1.743	2.130	2.468	2.865	3.699	4.392	4.997
60	1.104	1.742	2.129	2.467	2.862	3.696	4.388	4.993
61	1.104	1.741	2.127	2.465	2.860	3.693	4.384	4.988
62	1.103	1.740	2.126	2.463	2.858	3.690	4.380	4.983
63	1.103	1.739	2.125	2.462	2.856	3.687	4.377	4.979
64	1.103	1.738	2.124	2.460	2.855	3.684	4.373	4.975
65	1.102	1.738	2.123	2.459	2.853	3.681	4.370	4.971
66	1.102	1.737	2.122	2.458	2.851	3.679	4.366	4.967
67	1.102	1.736	2.120	2.456	2.849	3.676	4.363	4.963
68	1.101	1.735	2.119	2.455	2.848	3.674	4.360	4.959
69	1.101	1.735	2.118	2.454	2.846	3.671	4.357	4.955
70	1.101	1.734	2.117	2.452	2.844	3.669	4.354	4.952
71	1.100	1.733	2.117	2.451	2.843	3.667	4.351	4.948
72	1.100	1.733	2.116	2.450	2.841	3.665	4.348	4.945
73	1.100	1.732	2.115	2.449	2.840	3.662	4.345	4.941
74	1.100	1.731	2.114	2.448	2.839	3.660	4.342	4.938
75	1.099	1.731	2.113	2.447	2.837	3.658	4.340	4.935
80	1.098	1.728	2.109	2.442	2.831	3.649	4.328	4.920
85	1.097	1.726	2.106	2.437	2.825	3.640	4.317	4.907
90	1.096	1.724	2.103	2.433	2.820	3.633	4.307	4.895
95	1.095	1.722	2.100	2.430	2.816	3.626	4.298	4.884
100	1.094	1.720	2.097	2.427	2.811	3.620	4.290	4.875
110	1.093	1.717	2.093	2.421	2.804	3.609	4.276	4.858
120	1.092	1.714	2.090	2.417	2.798	3.600	4.264	4.844
130	1.091	1.712	2.087	2.413	2.793	3.592	4.254	4.831
140	1.090	1.710	2.084	2.409	2.789	3.586	4.245	4.821
150	1.089	1.709	2.082	2.406	2.785	3.580	4.238	4.811
200	1.087	1.703	2.074	2.396	2.772	3.559	4.211	4.778
300	1.085	1.698	2.066	2.386	2.759	3.539	4.183	4.744
500	1.083	1.693	2.060	2.378	2.748	3.522	4.160	4.715
1000	1.081	1.690	2.055	2.371	2.740	3.509	4.142	4.693
∞	1.080	1.687	2.050	2.365	2.732	3.495	4.124	4.670

4.1.11 Values of k for $\gamma = .90$ and $n = 17$

$$\Pr\left\{T_f \leq k\sqrt{n} \,\middle|\, K_p\sqrt{n}\right\} = \gamma$$

	P							
f	.75000	.90000	.95000	.97500	.99000	.99900	.99990	.99999
1	5.364	10.196	13.087	15.595	18.511	24.591	29.595	33.939
2	2.183	4.004	5.111	6.075	7.198	9.543	11.477	13.156
3	1.657	2.976	3.783	4.488	5.311	7.032	8.452	9.685
4	1.451	2.568	3.255	3.856	4.558	6.028	7.242	8.297
5	1.341	2.349	2.971	3.515	4.152	5.485	6.586	7.544
6	1.274	2.213	2.792	3.301	3.895	5.142	6.172	7.068
7	1.228	2.119	2.670	3.152	3.718	4.904	5.885	6.738
8	1.194	2.050	2.579	3.044	3.587	4.729	5.672	6.494
9	1.169	1.998	2.510	2.960	3.487	4.593	5.509	6.305
10	1.149	1.956	2.455	2.894	3.407	4.485	5.378	6.155
11	1.133	1.923	2.411	2.839	3.342	4.397	5.271	6.031
12	1.120	1.895	2.374	2.794	3.287	4.323	5.181	5.928
13	1.109	1.872	2.343	2.756	3.241	4.261	5.105	5.841
14	1.100	1.852	2.316	2.724	3.202	4.207	5.040	5.765
15	1.092	1.835	2.293	2.695	3.167	4.160	4.982	5.699
16	1.085	1.819	2.272	2.670	3.137	4.119	4.932	5.641
17	1.079	1.806	2.254	2.648	3.110	4.082	4.887	5.589
18	1.073	1.794	2.239	2.629	3.086	4.049	4.847	5.542
19	1.069	1.784	2.224	2.611	3.065	4.020	4.811	5.501
20	1.064	1.774	2.211	2.595	3.045	3.993	4.778	5.463
21	1.060	1.766	2.200	2.581	3.028	3.968	4.748	5.428
22	1.057	1.758	2.189	2.568	3.011	3.946	4.721	5.397
23	1.054	1.751	2.179	2.555	2.997	3.926	4.696	5.367
24	1.051	1.744	2.170	2.544	2.983	3.907	4.673	5.340
25	1.048	1.738	2.162	2.534	2.971	3.889	4.651	5.316
26	1.046	1.733	2.155	2.525	2.959	3.873	4.631	5.292
27	1.043	1.728	2.147	2.516	2.948	3.858	4.613	5.271
28	1.041	1.723	2.141	2.508	2.938	3.844	4.595	5.250
29	1.039	1.719	2.135	2.500	2.929	3.831	4.579	5.232
30	1.037	1.714	2.129	2.493	2.920	3.818	4.564	5.214
31	1.036	1.710	2.124	2.486	2.911	3.807	4.549	5.197
32	1.034	1.707	2.119	2.480	2.904	3.796	4.536	5.181
33	1.033	1.703	2.114	2.474	2.896	3.785	4.523	5.166
34	1.031	1.700	2.109	2.468	2.889	3.775	4.511	5.152
35	1.030	1.697	2.105	2.463	2.883	3.766	4.499	5.138
36	1.029	1.694	2.101	2.458	2.876	3.757	4.488	5.126
37	1.027	1.692	2.097	2.453	2.870	3.749	4.478	5.114
38	1.026	1.689	2.094	2.449	2.865	3.741	4.468	5.102
39	1.025	1.687	2.090	2.444	2.860	3.733	4.459	5.091
40	1.024	1.684	2.087	2.440	2.854	3.726	4.450	5.080
41	1.023	1.682	2.084	2.436	2.850	3.719	4.441	5.070
42	1.022	1.680	2.081	2.433	2.845	3.713	4.433	5.061
43	1.021	1.678	2.078	2.429	2.840	3.706	4.425	5.051
44	1.021	1.676	2.076	2.426	2.836	3.700	4.417	5.042
45	1.020	1.674	2.073	2.423	2.832	3.694	4.410	5.034

4.1.11 Values of k for $\gamma = .90$ and $n = 17$ (Continued)

$$\Pr\left\{T_f \leq k\sqrt{n} \,\middle|\, K_p\sqrt{n}\right\} = \gamma$$

	P							
f	.75000	.90000	.95000	.97500	.99000	.99900	.99990	.99999
46	1.019	1.672	2.071	2.419	2.828	3.689	4.403	5.026
47	1.018	1.671	2.068	2.416	2.824	3.683	4.396	5.018
48	1.018	1.669	2.066	2.414	2.821	3.678	4.390	5.010
49	1.017	1.668	2.064	2.411	2.817	3.673	4.383	5.003
50	1.016	1.666	2.062	2.408	2.814	3.668	4.377	4.996
51	1.016	1.665	2.060	2.406	2.811	3.664	4.372	4.989
52	1.015	1.663	2.058	2.403	2.808	3.659	4.366	4.982
53	1.014	1.662	2.056	2.401	2.805	3.655	4.361	4.976
54	1.014	1.661	2.054	2.399	2.802	3.651	4.355	4.970
55	1.013	1.659	2.052	2.396	2.799	3.647	4.350	4.964
56	1.013	1.658	2.051	2.394	2.796	3.643	4.346	4.958
57	1.012	1.657	2.049	2.392	2.794	3.639	4.341	4.953
58	1.012	1.656	2.048	2.390	2.791	3.636	4.336	4.947
59	1.011	1.655	2.046	2.388	2.789	3.632	4.332	4.942
60	1.011	1.654	2.045	2.386	2.787	3.629	4.327	4.937
61	1.011	1.653	2.043	2.385	2.784	3.625	4.323	4.932
62	1.010	1.652	2.042	2.383	2.782	3.622	4.319	4.927
63	1.010	1.651	2.040	2.381	2.780	3.619	4.315	4.923
64	1.009	1.650	2.039	2.379	2.778	3.616	4.311	4.918
65	1.009	1.649	2.038	2.378	2.776	3.613	4.308	4.914
66	1.009	1.648	2.037	2.376	2.774	3.610	4.304	4.909
67	1.008	1.648	2.036	2.375	2.772	3.607	4.301	4.905
68	1.008	1.647	2.034	2.373	2.770	3.605	4.297	4.901
69	1.008	1.646	2.033	2.372	2.768	3.602	4.294	4.897
70	1.007	1.645	2.032	2.371	2.767	3.599	4.290	4.893
71	1.007	1.644	2.031	2.369	2.765	3.597	4.287	4.889
72	1.007	1.644	2.030	2.368	2.763	3.595	4.284	4.886
73	1.006	1.643	2.029	2.367	2.762	3.592	4.281	4.882
74	1.006	1.642	2.028	2.365	2.760	3.590	4.278	4.879
75	1.006	1.642	2.027	2.364	2.758	3.588	4.275	4.875
80	1.005	1.639	2.023	2.359	2.751	3.577	4.262	4.859
85	1.003	1.636	2.019	2.354	2.745	3.568	4.250	4.845
90	1.002	1.634	2.016	2.349	2.739	3.559	4.239	4.832
95	1.002	1.631	2.013	2.345	2.734	3.552	4.230	4.821
100	1.001	1.629	2.010	2.342	2.730	3.545	4.221	4.810
110	.999	1.626	2.005	2.335	2.722	3.533	4.205	4.792
120	.998	1.623	2.001	2.330	2.715	3.523	4.192	4.776
130	.997	1.621	1.997	2.326	2.709	3.514	4.181	4.762
140	.996	1.619	1.995	2.322	2.704	3.507	4.171	4.751
150	.996	1.617	1.992	2.319	2.700	3.500	4.163	4.740
200	.993	1.611	1.983	2.307	2.685	3.477	4.132	4.703
300	.990	1.605	1.974	2.295	2.669	3.452	4.100	4.664
500	.988	1.600	1.967	2.285	2.657	3.432	4.073	4.630
1000	.987	1.596	1.961	2.278	2.647	3.417	4.052	4.604
∞	.985	1.592	1.956	2.271	2.637	3.401	4.030	4.576

4.1.12 Values of k for $\gamma = .90$ and $n = 37$

$$\Pr\left\{T_f \leq k\sqrt{n} \,\middle|\, K_p\sqrt{n}\right\} = \gamma$$

	P							
f	.75000	.90000	.95000	.97500	.99000	.99900	.99990	.99999
1	5.365	10.197	13.089	15.596	18.512	24.591	29.595	33.939
2	2.126	3.974	5.087	6.055	7.181	9.531	11.466	13.147
3	1.590	2.937	3.753	4.463	5.290	7.016	8.438	9.673
4	1.378	2.524	3.220	3.827	4.533	6.009	7.226	8.283
5	1.265	2.301	2.932	3.482	4.124	5.464	6.569	7.528
6	1.195	2.161	2.751	3.265	3.865	5.119	6.153	7.051
7	1.147	2.065	2.625	3.114	3.685	4.879	5.864	6.720
8	1.112	1.994	2.533	3.003	3.553	4.702	5.650	6.474
9	1.085	1.939	2.462	2.918	3.450	4.565	5.485	6.285
10	1.064	1.896	2.405	2.850	3.369	4.456	5.353	6.133
11	1.047	1.861	2.359	2.794	3.302	4.366	5.245	6.009
12	1.033	1.831	2.320	2.747	3.246	4.292	5.154	5.905
13	1.022	1.806	2.287	2.708	3.199	4.228	5.077	5.816
14	1.012	1.785	2.259	2.674	3.158	4.173	5.011	5.740
15	1.003	1.767	2.235	2.644	3.122	4.125	4.953	5.673
16	.995	1.750	2.213	2.618	3.091	4.083	4.902	5.614
17	.989	1.736	2.194	2.595	3.063	4.045	4.856	5.561
18	.983	1.723	2.177	2.574	3.038	4.011	4.815	5.514
19	.978	1.712	2.162	2.556	3.016	3.981	4.778	5.472
20	.973	1.702	2.148	2.539	2.996	3.953	4.745	5.433
21	.969	1.692	2.136	2.523	2.977	3.928	4.714	5.398
22	.965	1.684	2.124	2.509	2.960	3.905	4.686	5.366
23	.961	1.676	2.114	2.497	2.944	3.884	4.660	5.336
24	.958	1.669	2.104	2.485	2.930	3.864	4.637	5.308
25	.955	1.662	2.095	2.474	2.917	3.846	4.614	5.283
26	.953	1.656	2.087	2.463	2.904	3.829	4.594	5.259
27	.950	1.650	2.079	2.454	2.893	3.813	4.575	5.237
28	.948	1.645	2.072	2.445	2.882	3.799	4.557	5.216
29	.946	1.640	2.065	2.437	2.872	3.785	4.540	5.197
30	.944	1.635	2.059	2.429	2.862	3.772	4.524	5.178
31	.942	1.631	2.053	2.422	2.854	3.760	4.509	5.161
32	.940	1.627	2.047	2.415	2.845	3.748	4.495	5.145
33	.938	1.623	2.042	2.408	2.837	3.737	4.482	5.129
34	.937	1.619	2.037	2.402	2.830	3.727	4.469	5.115
35	.935	1.616	2.032	2.396	2.823	3.717	4.457	5.101
36	.934	1.613	2.028	2.391	2.816	3.708	4.445	5.088
37	.932	1.610	2.023	2.386	2.809	3.699	4.435	5.075
38	.931	1.607	2.019	2.381	2.803	3.690	4.424	5.063
39	.930	1.604	2.016	2.376	2.797	3.682	4.414	5.051
40	.929	1.601	2.012	2.371	2.792	3.675	4.405	5.040
41	.928	1.599	2.009	2.367	2.787	3.667	4.396	5.030
42	.927	1.596	2.005	2.363	2.781	3.660	4.387	5.020
43	.926	1.594	2.002	2.359	2.777	3.653	4.379	5.010
44	.925	1.592	1.999	2.355	2.772	3.647	4.371	5.001
45	.924	1.590	1.996	2.352	2.767	3.641	4.363	4.992

4.1.12 Values of k for $\gamma = .90$ and $n = 37$ (Continued)

$$\Pr\left\{T_f \leq k\sqrt{n} \,\middle|\, K_p\sqrt{n}\right\} = \gamma$$

	P							
f	.75000	.90000	.95000	.97500	.99000	.99900	.99990	.99999
46	.923	1.588	1.993	2.348	2.763	3.635	4.356	4.983
47	.922	1.586	1.991	2.345	2.759	3.629	4.349	4.975
48	.922	1.584	1.988	2.341	2.755	3.623	4.342	4.967
49	.921	1.582	1.986	2.338	2.751	3.618	4.335	4.960
50	.920	1.581	1.983	2.335	2.747	3.613	4.329	4.952
51	.919	1.579	1.981	2.332	2.744	3.608	4.323	4.945
52	.919	1.577	1.979	2.330	2.740	3.603	4.317	4.938
53	.918	1.576	1.976	2.327	2.737	3.598	4.311	4.931
54	.918	1.574	1.974	2.324	2.734	3.594	4.305	4.925
55	.917	1.573	1.972	2.322	2.731	3.589	4.300	4.919
56	.916	1.571	1.971	2.320	2.728	3.585	4.295	4.913
57	.916	1.570	1.969	2.317	2.725	3.581	4.290	4.907
58	.915	1.569	1.967	2.315	2.722	3.577	4.285	4.901
59	.915	1.568	1.965	2.313	2.719	3.573	4.280	4.895
60	.914	1.566	1.963	2.311	2.717	3.570	4.275	4.890
61	.914	1.565	1.962	2.309	2.714	3.566	4.271	4.885
62	.913	1.564	1.960	2.307	2.712	3.562	4.267	4.880
63	.913	1.563	1.959	2.305	2.709	3.559	4.262	4.875
64	.912	1.562	1.957	2.303	2.707	3.556	4.258	4.870
65	.912	1.561	1.956	2.301	2.705	3.552	4.254	4.865
66	.912	1.560	1.954	2.299	2.702	3.549	4.250	4.861
67	.911	1.559	1.953	2.297	2.700	3.546	4.246	4.856
68	.911	1.558	1.952	2.296	2.698	3.543	4.243	4.852
69	.911	1.557	1.950	2.294	2.696	3.540	4.239	4.848
70	.910	1.556	1.949	2.292	2.694	3.537	4.236	4.844
71	.910	1.555	1.948	2.291	2.692	3.535	4.232	4.839
72	.909	1.555	1.947	2.289	2.690	3.532	4.229	4.836
73	.909	1.554	1.945	2.288	2.688	3.529	4.226	4.832
74	.909	1.553	1.944	2.286	2.687	3.527	4.222	4.828
75	.908	1.552	1.943	2.285	2.685	3.524	4.219	4.824
80	.907	1.549	1.938	2.279	2.677	3.513	4.205	4.807
85	.906	1.545	1.934	2.273	2.669	3.502	4.191	4.792
90	.905	1.543	1.929	2.268	2.663	3.493	4.180	4.778
95	.904	1.540	1.926	2.263	2.657	3.484	4.169	4.765
100	.903	1.538	1.922	2.259	2.652	3.476	4.159	4.754
110	.901	1.534	1.917	2.251	2.642	3.463	4.142	4.734
120	.900	1.530	1.912	2.245	2.634	3.451	4.127	4.716
130	.899	1.527	1.908	2.240	2.627	3.441	4.114	4.701
140	.898	1.525	1.904	2.235	2.621	3.432	4.103	4.688
150	.897	1.523	1.901	2.231	2.616	3.425	4.094	4.676
200	.894	1.515	1.890	2.217	2.598	3.397	4.058	4.634
300	.891	1.508	1.879	2.202	2.579	3.367	4.020	4.588
500	.889	1.502	1.870	2.190	2.562	3.342	3.986	4.547
1000	.887	1.497	1.863	2.180	2.550	3.322	3.959	4.513
∞	.885	1.492	1.856	2.171	2.537	3.301	3.930	4.476

4.1.13 Values of k for $\gamma = .90$ and $n = 145$

$$\Pr\left\{T_f \leq k\sqrt{n} \,\middle|\, K_p\sqrt{n}\right\} = \gamma$$

f	P .75000	.90000	.95000	.97500	.99000	.99900	.99990	.99999
1	5.367	10.198	13.089	15.597	18.513	24.592	29.595	33.939
2	2.090	3.955	5.073	6.043	7.171	9.523	11.460	13.141
3	1.544	2.912	3.734	4.446	5.276	7.005	8.429	9.666
4	1.327	2.495	3.198	3.807	4.517	5.997	7.216	8.274
5	1.209	2.269	2.907	3.461	4.105	5.450	6.557	7.519
6	1.136	2.127	2.723	3.242	3.845	5.104	6.140	7.040
7	1.085	2.028	2.596	3.090	3.664	4.863	5.850	6.708
8	1.047	1.955	2.502	2.977	3.530	4.685	5.636	6.462
9	1.018	1.898	2.429	2.890	3.427	4.547	5.470	6.272
10	.995	1.853	2.370	2.820	3.344	4.437	5.337	6.119
11	.977	1.816	2.323	2.763	3.276	4.347	5.228	5.994
12	.961	1.785	2.283	2.715	3.219	4.271	5.137	5.890
13	.948	1.759	2.249	2.675	3.171	4.206	5.059	5.800
14	.937	1.736	2.220	2.640	3.129	4.151	4.992	5.723
15	.927	1.717	2.194	2.609	3.093	4.102	4.934	5.656
16	.919	1.699	2.171	2.582	3.060	4.059	4.882	5.596
17	.911	1.684	2.151	2.558	3.032	4.021	4.836	5.543
18	.904	1.670	2.133	2.536	3.006	3.986	4.794	5.496
19	.898	1.658	2.117	2.517	2.983	3.955	4.757	5.453
20	.893	1.646	2.102	2.499	2.962	3.927	4.723	5.414
21	.888	1.636	2.089	2.483	2.942	3.901	4.692	5.378
22	.883	1.627	2.077	2.468	2.925	3.878	4.663	5.345
23	.879	1.618	2.065	2.455	2.908	3.856	4.637	5.315
24	.875	1.610	2.055	2.442	2.893	3.836	4.613	5.287
25	.872	1.603	2.045	2.430	2.879	3.817	4.590	5.261
26	.868	1.596	2.036	2.420	2.866	3.800	4.569	5.237
27	.865	1.589	2.028	2.409	2.854	3.783	4.549	5.215
28	.863	1.583	2.020	2.400	2.843	3.768	4.531	5.194
29	.860	1.578	2.012	2.391	2.832	3.754	4.514	5.174
30	.858	1.572	2.006	2.383	2.822	3.740	4.497	5.155
31	.855	1.567	1.999	2.375	2.813	3.728	4.482	5.137
32	.853	1.563	1.993	2.367	2.804	3.716	4.468	5.121
33	.851	1.558	1.987	2.360	2.795	3.704	4.454	5.105
34	.849	1.554	1.981	2.354	2.787	3.694	4.441	5.090
35	.847	1.550	1.976	2.347	2.780	3.683	4.428	5.076
36	.845	1.546	1.971	2.341	2.772	3.674	4.417	5.062
37	.844	1.543	1.966	2.335	2.766	3.664	4.405	5.049
38	.842	1.539	1.962	2.330	2.759	3.656	4.395	5.037
39	.841	1.536	1.958	2.325	2.753	3.647	4.384	5.025
40	.839	1.533	1.953	2.320	2.747	3.639	4.375	5.014
41	.838	1.530	1.949	2.315	2.741	3.631	4.365	5.003
42	.837	1.527	1.946	2.310	2.735	3.624	4.356	4.993
43	.836	1.524	1.942	2.306	2.730	3.617	4.348	4.983
44	.834	1.522	1.939	2.302	2.725	3.610	4.339	4.973
45	.833	1.519	1.935	2.298	2.720	3.603	4.331	4.964

4.1.13 Values of k for $\gamma = .90$ and $n = 145$ (Continued)

$$\Pr\left\{T_f \leq k\sqrt{n} \,\middle|\, K_p\sqrt{n}\right\} = \gamma$$

	P							
f	.75000	.90000	.95000	.97500	.99000	.99900	.99990	.99999
46	.832	1.517	1.932	2.294	2.715	3.597	4.324	4.955
47	.831	1.515	1.929	2.290	2.711	3.591	4.316	4.947
48	.830	1.512	1.926	2.286	2.707	3.585	4.309	4.938
49	.829	1.510	1.923	2.283	2.702	3.579	4.302	4.930
50	.828	1.508	1.920	2.279	2.698	3.574	4.296	4.923
51	.827	1.506	1.918	2.276	2.694	3.568	4.289	4.915
52	.827	1.504	1.915	2.273	2.691	3.563	4.283	4.908
53	.826	1.502	1.913	2.270	2.687	3.558	4.277	4.901
54	.825	1.500	1.910	2.267	2.683	3.553	4.271	4.894
55	.824	1.499	1.908	2.264	2.680	3.549	4.265	4.888
56	.823	1.497	1.906	2.261	2.676	3.544	4.260	4.882
57	.823	1.495	1.903	2.259	2.673	3.540	4.254	4.876
58	.822	1.494	1.901	2.256	2.670	3.536	4.249	4.870
59	.821	1.492	1.899	2.254	2.667	3.531	4.244	4.864
60	.821	1.491	1.897	2.251	2.664	3.527	4.239	4.858
61	.820	1.489	1.895	2.249	2.661	3.523	4.235	4.853
62	.820	1.488	1.893	2.247	2.658	3.520	4.230	4.847
63	.819	1.487	1.891	2.244	2.656	3.516	4.226	4.842
64	.818	1.485	1.890	2.242	2.653	3.512	4.221	4.837
65	.818	1.484	1.888	2.240	2.650	3.509	4.217	4.832
66	.817	1.483	1.886	2.238	2.648	3.505	4.213	4.827
67	.817	1.482	1.885	2.236	2.645	3.502	4.209	4.823
68	.816	1.480	1.883	2.234	2.643	3.499	4.205	4.818
69	.816	1.479	1.881	2.232	2.641	3.496	4.201	4.814
70	.815	1.478	1.880	2.230	2.639	3.493	4.197	4.809
71	.815	1.477	1.878	2.228	2.636	3.490	4.193	4.805
72	.814	1.476	1.877	2.226	2.634	3.487	4.190	4.801
73	.814	1.475	1.876	2.225	2.632	3.484	4.186	4.797
74	.814	1.474	1.874	2.223	2.630	3.481	4.183	4.793
75	.813	1.473	1.873	2.221	2.628	3.478	4.180	4.789
80	.811	1.468	1.866	2.214	2.619	3.465	4.164	4.771
85	.809	1.464	1.861	2.207	2.610	3.454	4.150	4.755
90	.808	1.460	1.856	2.200	2.602	3.443	4.137	4.740
95	.807	1.457	1.851	2.195	2.595	3.434	4.125	4.726
100	.805	1.454	1.847	2.189	2.589	3.425	4.115	4.714
110	.803	1.449	1.840	2.180	2.578	3.409	4.096	4.692
120	.801	1.444	1.833	2.172	2.568	3.396	4.079	4.673
130	.800	1.440	1.828	2.166	2.560	3.385	4.065	4.657
140	.799	1.437	1.823	2.160	2.553	3.374	4.053	4.642
150	.797	1.434	1.819	2.155	2.546	3.365	4.042	4.630
200	.793	1.423	1.804	2.136	2.522	3.332	4.001	4.582
300	.789	1.412	1.788	2.115	2.497	3.295	3.954	4.528
500	.786	1.403	1.774	2.097	2.474	3.261	3.912	4.477
1000	.783	1.396	1.763	2.082	2.454	3.232	3.874	4.432
∞	.781	1.388	1.751	2.066	2.433	3.197	3.825	4.371

4.1.14 Values of k for $\gamma = .90$ and $n = 500$

$$\Pr\left\{T_f \leq k\sqrt{n} \,\middle|\, K_p\sqrt{n}\right\} = \gamma$$

	P							
f	.75000	.90000	.95000	.97500	.99000	.99900	.99990	.99999
1	5.367	10.198	13.089	15.597	18.513	24.592	29.596	33.940
2	2.082	3.950	5.069	6.039	7.168	9.521	11.458	13.140
3	1.533	2.906	3.729	4.442	5.272	7.003	8.427	9.664
4	1.314	2.488	3.192	3.803	4.513	5.994	7.213	8.272
5	1.195	2.262	2.901	3.456	4.101	5.447	6.554	7.516
6	1.120	2.118	2.717	3.236	3.840	5.100	6.137	7.038
7	1.068	2.018	2.589	3.083	3.659	4.859	5.847	6.705
8	1.029	1.945	2.494	2.970	3.525	4.681	5.632	6.459
9	.999	1.888	2.420	2.883	3.421	4.543	5.466	6.268
10	.976	1.842	2.362	2.813	3.338	4.432	5.333	6.116
11	.956	1.805	2.314	2.756	3.270	4.342	5.224	5.991
12	.940	1.773	2.273	2.707	3.212	4.266	5.133	5.886
13	.926	1.747	2.239	2.667	3.164	4.201	5.055	5.796
14	.914	1.723	2.209	2.631	3.122	4.145	4.988	5.719
15	.904	1.703	2.183	2.600	3.085	4.096	4.929	5.652
16	.895	1.686	2.161	2.573	3.053	4.053	4.877	5.592
17	.887	1.670	2.140	2.549	3.024	4.015	4.831	5.539
18	.879	1.656	2.122	2.527	2.998	3.980	4.789	5.491
19	.873	1.643	2.105	2.507	2.974	3.949	4.751	5.448
20	.867	1.631	2.090	2.489	2.953	3.921	4.717	5.409
21	.862	1.621	2.077	2.473	2.934	3.895	4.686	5.373
22	.857	1.611	2.064	2.458	2.916	3.871	4.657	5.340
23	.852	1.602	2.053	2.444	2.899	3.849	4.631	5.310
24	.848	1.594	2.042	2.431	2.884	3.829	4.607	5.282
25	.844	1.586	2.032	2.419	2.870	3.810	4.584	5.256
26	.840	1.579	2.023	2.408	2.857	3.792	4.563	5.232
27	.837	1.572	2.014	2.398	2.844	3.776	4.543	5.209
28	.834	1.566	2.006	2.388	2.833	3.761	4.525	5.188
29	.831	1.560	1.998	2.379	2.822	3.746	4.507	5.168
30	.828	1.554	1.991	2.370	2.812	3.733	4.491	5.149
31	.826	1.549	1.984	2.362	2.802	3.720	4.475	5.132
32	.823	1.544	1.978	2.355	2.793	3.708	4.461	5.115
33	.821	1.540	1.972	2.347	2.784	3.696	4.447	5.099
34	.819	1.535	1.966	2.341	2.776	3.685	4.434	5.084
35	.816	1.531	1.961	2.334	2.769	3.675	4.421	5.069
36	.814	1.527	1.956	2.328	2.761	3.665	4.409	5.056
37	.813	1.523	1.951	2.322	2.754	3.656	4.398	5.043
38	.811	1.519	1.946	2.316	2.747	3.647	4.387	5.030
39	.809	1.516	1.941	2.311	2.741	3.638	4.377	5.019
40	.807	1.513	1.937	2.306	2.735	3.630	4.367	5.007
41	.806	1.510	1.933	2.301	2.729	3.622	4.358	4.996
42	.804	1.506	1.929	2.296	2.723	3.614	4.349	4.986
43	.803	1.504	1.925	2.292	2.718	3.607	4.340	4.976
44	.802	1.501	1.922	2.287	2.713	3.600	4.331	4.966
45	.800	1.498	1.918	2.283	2.708	3.594	4.323	4.957

4.1.14 Values of k for $\gamma = .90$ and $n = 500$ (Continued)

$$Pr\left\{T_f \leq k\sqrt{n} \,\middle|\, K_p\sqrt{n}\right\} = \gamma$$

	P							
f	.75000	.90000	.95000	.97500	.99000	.99900	.99990	.99999
46	.799	1.495	1.915	2.279	2.703	3.587	4.316	4.948
47	.798	1.493	1.911	2.275	2.698	3.581	4.308	4.939
48	.797	1.491	1.908	2.271	2.694	3.575	4.301	4.931
49	.796	1.488	1.905	2.268	2.689	3.569	4.294	4.923
50	.794	1.486	1.902	2.264	2.685	3.564	4.287	4.915
51	.793	1.484	1.900	2.261	2.681	3.558	4.281	4.908
52	.792	1.482	1.897	2.257	2.677	3.553	4.274	4.901
53	.791	1.480	1.894	2.254	2.673	3.548	4.268	4.894
54	.790	1.478	1.892	2.251	2.670	3.543	4.262	4.887
55	.790	1.476	1.889	2.248	2.666	3.538	4.256	4.880
56	.789	1.474	1.887	2.245	2.663	3.534	4.251	4.874
57	.788	1.472	1.884	2.242	2.659	3.529	4.246	4.868
58	.787	1.470	1.882	2.240	2.656	3.525	4.240	4.862
59	.786	1.469	1.880	2.237	2.653	3.521	4.235	4.856
60	.785	1.467	1.878	2.235	2.650	3.516	4.230	4.850
61	.785	1.466	1.876	2.232	2.647	3.512	4.225	4.845
62	.784	1.464	1.874	2.230	2.644	3.509	4.221	4.839
63	.783	1.462	1.872	2.227	2.641	3.505	4.216	4.834
64	.782	1.461	1.870	2.225	2.638	3.501	4.212	4.829
65	.782	1.460	1.868	2.223	2.636	3.497	4.207	4.824
66	.781	1.458	1.866	2.220	2.633	3.494	4.203	4.819
67	.781	1.457	1.864	2.218	2.630	3.491	4.199	4.814
68	.780	1.456	1.863	2.216	2.628	3.487	4.195	4.810
69	.779	1.454	1.861	2.214	2.626	3.484	4.191	4.805
70	.779	1.453	1.859	2.212	2.623	3.481	4.187	4.801
71	.778	1.452	1.858	2.210	2.621	3.478	4.184	4.796
72	.778	1.451	1.856	2.208	2.619	3.475	4.180	4.792
73	.777	1.449	1.855	2.207	2.616	3.472	4.176	4.788
74	.777	1.448	1.853	2.205	2.614	3.469	4.173	4.784
75	.776	1.447	1.852	2.203	2.612	3.466	4.169	4.780
80	.774	1.442	1.845	2.195	2.602	3.453	4.153	4.762
85	.771	1.437	1.839	2.187	2.593	3.441	4.139	4.745
90	.769	1.433	1.833	2.181	2.585	3.430	4.126	4.730
95	.768	1.429	1.828	2.174	2.578	3.420	4.114	4.716
100	.766	1.426	1.823	2.169	2.571	3.411	4.103	4.704
110	.763	1.419	1.815	2.159	2.559	3.395	4.083	4.681
120	.761	1.414	1.808	2.150	2.549	3.381	4.067	4.662
130	.759	1.410	1.802	2.143	2.540	3.369	4.052	4.645
140	.757	1.406	1.796	2.136	2.532	3.358	4.039	4.630
150	.756	1.402	1.792	2.130	2.525	3.349	4.028	4.617
200	.750	1.389	1.774	2.109	2.499	3.313	3.985	4.568
300	.744	1.374	1.754	2.085	2.469	3.273	3.935	4.511
500	.740	1.362	1.736	2.062	2.442	3.235	3.888	4.456
1000	.736	1.351	1.721	2.042	2.417	3.199	3.844	4.405
∞	.732	1.339	1.702	2.017	2.384	3.148	3.776	4.322

4.1.15 Values of k for $\gamma = .90$ and $n = \infty$

$$Pr\left\{T_f \leq k\sqrt{n} \,\middle|\, K_p\sqrt{n}\right\} = \gamma$$

	P							
f	.75000	.90000	.95000	.97500	.99000	.99900	.99990	.99999
1	5.368	10.198	13.090	15.597	18.513	24.592	29.596	33.940
2	2.078	3.948	5.067	6.038	7.167	9.520	11.457	13.139
3	1.528	2.904	3.727	4.441	5.271	7.002	8.426	9.663
4	1.308	2.485	3.190	3.801	4.511	5.993	7.212	8.271
5	1.189	2.258	2.898	3.454	4.099	5.445	6.553	7.515
6	1.113	2.114	2.714	3.234	3.838	5.099	6.136	7.037
7	1.060	2.014	2.586	3.081	3.657	4.857	5.846	6.704
8	1.021	1.940	2.491	2.968	3.522	4.679	5.631	6.458
9	.991	1.883	2.417	2.880	3.418	4.541	5.465	6.267
10	.967	1.837	2.358	2.810	3.335	4.430	5.332	6.114
11	.947	1.800	2.310	2.752	3.267	4.340	5.223	5.989
12	.931	1.768	2.269	2.704	3.210	4.264	5.131	5.884
13	.916	1.741	2.235	2.663	3.161	4.199	5.053	5.795
14	.904	1.718	2.205	2.628	3.119	4.143	4.986	5.718
15	.894	1.698	2.179	2.597	3.082	4.094	4.927	5.650
16	.884	1.680	2.156	2.569	3.049	4.051	4.875	5.590
17	.876	1.664	2.136	2.545	3.020	4.012	4.828	5.537
18	.868	1.650	2.117	2.523	2.994	3.978	4.787	5.489
19	.861	1.637	2.101	2.503	2.971	3.946	4.749	5.446
20	.855	1.625	2.085	2.485	2.949	3.918	4.715	5.407
21	.849	1.614	2.072	2.468	2.930	3.892	4.684	5.371
22	.844	1.604	2.059	2.453	2.912	3.868	4.655	5.338
23	.839	1.595	2.047	2.439	2.895	3.846	4.629	5.308
24	.835	1.587	2.036	2.426	2.880	3.826	4.604	5.280
25	.831	1.579	2.026	2.414	2.866	3.807	4.581	5.254
26	.827	1.571	2.017	2.403	2.853	3.789	4.560	5.230
27	.823	1.565	2.008	2.393	2.840	3.773	4.541	5.207
28	.820	1.558	2.000	2.383	2.829	3.757	4.522	5.186
29	.817	1.552	1.992	2.374	2.818	3.743	4.505	5.166
30	.814	1.547	1.985	2.365	2.807	3.729	4.488	5.147
31	.811	1.541	1.978	2.357	2.798	3.716	4.473	5.129
32	.809	1.536	1.972	2.349	2.789	3.704	4.458	5.112
33	.806	1.531	1.966	2.342	2.780	3.693	4.444	5.096
34	.804	1.527	1.960	2.335	2.772	3.682	4.431	5.081
35	.801	1.523	1.954	2.329	2.764	3.671	4.418	5.067
36	.799	1.518	1.949	2.322	2.756	3.661	4.406	5.053
37	.797	1.515	1.944	2.316	2.749	3.652	4.395	5.040
38	.795	1.511	1.939	2.311	2.742	3.643	4.384	5.028
39	.793	1.507	1.934	2.305	2.736	3.634	4.374	5.016
40	.791	1.504	1.930	2.300	2.730	3.626	4.364	5.005
41	.790	1.501	1.926	2.295	2.724	3.618	4.354	4.994
42	.788	1.497	1.922	2.290	2.718	3.611	4.345	4.983
43	.786	1.494	1.918	2.285	2.713	3.603	4.337	4.973
44	.785	1.491	1.914	2.281	2.707	3.596	4.328	4.963
45	.783	1.489	1.911	2.277	2.702	3.590	4.320	4.954

4.1.15 Values of k for $\gamma = .90$ and $n = \infty$ (Continued)

$$\Pr\left\{T_f \leq k\sqrt{n} \,\middle|\, K_p\sqrt{n}\right\} = \gamma$$

	P							
f	.75000	.90000	.95000	.97500	.99000	.99900	.99990	.99999
46	.782	1.486	1.907	2.273	2.697	3.583	4.312	4.945
47	.781	1.483	1.904	2.269	2.693	3.577	4.305	4.936
48	.779	1.481	1.901	2.265	2.688	3.571	4.297	4.928
49	.778	1.478	1.898	2.261	2.684	3.565	4.290	4.920
50	.777	1.476	1.895	2.258	2.680	3.559	4.284	4.912
51	.776	1.474	1.892	2.254	2.675	3.554	4.277	4.905
52	.775	1.472	1.889	2.251	2.671	3.549	4.271	4.898
53	.773	1.470	1.886	2.247	2.668	3.544	4.265	4.890
54	.772	1.467	1.883	2.244	2.664	3.539	4.259	4.884
55	.771	1.465	1.881	2.241	2.660	3.534	4.253	4.877
56	.770	1.464	1.878	2.238	2.657	3.529	4.247	4.871
57	.769	1.462	1.876	2.235	2.653	3.525	4.242	4.864
58	.768	1.460	1.874	2.233	2.650	3.520	4.237	4.858
59	.767	1.458	1.871	2.230	2.647	3.516	4.231	4.852
60	.767	1.456	1.869	2.227	2.644	3.512	4.226	4.847
61	.766	1.455	1.867	2.225	2.641	3.508	4.222	4.841
62	.765	1.453	1.865	2.222	2.638	3.504	4.217	4.836
63	.764	1.452	1.863	2.220	2.635	3.500	4.212	4.830
64	.763	1.450	1.861	2.218	2.632	3.496	4.208	4.825
65	.762	1.448	1.859	2.215	2.629	3.493	4.203	4.820
66	.762	1.447	1.857	2.213	2.627	3.489	4.199	4.815
67	.761	1.446	1.855	2.211	2.624	3.486	4.195	4.811
68	.760	1.444	1.854	2.209	2.622	3.482	4.191	4.806
69	.759	1.443	1.852	2.207	2.619	3.479	4.187	4.802
70	.759	1.441	1.850	2.205	2.617	3.476	4.183	4.797
71	.758	1.440	1.848	2.203	2.614	3.473	4.179	4.793
72	.757	1.439	1.847	2.201	2.612	3.470	4.176	4.789
73	.757	1.438	1.845	2.199	2.610	3.467	4.172	4.784
74	.756	1.436	1.844	2.197	2.608	3.464	4.169	4.780
75	.755	1.435	1.842	2.195	2.605	3.461	4.165	4.776
80	.752	1.430	1.835	2.187	2.595	3.448	4.149	4.758
85	.750	1.425	1.829	2.179	2.586	3.435	4.134	4.741
90	.747	1.420	1.823	2.172	2.578	3.424	4.121	4.726
95	.745	1.416	1.817	2.166	2.570	3.414	4.109	4.712
100	.743	1.412	1.812	2.160	2.563	3.405	4.098	4.700
110	.740	1.405	1.804	2.149	2.551	3.389	4.078	4.677
120	.737	1.400	1.796	2.140	2.540	3.375	4.061	4.657
130	.734	1.394	1.790	2.133	2.531	3.362	4.046	4.640
140	.731	1.390	1.784	2.126	2.523	3.351	4.033	4.625
150	.729	1.386	1.779	2.119	2.516	3.342	4.022	4.612
200	.721	1.371	1.759	2.096	2.488	3.305	3.978	4.562
300	.712	1.353	1.737	2.070	2.456	3.263	3.927	4.503
500	.703	1.336	1.715	2.044	2.426	3.222	3.878	4.447
1000	.695	1.320	1.694	2.018	2.395	3.182	3.829	4.392
∞	.674	1.282	1.645	1.960	2.326	3.090	3.719	4.265

4.2 Values of k for $\gamma = .95$

4.2.1 Values of k for $\gamma = .95$ and n = 1

$$\Pr\left\{T_f \leq k\sqrt{n} \,\middle|\, K_p\sqrt{n}\right\} = \gamma$$

	P							
f	.75000	.90000	.95000	.97500	.99000	.99900	.99990	.99999
1	13.104	21.171	26.546	31.391	37.139	49.275	59.300	68.006
2	4.895	7.006	8.378	9.616	11.096	14.275	16.947	19.291
3	3.698	5.074	5.957	6.750	7.699	9.743	11.472	12.994
4	3.251	4.368	5.077	5.712	6.470	8.104	9.489	10.710
5	3.021	4.008	4.629	5.184	5.846	7.271	8.478	9.544
6	2.881	3.790	4.360	4.867	5.471	6.768	7.867	8.838
7	2.788	3.645	4.180	4.655	5.220	6.432	7.458	8.364
8	2.721	3.542	4.052	4.504	5.041	6.192	7.165	8.024
9	2.671	3.464	3.956	4.391	4.907	6.011	6.944	7.768
10	2.631	3.404	3.881	4.303	4.803	5.870	6.772	7.568
11	2.600	3.356	3.822	4.233	4.719	5.758	6.634	7.407
12	2.575	3.317	3.773	4.176	4.651	5.666	6.521	7.275
13	2.553	3.284	3.732	4.128	4.595	5.589	6.426	7.164
14	2.535	3.256	3.698	4.087	4.547	5.524	6.346	7.071
15	2.520	3.233	3.669	4.053	4.505	5.468	6.277	6.990
16	2.506	3.212	3.643	4.023	4.470	5.419	6.217	6.920
17	2.495	3.194	3.621	3.997	4.439	5.377	6.165	6.859
18	2.484	3.178	3.602	3.974	4.411	5.340	6.119	6.804
19	2.475	3.164	3.584	3.953	4.387	5.306	6.077	6.756
20	2.467	3.152	3.569	3.935	4.365	5.276	6.041	6.713
21	2.459	3.140	3.555	3.918	4.345	5.250	6.007	6.674
22	2.453	3.130	3.542	3.903	4.327	5.225	5.977	6.638
23	2.447	3.121	3.530	3.889	4.311	5.203	5.950	6.606
24	2.441	3.112	3.520	3.877	4.296	5.183	5.925	6.576
25	2.436	3.104	3.510	3.866	4.283	5.164	5.902	6.549
26	2.431	3.097	3.501	3.855	4.270	5.147	5.880	6.524
27	2.427	3.091	3.493	3.846	4.259	5.132	5.861	6.501
28	2.423	3.085	3.486	3.837	4.248	5.117	5.843	6.480
29	2.419	3.079	3.479	3.828	4.238	5.103	5.826	6.460
30	2.416	3.074	3.472	3.821	4.229	5.091	5.810	6.441
31	2.413	3.069	3.466	3.813	4.220	5.079	5.795	6.424
32	2.410	3.064	3.460	3.807	4.212	5.068	5.782	6.408
33	2.407	3.060	3.455	3.800	4.205	5.058	5.769	6.392
34	2.404	3.056	3.450	3.794	4.198	5.048	5.757	6.378
35	2.402	3.052	3.445	3.789	4.191	5.039	5.745	6.365
36	2.399	3.048	3.441	3.784	4.185	5.030	5.735	6.352
37	2.397	3.045	3.437	3.779	4.179	5.022	5.724	6.340
38	2.395	3.042	3.433	3.774	4.173	5.014	5.715	6.328
39	2.393	3.039	3.429	3.769	4.168	5.007	5.706	6.317
40	2.391	3.036	3.425	3.765	4.163	5.000	5.697	6.307
41	2.389	3.033	3.422	3.761	4.158	4.994	5.689	6.297
42	2.388	3.030	3.419	3.757	4.154	4.987	5.681	6.288
43	2.386	3.028	3.416	3.754	4.149	4.981	5.673	6.279
44	2.384	3.026	3.413	3.750	4.145	4.976	5.666	6.271
45	2.383	3.023	3.410	3.747	4.141	4.970	5.660	6.263

4.2.1 Values of k for $\gamma = .95$ and $n = 1$ (Continued)

$$\Pr\left\{T_f \leq k\sqrt{n} \,\middle|\, K_p\sqrt{n}\right\} = \gamma$$

	P							
f	.75000	.90000	.95000	.97500	.99000	.99900	.99990	.99999
46	2.381	3.021	3.407	3.744	4.137	4.965	5.653	6.255
47	2.380	3.019	3.405	3.741	4.134	4.960	5.647	6.248
48	2.379	3.017	3.402	3.738	4.130	4.955	5.641	6.241
49	2.378	3.015	3.400	3.735	4.127	4.951	5.635	6.234
50	2.376	3.013	3.398	3.732	4.124	4.946	5.630	6.227
51	2.375	3.012	3.395	3.730	4.121	4.942	5.624	6.221
52	2.374	3.010	3.393	3.727	4.118	4.938	5.619	6.215
53	2.373	3.008	3.391	3.725	4.115	4.934	5.614	6.209
54	2.372	3.007	3.389	3.723	4.112	4.930	5.610	6.204
55	2.371	3.005	3.388	3.721	4.110	4.927	5.605	6.198
56	2.370	3.004	3.386	3.718	4.107	4.923	5.601	6.193
57	2.369	3.003	3.384	3.716	4.105	4.920	5.597	6.188
58	2.368	3.001	3.382	3.714	4.102	4.917	5.593	6.183
59	2.368	3.000	3.381	3.713	4.100	4.914	5.589	6.179
60	2.367	2.999	3.379	3.711	4.098	4.911	5.585	6.174
61	2.366	2.997	3.378	3.709	4.096	4.908	5.581	6.170
62	2.365	2.996	3.376	3.707	4.094	4.905	5.578	6.166
63	2.364	2.995	3.375	3.706	4.092	4.902	5.574	6.162
64	2.364	2.994	3.374	3.704	4.090	4.900	5.571	6.158
65	2.363	2.993	3.372	3.702	4.088	4.897	5.568	6.154
66	2.362	2.992	3.371	3.701	4.086	4.894	5.565	6.150
67	2.362	2.991	3.370	3.700	4.084	4.892	5.562	6.146
68	2.361	2.990	3.369	3.698	4.083	4.890	5.559	6.143
69	2.360	2.989	3.367	3.697	4.081	4.887	5.556	6.140
70	2.360	2.988	3.366	3.695	4.080	4.885	5.553	6.136
71	2.359	2.987	3.365	3.694	4.078	4.883	5.550	6.133
72	2.359	2.986	3.364	3.693	4.076	4.881	5.548	6.130
73	2.358	2.986	3.363	3.692	4.075	4.879	5.545	6.127
74	2.358	2.985	3.362	3.690	4.074	4.877	5.543	6.124
75	2.357	2.984	3.361	3.689	4.072	4.875	5.540	6.121
80	2.355	2.980	3.357	3.684	4.066	4.866	5.529	6.108
85	2.353	2.977	3.353	3.679	4.060	4.859	5.520	6.096
90	2.351	2.974	3.349	3.675	4.055	4.852	5.511	6.086
95	2.349	2.972	3.346	3.671	4.051	4.845	5.503	6.077
100	2.348	2.969	3.343	3.668	4.047	4.840	5.496	6.068
110	2.345	2.965	3.338	3.662	4.040	4.830	5.484	6.054
120	2.343	2.962	3.334	3.657	4.034	4.822	5.474	6.042
130	2.341	2.959	3.331	3.653	4.029	4.816	5.466	6.032
140	2.339	2.957	3.328	3.650	4.025	4.810	5.458	6.023
150	2.338	2.955	3.325	3.647	4.021	4.805	5.452	6.015
200	2.333	2.948	3.316	3.636	4.009	4.787	5.430	5.989
300	2.329	2.941	3.307	3.626	3.996	4.770	5.408	5.963
500	2.325	2.935	3.300	3.617	3.986	4.756	5.390	5.941
1000	2.322	2.931	3.295	3.611	3.979	4.745	5.377	5.926
∞	2.319	2.926	3.290	3.605	3.971	4.735	5.364	5.910

4.2.2 Values of k for $\gamma = .95$ and $n = 2$

$$Pr\left\{T_f \leq k\sqrt{n} \,\middle|\, K_p\sqrt{n}\right\} = \gamma$$

	P							
f	.75000	.90000	.95000	.97500	.99000	.99900	.99990	.99999
1	11.763	20.581	26.260	31.257	37.094	49.276	59.304	68.010
2	4.125	6.386	7.845	9.148	10.691	13.962	16.686	19.062
3	3.051	4.508	5.443	6.280	7.275	9.397	11.174	12.730
4	2.654	3.827	4.575	5.244	6.039	7.741	9.171	10.425
5	2.451	3.481	4.134	4.717	5.410	6.896	8.145	9.242
6	2.328	3.272	3.868	4.399	5.031	6.383	7.522	8.523
7	2.246	3.134	3.691	4.187	4.777	6.039	7.103	8.038
8	2.187	3.034	3.564	4.036	4.595	5.792	6.801	7.688
9	2.144	2.960	3.470	3.922	4.458	5.606	6.573	7.423
10	2.109	2.903	3.396	3.834	4.352	5.461	6.394	7.216
11	2.082	2.856	3.337	3.763	4.267	5.344	6.250	7.049
12	2.060	2.819	3.289	3.705	4.197	5.248	6.132	6.911
13	2.041	2.787	3.249	3.657	4.139	5.168	6.033	6.795
14	2.025	2.761	3.215	3.616	4.089	5.099	5.949	6.696
15	2.012	2.738	3.186	3.581	4.047	5.041	5.876	6.612
16	2.000	2.719	3.160	3.550	4.010	4.990	5.813	6.537
17	1.990	2.701	3.138	3.524	3.978	4.945	5.758	6.472
18	1.981	2.686	3.119	3.500	3.950	4.906	5.708	6.415
19	1.973	2.673	3.102	3.479	3.924	4.870	5.665	6.363
20	1.966	2.661	3.086	3.461	3.902	4.839	5.625	6.317
21	1.959	2.650	3.072	3.444	3.881	4.810	5.590	6.275
22	1.954	2.640	3.060	3.429	3.863	4.785	5.557	6.237
23	1.948	2.631	3.048	3.415	3.846	4.761	5.528	6.202
24	1.943	2.623	3.038	3.402	3.831	4.740	5.501	6.170
25	1.939	2.615	3.028	3.391	3.817	4.720	5.476	6.141
26	1.935	2.609	3.019	3.380	3.804	4.702	5.453	6.114
27	1.931	2.602	3.011	3.370	3.792	4.685	5.432	6.089
28	1.928	2.596	3.004	3.361	3.781	4.669	5.413	6.066
29	1.924	2.591	2.997	3.352	3.770	4.655	5.394	6.044
30	1.921	2.586	2.990	3.345	3.761	4.641	5.377	6.024
31	1.919	2.581	2.984	3.337	3.752	4.629	5.362	6.005
32	1.916	2.577	2.978	3.330	3.743	4.617	5.347	5.987
33	1.914	2.573	2.973	3.324	3.735	4.606	5.333	5.971
34	1.911	2.569	2.968	3.318	3.728	4.595	5.319	5.955
35	1.909	2.565	2.963	3.312	3.721	4.585	5.307	5.940
36	1.907	2.562	2.959	3.307	3.715	4.576	5.295	5.926
37	1.905	2.558	2.955	3.302	3.708	4.567	5.284	5.913
38	1.903	2.555	2.951	3.297	3.702	4.559	5.274	5.900
39	1.902	2.552	2.947	3.292	3.697	4.551	5.264	5.888
40	1.900	2.550	2.943	3.288	3.692	4.544	5.254	5.877
41	1.898	2.547	2.940	3.284	3.687	4.536	5.245	5.866
42	1.897	2.545	2.937	3.280	3.682	4.530	5.237	5.856
43	1.895	2.542	2.934	3.276	3.677	4.523	5.228	5.846
44	1.894	2.540	2.931	3.273	3.673	4.517	5.221	5.837
45	1.893	2.538	2.928	3.269	3.669	4.511	5.213	5.828

4.2.2 Values of k for $\gamma = .95$ and $n = 2$ (Continued)

$$Pr\left\{T_f \leq k\sqrt{n} \,\middle|\, K_p\sqrt{n}\right\} = \gamma$$

	P							
f	.75000	.90000	.95000	.97500	.99000	.99900	.99990	.99999
46	1.892	2.536	2.925	3.266	3.665	4.506	5.206	5.819
47	1.890	2.534	2.923	3.263	3.661	4.500	5.199	5.811
48	1.889	2.532	2.920	3.260	3.657	4.495	5.193	5.803
49	1.888	2.530	2.918	3.257	3.654	4.490	5.186	5.796
50	1.887	2.528	2.916	3.254	3.651	4.485	5.180	5.789
51	1.886	2.527	2.914	3.252	3.647	4.481	5.174	5.782
52	1.885	2.525	2.912	3.249	3.644	4.476	5.169	5.775
53	1.884	2.523	2.910	3.247	3.641	4.472	5.163	5.769
54	1.883	2.522	2.908	3.244	3.639	4.468	5.158	5.762
55	1.883	2.520	2.906	3.242	3.636	4.464	5.153	5.756
56	1.882	2.519	2.904	3.240	3.633	4.460	5.148	5.751
57	1.881	2.518	2.902	3.238	3.631	4.457	5.144	5.745
58	1.880	2.516	2.901	3.236	3.628	4.453	5.139	5.740
59	1.879	2.515	2.899	3.234	3.626	4.450	5.135	5.735
60	1.879	2.514	2.898	3.232	3.623	4.446	5.131	5.729
61	1.878	2.513	2.896	3.230	3.621	4.443	5.127	5.725
62	1.877	2.512	2.895	3.229	3.619	4.440	5.123	5.720
63	1.877	2.511	2.893	3.227	3.617	4.437	5.119	5.715
64	1.876	2.510	2.892	3.225	3.615	4.434	5.115	5.711
65	1.876	2.509	2.891	3.224	3.613	4.432	5.112	5.707
66	1.875	2.508	2.889	3.222	3.611	4.429	5.108	5.702
67	1.874	2.507	2.888	3.221	3.609	4.426	5.105	5.698
68	1.874	2.506	2.887	3.219	3.608	4.424	5.102	5.695
69	1.873	2.505	2.886	3.218	3.606	4.421	5.099	5.691
70	1.873	2.504	2.885	3.216	3.604	4.419	5.096	5.687
71	1.872	2.503	2.883	3.215	3.602	4.417	5.093	5.683
72	1.872	2.502	2.882	3.214	3.601	4.414	5.090	5.680
73	1.871	2.501	2.881	3.212	3.599	4.412	5.087	5.677
74	1.871	2.501	2.880	3.211	3.598	4.410	5.084	5.673
75	1.870	2.500	2.879	3.210	3.596	4.408	5.081	5.670
80	1.868	2.496	2.875	3.205	3.590	4.398	5.069	5.655
85	1.866	2.493	2.871	3.200	3.584	4.390	5.058	5.642
90	1.865	2.491	2.867	3.195	3.578	4.382	5.048	5.630
95	1.863	2.488	2.864	3.192	3.574	4.375	5.040	5.620
100	1.862	2.486	2.861	3.188	3.569	4.369	5.032	5.610
110	1.860	2.482	2.856	3.182	3.562	4.359	5.018	5.594
120	1.858	2.479	2.852	3.177	3.556	4.350	5.007	5.580
130	1.856	2.476	2.849	3.173	3.551	4.342	4.997	5.569
140	1.855	2.474	2.846	3.169	3.546	4.336	4.989	5.559
150	1.854	2.472	2.843	3.166	3.543	4.331	4.982	5.550
200	1.850	2.465	2.835	3.155	3.529	4.311	4.957	5.520
300	1.846	2.458	2.826	3.145	3.516	4.292	4.932	5.489
500	1.842	2.453	2.819	3.136	3.505	4.276	4.912	5.465
1000	1.840	2.449	2.813	3.130	3.497	4.265	4.897	5.446
∞	1.838	2.445	2.808	3.123	3.489	4.253	4.882	5.428

4.2.3 Values of k for $\gamma = .95$ and $n = 3$

$$\Pr\left\{T_f \leq k\sqrt{n} \,\middle|\, K_p\sqrt{n}\right\} = \gamma$$

	P							
f	.75000	.90000	.95000	.97500	.99000	.99900	.99990	.99999
1	11.294	20.472	26.230	31.251	37.094	49.277	59.305	68.011
2	3.806	6.155	7.656	8.986	10.553	13.857	16.598	18.986
3	2.776	4.284	5.248	6.106	7.122	9.276	11.071	12.639
4	2.397	3.607	4.377	5.064	5.878	7.611	9.058	10.325
5	2.204	3.263	3.935	4.534	5.244	6.758	8.025	9.135
6	2.088	3.056	3.668	4.213	4.860	6.240	7.396	8.410
7	2.010	2.918	3.490	3.999	4.602	5.891	6.972	7.920
8	1.955	2.820	3.363	3.845	4.418	5.640	6.665	7.565
9	1.913	2.746	3.267	3.730	4.279	5.450	6.433	7.296
10	1.881	2.688	3.193	3.640	4.170	5.301	6.251	7.085
11	1.855	2.643	3.133	3.568	4.083	5.182	6.104	6.914
12	1.834	2.605	3.084	3.509	4.011	5.083	5.983	6.773
13	1.816	2.574	3.044	3.460	3.952	5.001	5.881	6.655
14	1.801	2.547	3.009	3.418	3.901	4.930	5.794	6.554
15	1.789	2.525	2.980	3.382	3.857	4.870	5.720	6.466
16	1.778	2.505	2.954	3.351	3.820	4.817	5.654	6.390
17	1.768	2.488	2.932	3.324	3.786	4.771	5.597	6.323
18	1.759	2.473	2.912	3.300	3.757	4.730	5.546	6.263
19	1.752	2.459	2.895	3.278	3.731	4.693	5.501	6.210
20	1.745	2.447	2.879	3.259	3.708	4.661	5.460	6.162
21	1.739	2.437	2.865	3.242	3.686	4.631	5.423	6.118
22	1.734	2.427	2.852	3.226	3.667	4.604	5.389	6.079
23	1.729	2.418	2.840	3.212	3.650	4.580	5.358	6.042
24	1.724	2.410	2.830	3.199	3.634	4.557	5.330	6.009
25	1.720	2.402	2.820	3.187	3.619	4.536	5.304	5.979
26	1.716	2.395	2.811	3.176	3.606	4.517	5.280	5.950
27	1.712	2.389	2.803	3.166	3.593	4.500	5.258	5.924
28	1.709	2.383	2.795	3.157	3.582	4.483	5.238	5.900
29	1.706	2.378	2.788	3.148	3.571	4.468	5.219	5.877
30	1.703	2.373	2.781	3.140	3.561	4.454	5.201	5.856
31	1.701	2.368	2.775	3.132	3.552	4.441	5.184	5.836
32	1.698	2.364	2.769	3.125	3.543	4.428	5.168	5.818
33	1.696	2.360	2.764	3.118	3.535	4.416	5.153	5.800
34	1.694	2.356	2.759	3.112	3.527	4.405	5.140	5.783
35	1.692	2.352	2.754	3.106	3.520	4.395	5.126	5.768
36	1.690	2.348	2.749	3.101	3.513	4.385	5.114	5.753
37	1.688	2.345	2.745	3.095	3.507	4.376	5.102	5.739
38	1.686	2.342	2.741	3.090	3.500	4.367	5.091	5.726
39	1.684	2.339	2.737	3.086	3.495	4.359	5.081	5.713
40	1.683	2.336	2.733	3.081	3.489	4.351	5.070	5.701
41	1.681	2.334	2.730	3.077	3.484	4.343	5.061	5.690
42	1.680	2.331	2.727	3.073	3.479	4.336	5.052	5.679
43	1.679	2.329	2.724	3.069	3.474	4.329	5.043	5.669
44	1.677	2.327	2.721	3.065	3.470	4.323	5.035	5.659
45	1.676	2.324	2.718	3.062	3.465	4.317	5.027	5.649

4.2.3 Values of k for $\gamma = .95$ and $n = 3$ (Continued)

$$\Pr\left\{T_f \leq k\sqrt{n} \,\middle|\, K_p\sqrt{n}\right\} = \gamma$$

	P							
f	.75000	.90000	.95000	.97500	.99000	.99900	.99990	.99999
46	1.675	2.322	2.715	3.058	3.461	4.311	5.019	5.640
47	1.674	2.320	2.712	3.055	3.457	4.305	5.012	5.631
48	1.673	2.319	2.710	3.052	3.453	4.300	5.005	5.623
49	1.672	2.317	2.708	3.049	3.450	4.294	4.998	5.615
50	1.671	2.315	2.705	3.046	3.446	4.289	4.992	5.607
51	1.670	2.313	2.703	3.044	3.443	4.284	4.986	5.600
52	1.669	2.312	2.701	3.041	3.440	4.280	4.980	5.593
53	1.668	2.310	2.699	3.039	3.436	4.275	4.974	5.586
54	1.667	2.309	2.697	3.036	3.433	4.271	4.968	5.579
55	1.667	2.307	2.695	3.034	3.431	4.267	4.963	5.573
56	1.666	2.306	2.693	3.032	3.428	4.263	4.958	5.567
57	1.665	2.305	2.691	3.029	3.425	4.259	4.953	5.561
58	1.664	2.303	2.690	3.027	3.423	4.255	4.948	5.555
59	1.664	2.302	2.688	3.025	3.420	4.251	4.944	5.549
60	1.663	2.301	2.686	3.023	3.418	4.248	4.939	5.544
61	1.662	2.300	2.685	3.021	3.415	4.245	4.935	5.539
62	1.662	2.298	2.683	3.020	3.413	4.241	4.931	5.534
63	1.661	2.297	2.682	3.018	3.411	4.238	4.926	5.529
64	1.660	2.296	2.681	3.016	3.409	4.235	4.922	5.524
65	1.660	2.295	2.679	3.015	3.407	4.232	4.919	5.519
66	1.659	2.294	2.678	3.013	3.405	4.229	4.915	5.515
67	1.659	2.293	2.677	3.011	3.403	4.226	4.911	5.511
68	1.658	2.292	2.676	3.010	3.401	4.224	4.908	5.506
69	1.658	2.292	2.674	3.008	3.399	4.221	4.904	5.502
70	1.657	2.291	2.673	3.007	3.397	4.218	4.901	5.498
71	1.657	2.290	2.672	3.006	3.396	4.216	4.898	5.494
72	1.656	2.289	2.671	3.004	3.394	4.214	4.895	5.491
73	1.656	2.288	2.670	3.003	3.392	4.211	4.892	5.487
74	1.655	2.287	2.669	3.002	3.391	4.209	4.889	5.483
75	1.655	2.287	2.668	3.000	3.389	4.207	4.886	5.480
80	1.653	2.283	2.663	2.995	3.382	4.196	4.873	5.464
85	1.651	2.280	2.659	2.990	3.376	4.187	4.861	5.450
90	1.650	2.277	2.656	2.985	3.370	4.179	4.850	5.437
95	1.648	2.275	2.652	2.981	3.365	4.172	4.841	5.425
100	1.647	2.273	2.649	2.978	3.361	4.165	4.832	5.415
110	1.645	2.269	2.644	2.971	3.353	4.154	4.818	5.397
120	1.643	2.266	2.640	2.966	3.347	4.144	4.806	5.382
130	1.642	2.263	2.637	2.962	3.341	4.136	4.795	5.370
140	1.641	2.261	2.634	2.958	3.337	4.130	4.786	5.359
150	1.639	2.259	2.631	2.955	3.332	4.124	4.778	5.349
200	1.636	2.252	2.622	2.944	3.318	4.103	4.751	5.316
300	1.632	2.245	2.613	2.932	3.304	4.082	4.724	5.283
500	1.629	2.239	2.605	2.923	3.293	4.065	4.702	5.256
1000	1.626	2.235	2.600	2.916	3.284	4.053	4.685	5.235
∞	1.624	2.231	2.595	2.910	3.276	4.040	4.669	5.215

4.2.4 Values of k for $\gamma = .95$ and $n = 4$

$$Pr\left\{T_f \leq k\sqrt{n} \,\middle|\, K_p\sqrt{n}\right\} = \gamma$$

	P							
f	.75000	.90000	.95000	.97500	.99000	.99900	.99990	.99999
1	11.073	20.444	26.227	31.252	37.095	49.278	59.306	68.011
2	3.628	6.035	7.559	8.904	10.483	13.804	16.554	18.947
3	2.618	4.162	5.144	6.015	7.042	9.214	11.019	12.593
4	2.249	3.485	4.270	4.968	5.793	7.543	9.001	10.274
5	2.061	3.141	3.825	4.434	5.155	6.686	7.964	9.081
6	1.947	2.934	3.557	4.111	4.768	6.164	7.331	8.352
7	1.872	2.795	3.378	3.895	4.508	5.812	6.903	7.858
8	1.818	2.697	3.249	3.740	4.321	5.558	6.594	7.501
9	1.777	2.623	3.152	3.623	4.180	5.366	6.359	7.230
10	1.746	2.565	3.077	3.532	4.070	5.215	6.175	7.016
11	1.721	2.519	3.017	3.459	3.981	5.094	6.026	6.844
12	1.700	2.481	2.968	3.398	3.908	4.994	5.903	6.701
13	1.683	2.450	2.926	3.348	3.847	4.909	5.800	6.581
14	1.669	2.423	2.891	3.306	3.795	4.838	5.711	6.478
15	1.656	2.401	2.862	3.269	3.751	4.776	5.635	6.389
16	1.646	2.381	2.836	3.237	3.712	4.722	5.569	6.311
17	1.636	2.364	2.813	3.210	3.678	4.675	5.510	6.243
18	1.628	2.348	2.793	3.185	3.648	4.633	5.458	6.182
19	1.621	2.335	2.775	3.163	3.621	4.595	5.411	6.127
20	1.614	2.323	2.759	3.144	3.597	4.561	5.369	6.078
21	1.608	2.312	2.744	3.126	3.576	4.531	5.331	6.033
22	1.603	2.302	2.731	3.110	3.556	4.503	5.297	5.993
23	1.598	2.293	2.719	3.095	3.538	4.478	5.265	5.956
24	1.594	2.285	2.709	3.082	3.522	4.455	5.236	5.922
25	1.590	2.277	2.699	3.070	3.507	4.433	5.209	5.890
26	1.586	2.270	2.689	3.058	3.493	4.414	5.185	5.861
27	1.583	2.264	2.681	3.048	3.480	4.396	5.162	5.834
28	1.579	2.258	2.673	3.038	3.468	4.379	5.141	5.809
29	1.576	2.252	2.666	3.029	3.457	4.363	5.121	5.786
30	1.574	2.247	2.659	3.021	3.446	4.348	5.102	5.764
31	1.571	2.243	2.653	3.013	3.437	4.334	5.085	5.743
32	1.569	2.238	2.647	3.006	3.428	4.321	5.069	5.724
33	1.566	2.234	2.641	2.999	3.419	4.309	5.053	5.706
34	1.564	2.230	2.636	2.992	3.411	4.298	5.039	5.689
35	1.562	2.226	2.631	2.986	3.404	4.287	5.025	5.672
36	1.560	2.223	2.626	2.981	3.397	4.277	5.012	5.657
37	1.559	2.219	2.622	2.975	3.390	4.267	5.000	5.643
38	1.557	2.216	2.618	2.970	3.384	4.258	4.989	5.629
39	1.555	2.213	2.614	2.965	3.377	4.249	4.978	5.616
40	1.554	2.211	2.610	2.961	3.372	4.241	4.967	5.603
41	1.553	2.208	2.607	2.956	3.366	4.233	4.957	5.591
42	1.551	2.205	2.603	2.952	3.361	4.226	4.948	5.580
43	1.550	2.203	2.600	2.948	3.356	4.219	4.938	5.569
44	1.549	2.201	2.597	2.944	3.351	4.212	4.930	5.559
45	1.547	2.199	2.594	2.941	3.347	4.205	4.922	5.549

4.2.4 Values of k for $\gamma = .95$ and $n = 4$ (Continued)

$$\Pr\left\{T_f \leq k\sqrt{n} \,\middle|\, K_p\sqrt{n}\right\} = \gamma$$

	P							
f	.75000	.90000	.95000	.97500	.99000	.99900	.99990	.99999
46	1.546	2.196	2.591	2.937	3.343	4.199	4.914	5.540
47	1.545	2.194	2.589	2.934	3.339	4.193	4.906	5.530
48	1.544	2.192	2.586	2.931	3.335	4.187	4.899	5.522
49	1.543	2.191	2.584	2.928	3.331	4.182	4.892	5.513
50	1.542	2.189	2.581	2.925	3.327	4.177	4.885	5.505
51	1.541	2.187	2.579	2.922	3.324	4.172	4.878	5.497
52	1.540	2.186	2.577	2.919	3.320	4.167	4.872	5.490
53	1.540	2.184	2.575	2.916	3.317	4.162	4.866	5.483
54	1.539	2.182	2.573	2.914	3.314	4.157	4.860	5.476
55	1.538	2.181	2.571	2.912	3.311	4.153	4.855	5.469
56	1.537	2.180	2.569	2.909	3.308	4.149	4.849	5.463
57	1.537	2.178	2.567	2.907	3.305	4.145	4.844	5.456
58	1.536	2.177	2.565	2.905	3.303	4.141	4.839	5.450
59	1.535	2.176	2.564	2.903	3.300	4.137	4.834	5.445
60	1.535	2.175	2.562	2.901	3.297	4.133	4.830	5.439
61	1.534	2.173	2.560	2.899	3.295	4.130	4.825	5.433
62	1.533	2.172	2.559	2.897	3.293	4.126	4.821	5.428
63	1.533	2.171	2.557	2.895	3.290	4.123	4.816	5.423
64	1.532	2.170	2.556	2.893	3.288	4.120	4.812	5.418
65	1.532	2.169	2.555	2.892	3.286	4.117	4.808	5.413
66	1.531	2.168	2.553	2.890	3.284	4.114	4.804	5.408
67	1.531	2.167	2.552	2.888	3.282	4.111	4.800	5.404
68	1.530	2.166	2.551	2.887	3.280	4.108	4.797	5.399
69	1.530	2.165	2.550	2.885	3.278	4.105	4.793	5.395
70	1.529	2.164	2.548	2.884	3.276	4.102	4.790	5.391
71	1.529	2.163	2.547	2.882	3.274	4.100	4.786	5.387
72	1.528	2.163	2.546	2.881	3.273	4.097	4.783	5.383
73	1.528	2.162	2.545	2.880	3.271	4.095	4.780	5.379
74	1.527	2.161	2.544	2.878	3.269	4.092	4.777	5.375
75	1.527	2.160	2.543	2.877	3.268	4.090	4.774	5.371
80	1.525	2.157	2.538	2.871	3.260	4.079	4.759	5.354
85	1.523	2.154	2.534	2.866	3.254	4.069	4.747	5.339
90	1.522	2.151	2.530	2.861	3.248	4.061	4.736	5.326
95	1.521	2.148	2.527	2.857	3.243	4.053	4.726	5.314
100	1.519	2.146	2.524	2.853	3.238	4.046	4.717	5.303
110	1.517	2.142	2.519	2.847	3.230	4.034	4.701	5.284
120	1.516	2.139	2.514	2.841	3.223	4.024	4.688	5.268
130	1.514	2.136	2.511	2.837	3.217	4.016	4.677	5.255
140	1.513	2.134	2.508	2.833	3.213	4.008	4.668	5.243
150	1.512	2.132	2.505	2.830	3.208	4.002	4.660	5.233
200	1.508	2.125	2.495	2.818	3.193	3.980	4.630	5.197
300	1.504	2.118	2.486	2.806	3.179	3.958	4.601	5.161
500	1.501	2.112	2.479	2.797	3.167	3.940	4.577	5.132
000	1.499	2.108	2.473	2.789	3.158	3.926	4.559	5.110
∞	1.497	2.104	2.467	2.782	3.149	3.913	4.541	5.087

4.2.5 Values of k for $\gamma = .95$ and $n = 5$

$$\Pr\left\{T_f \leq k\sqrt{n} \,\middle|\, K_p\sqrt{n}\right\} = \gamma$$

	P							
f	.75000	.90000	.95000	.97500	.99000	.99900	.99990	.99999
1	10.953	20.437	26.227	31.253	37.096	49.279	59.306	68.012
2	3.512	5.961	7.501	8.854	10.441	13.772	16.527	18.924
3	2.514	4.085	5.079	5.959	6.994	9.177	10.987	12.565
4	2.150	3.407	4.203	4.909	5.741	7.502	8.966	10.243
5	1.965	3.062	3.756	4.372	5.100	6.642	7.926	9.047
6	1.853	2.854	3.486	4.047	4.710	6.117	7.291	8.316
7	1.779	2.715	3.305	3.829	4.448	5.763	6.861	7.821
8	1.726	2.616	3.175	3.672	4.259	5.507	6.550	7.462
9	1.686	2.541	3.078	3.554	4.117	5.314	6.314	7.189
10	1.655	2.483	3.002	3.462	4.005	5.161	6.128	6.974
11	1.630	2.437	2.941	3.388	3.916	5.038	5.978	6.800
12	1.610	2.399	2.891	3.327	3.842	4.937	5.853	6.656
13	1.593	2.367	2.849	3.276	3.780	4.852	5.749	6.534
14	1.579	2.341	2.814	3.233	3.727	4.779	5.659	6.431
15	1.567	2.318	2.783	3.195	3.682	4.716	5.582	6.341
16	1.556	2.298	2.757	3.163	3.643	4.662	5.514	6.262
17	1.547	2.280	2.734	3.135	3.608	4.613	5.455	6.192
18	1.539	2.265	2.713	3.110	3.577	4.571	5.402	6.131
19	1.532	2.251	2.695	3.087	3.550	4.532	5.354	6.075
20	1.526	2.239	2.679	3.067	3.525	4.498	5.312	6.025
21	1.520	2.228	2.664	3.049	3.503	4.467	5.273	5.980
22	1.514	2.218	2.651	3.033	3.483	4.438	5.238	5.939
23	1.510	2.209	2.639	3.018	3.465	4.413	5.206	5.901
24	1.505	2.201	2.628	3.004	3.448	4.389	5.176	5.866
25	1.501	2.193	2.618	2.992	3.432	4.367	5.149	5.834
26	1.498	2.186	2.608	2.980	3.418	4.347	5.123	5.804
27	1.494	2.179	2.600	2.969	3.405	4.328	5.100	5.777
28	1.491	2.173	2.592	2.960	3.393	4.311	5.078	5.751
29	1.488	2.168	2.584	2.950	3.381	4.294	5.058	5.727
30	1.486	2.163	2.577	2.942	3.371	4.279	5.039	5.705
31	1.483	2.158	2.571	2.934	3.361	4.265	5.021	5.684
32	1.481	2.153	2.565	2.926	3.351	4.252	5.004	5.664
33	1.478	2.149	2.559	2.919	3.343	4.239	4.989	5.645
34	1.476	2.145	2.554	2.913	3.334	4.228	4.974	5.628
35	1.474	2.141	2.549	2.906	3.327	4.217	4.960	5.611
36	1.473	2.138	2.544	2.900	3.319	4.206	4.947	5.596
37	1.471	2.135	2.539	2.895	3.312	4.196	4.934	5.581
38	1.469	2.131	2.535	2.890	3.306	4.187	4.922	5.567
39	1.468	2.128	2.531	2.885	3.300	4.178	4.911	5.553
40	1.466	2.126	2.527	2.880	3.294	4.169	4.900	5.540
41	1.465	2.123	2.524	2.875	3.288	4.161	4.890	5.528
42	1.463	2.120	2.520	2.871	3.283	4.153	4.880	5.516
43	1.462	2.118	2.517	2.867	3.278	4.146	4.870	5.505
44	1.461	2.115	2.514	2.863	3.273	4.139	4.862	5.495
45	1.460	2.113	2.511	2.859	3.268	4.132	4.853	5.484

4.2.5 Values of k for $\gamma = .95$ and $n = 5$ (Continued)

$$Pr\left\{T_f \leq k\sqrt{n} \,\middle|\, K_p\sqrt{n}\right\} = \gamma$$

	P							
f	.75000	.90000	.95000	.97500	.99000	.99900	.99990	.99999
46	1.459	2.111	2.508	2.856	3.264	4.126	4.845	5.475
47	1.458	2.109	2.505	2.852	3.259	4.119	4.837	5.465
48	1.457	2.107	2.503	2.849	3.255	4.114	4.829	5.456
49	1.456	2.105	2.500	2.846	3.251	4.108	4.822	5.448
50	1.455	2.103	2.498	2.843	3.248	4.102	4.815	5.439
51	1.454	2.102	2.495	2.840	3.244	4.097	4.808	5.431
52	1.453	2.100	2.493	2.837	3.241	4.092	4.802	5.423
53	1.452	2.099	2.491	2.834	3.237	4.087	4.796	5.416
54	1.451	2.097	2.489	2.832	3.234	4.082	4.790	5.409
55	1.451	2.096	2.487	2.829	3.231	4.078	4.784	5.402
56	1.450	2.094	2.485	2.827	3.228	4.074	4.778	5.395
57	1.449	2.093	2.483	2.825	3.225	4.069	4.773	5.389
58	1.448	2.091	2.481	2.822	3.222	4.065	4.768	5.382
59	1.448	2.090	2.480	2.820	3.219	4.061	4.763	5.376
60	1.447	2.089	2.478	2.818	3.217	4.057	4.758	5.370
61	1.447	2.088	2.476	2.816	3.214	4.054	4.753	5.365
62	1.446	2.087	2.475	2.814	3.212	4.050	4.748	5.359
63	1.445	2.085	2.473	2.812	3.210	4.047	4.744	5.354
64	1.445	2.084	2.472	2.811	3.207	4.043	4.740	5.349
65	1.444	2.083	2.470	2.809	3.205	4.040	4.735	5.344
66	1.444	2.082	2.469	2.807	3.203	4.037	4.731	5.339
67	1.443	2.081	2.468	2.805	3.201	4.034	4.727	5.334
68	1.443	2.080	2.466	2.804	3.199	4.031	4.723	5.329
69	1.442	2.079	2.465	2.802	3.197	4.028	4.720	5.325
70	1.442	2.079	2.464	2.801	3.195	4.025	4.716	5.321
71	1.441	2.078	2.463	2.799	3.193	4.022	4.713	5.316
72	1.441	2.077	2.462	2.798	3.191	4.020	4.709	5.312
73	1.440	2.076	2.460	2.796	3.189	4.017	4.706	5.308
74	1.440	2.075	2.459	2.795	3.188	4.015	4.703	5.304
75	1.440	2.074	2.458	2.794	3.186	4.012	4.699	5.300
80	1.438	2.071	2.453	2.787	3.178	4.001	4.685	5.283
85	1.436	2.068	2.449	2.782	3.172	3.991	4.672	5.267
90	1.435	2.065	2.445	2.777	3.165	3.982	4.660	5.253
95	1.433	2.062	2.442	2.773	3.160	3.974	4.650	5.240
100	1.432	2.060	2.439	2.769	3.155	3.967	4.640	5.229
110	1.430	2.056	2.433	2.762	3.147	3.954	4.624	5.209
120	1.428	2.053	2.429	2.757	3.140	3.943	4.610	5.192
130	1.427	2.050	2.425	2.752	3.134	3.935	4.599	5.178
140	1.426	2.048	2.422	2.748	3.129	3.927	4.589	5.166
150	1.425	2.046	2.419	2.745	3.124	3.920	4.580	5.155
200	1.421	2.038	2.410	2.732	3.109	3.897	4.549	5.118
300	1.417	2.031	2.400	2.720	3.093	3.873	4.518	5.079
500	1.414	2.026	2.392	2.710	3.081	3.855	4.493	5.048
1000	1.412	2.021	2.386	2.703	3.071	3.840	4.474	5.025
∞	1.410	2.017	2.380	2.696	3.062	3.826	4.455	5.000

4.2.6 Values of k for $\gamma = .95$ and $n = 6$

$$\Pr\left\{T_f \leq k\sqrt{n} \,\middle|\, K_p\sqrt{n}\right\} = \gamma$$

	P							
f	.75000	.90000	.95000	.97500	.99000	.99900	.99990	.99999
1	10.883	20.435	26.228	31.253	37.097	49.279	59.307	68.012
2	3.432	5.912	7.461	8.821	10.413	13.751	16.510	18.908
3	2.439	4.032	5.035	5.921	6.961	9.151	10.966	12.547
4	2.078	3.352	4.156	4.868	5.706	7.474	8.943	10.223
5	1.895	3.006	3.708	4.329	5.062	6.612	7.901	9.025
6	1.785	2.798	3.436	4.002	4.671	6.086	7.264	8.292
7	1.711	2.658	3.254	3.783	4.407	5.730	6.832	7.796
8	1.658	2.558	3.124	3.625	4.217	5.473	6.520	7.435
9	1.619	2.483	3.025	3.506	4.073	5.278	6.283	7.161
10	1.588	2.425	2.949	3.413	3.961	5.124	6.096	6.945
11	1.564	2.378	2.887	3.338	3.870	5.000	5.944	6.770
12	1.544	2.340	2.836	3.276	3.795	4.898	5.819	6.625
13	1.527	2.308	2.794	3.224	3.733	4.812	5.714	6.503
14	1.513	2.281	2.758	3.181	3.679	4.738	5.623	6.398
15	1.501	2.258	2.727	3.143	3.633	4.675	5.545	6.308
16	1.491	2.238	2.701	3.110	3.593	4.619	5.477	6.228
17	1.482	2.220	2.677	3.081	3.558	4.571	5.417	6.158
18	1.474	2.204	2.657	3.056	3.527	4.527	5.363	6.096
19	1.467	2.191	2.638	3.033	3.499	4.488	5.315	6.040
20	1.460	2.178	2.622	3.013	3.474	4.453	5.272	5.989
21	1.455	2.167	2.607	2.994	3.452	4.422	5.233	5.943
22	1.449	2.157	2.593	2.978	3.431	4.393	5.197	5.901
23	1.445	2.148	2.581	2.962	3.412	4.367	5.164	5.863
24	1.440	2.139	2.569	2.949	3.395	4.342	5.134	5.828
25	1.436	2.132	2.559	2.936	3.379	4.320	5.106	5.795
26	1.433	2.125	2.550	2.924	3.365	4.300	5.081	5.765
27	1.429	2.118	2.541	2.913	3.351	4.280	5.057	5.737
28	1.426	2.112	2.533	2.903	3.339	4.263	5.035	5.711
29	1.423	2.106	2.525	2.894	3.327	4.246	5.014	5.687
30	1.421	2.101	2.518	2.885	3.316	4.231	4.995	5.664
31	1.418	2.096	2.511	2.877	3.306	4.216	4.977	5.643
32	1.416	2.092	2.505	2.869	3.297	4.203	4.959	5.622
33	1.414	2.087	2.499	2.862	3.288	4.190	4.943	5.603
34	1.412	2.083	2.494	2.855	3.279	4.178	4.928	5.586
35	1.410	2.079	2.489	2.848	3.271	4.166	4.914	5.569
36	1.408	2.076	2.484	2.842	3.264	4.156	4.900	5.553
37	1.406	2.072	2.479	2.837	3.257	4.146	4.887	5.537
38	1.405	2.069	2.475	2.831	3.250	4.136	4.875	5.523
39	1.403	2.066	2.471	2.826	3.244	4.127	4.864	5.509
40	1.402	2.063	2.467	2.821	3.238	4.118	4.853	5.496
41	1.400	2.061	2.463	2.817	3.232	4.110	4.842	5.484
42	1.399	2.058	2.460	2.812	3.226	4.102	4.832	5.472
43	1.398	2.055	2.456	2.808	3.221	4.094	4.822	5.460
44	1.396	2.053	2.453	2.804	3.216	4.087	4.813	5.449
45	1.395	2.051	2.450	2.800	3.211	4.080	4.804	5.439

4.2.6 Values of k for $\gamma = .95$ and $n = 6$ (Continued)

$$\Pr\left\{T_f \leq k\sqrt{n} \,\middle|\, K_p\sqrt{n}\right\} = \gamma$$

	P							
f	.75000	.90000	.95000	.97500	.99000	.99900	.99990	.99999
46	1.394	2.049	2.447	2.797	3.207	4.073	4.796	5.429
47	1.393	2.047	2.444	2.793	3.202	4.067	4.788	5.419
48	1.392	2.045	2.442	2.790	3.198	4.061	4.780	5.410
49	1.391	2.043	2.439	2.786	3.194	4.055	4.773	5.401
50	1.390	2.041	2.437	2.783	3.190	4.049	4.766	5.393
51	1.389	2.039	2.434	2.780	3.186	4.044	4.759	5.384
52	1.388	2.037	2.432	2.778	3.183	4.039	4.752	5.376
53	1.388	2.036	2.430	2.775	3.179	4.034	4.746	5.369
54	1.387	2.034	2.428	2.772	3.176	4.029	4.739	5.361
55	1.386	2.033	2.426	2.770	3.173	4.024	4.733	5.354
56	1.385	2.031	2.424	2.767	3.170	4.020	4.728	5.347
57	1.385	2.030	2.422	2.765	3.167	4.015	4.722	5.341
58	1.384	2.029	2.420	2.762	3.164	4.011	4.717	5.334
59	1.383	2.027	2.418	2.760	3.161	4.007	4.711	5.328
60	1.383	2.026	2.417	2.758	3.158	4.003	4.706	5.322
61	1.382	2.025	2.415	2.756	3.156	3.999	4.702	5.316
62	1.381	2.024	2.413	2.754	3.153	3.995	4.697	5.311
63	1.381	2.023	2.412	2.752	3.151	3.992	4.692	5.305
64	1.380	2.021	2.410	2.750	3.149	3.988	4.688	5.300
65	1.380	2.020	2.409	2.748	3.146	3.985	4.683	5.295
66	1.379	2.019	2.407	2.747	3.144	3.982	4.679	5.289
67	1.379	2.018	2.406	2.745	3.142	3.979	4.675	5.285
68	1.378	2.017	2.405	2.743	3.140	3.976	4.671	5.280
69	1.378	2.016	2.403	2.742	3.138	3.973	4.667	5.275
70	1.377	2.016	2.402	2.740	3.136	3.970	4.664	5.271
71	1.377	2.015	2.401	2.739	3.134	3.967	4.660	5.266
72	1.376	2.014	2.400	2.737	3.132	3.964	4.656	5.262
73	1.376	2.013	2.399	2.736	3.130	3.961	4.653	5.258
74	1.376	2.012	2.397	2.734	3.128	3.959	4.650	5.254
75	1.375	2.011	2.396	2.733	3.127	3.956	4.646	5.250
80	1.373	2.008	2.391	2.727	3.119	3.944	4.631	5.232
85	1.372	2.004	2.387	2.721	3.112	3.934	4.618	5.215
90	1.370	2.002	2.383	2.716	3.105	3.925	4.606	5.201
95	1.369	1.999	2.379	2.712	3.100	3.916	4.595	5.188
100	1.368	1.997	2.376	2.708	3.095	3.909	4.585	5.176
110	1.366	1.993	2.371	2.701	3.086	3.896	4.568	5.155
120	1.364	1.989	2.366	2.695	3.079	3.885	4.554	5.138
130	1.363	1.987	2.362	2.690	3.073	3.876	4.542	5.123
140	1.362	1.984	2.359	2.686	3.067	3.868	4.531	5.110
150	1.361	1.982	2.356	2.682	3.063	3.861	4.522	5.099
200	1.357	1.975	2.346	2.670	3.047	3.836	4.490	5.060
300	1.353	1.968	2.336	2.657	3.030	3.812	4.458	5.020
500	1.350	1.962	2.328	2.647	3.017	3.792	4.431	4.987
1000	1.348	1.957	2.322	2.639	3.008	3.777	4.411	4.962
∞	1.346	1.953	2.316	2.631	2.998	3.762	4.391	4.936

4.2.7 Values of k for $\gamma = .95$ and $n = 7$

$$Pr\left\{T_f \leq k\sqrt{n} \,\middle|\, K_p\sqrt{n}\right\} = \gamma$$

	P							
f	.75000	.90000	.95000	.97500	.99000	.99900	.99990	.99999
1	10.839	20.434	26.228	31.254	37.097	49.279	59.307	68.012
2	3.372	5.876	7.433	8.798	10.393	13.736	16.497	18.897
3	2.383	3.993	5.004	5.893	6.938	9.133	10.951	12.534
4	2.024	3.312	4.122	4.838	5.680	7.454	8.926	10.208
5	1.842	2.965	3.672	4.298	5.035	6.590	7.882	9.009
6	1.732	2.755	3.399	3.970	4.642	6.063	7.244	8.275
7	1.659	2.615	3.216	3.749	4.377	5.706	6.812	7.777
8	1.607	2.515	3.085	3.590	4.186	5.448	6.498	7.416
9	1.568	2.440	2.986	3.470	4.041	5.252	6.260	7.141
10	1.537	2.381	2.909	3.376	3.928	5.097	6.072	6.924
11	1.513	2.334	2.846	3.300	3.836	4.973	5.920	6.749
12	1.493	2.295	2.795	3.238	3.761	4.869	5.794	6.603
13	1.477	2.263	2.753	3.186	3.698	4.783	5.688	6.480
14	1.463	2.236	2.716	3.142	3.644	4.709	5.597	6.375
15	1.451	2.212	2.685	3.104	3.597	4.644	5.519	6.283
16	1.440	2.192	2.658	3.070	3.557	4.588	5.450	6.204
17	1.431	2.174	2.634	3.041	3.521	4.539	5.389	6.133
18	1.423	2.158	2.613	3.015	3.489	4.495	5.335	6.070
19	1.416	2.144	2.595	2.992	3.461	4.456	5.286	6.013
20	1.410	2.132	2.578	2.972	3.436	4.420	5.243	5.962
21	1.404	2.120	2.563	2.953	3.413	4.388	5.203	5.916
22	1.399	2.110	2.549	2.936	3.392	4.359	5.167	5.874
23	1.394	2.101	2.537	2.921	3.373	4.332	5.134	5.835
24	1.390	2.092	2.525	2.906	3.356	4.308	5.103	5.800
25	1.386	2.085	2.515	2.893	3.340	4.285	5.075	5.767
26	1.383	2.077	2.505	2.881	3.325	4.264	5.049	5.736
27	1.379	2.071	2.496	2.870	3.311	4.245	5.025	5.708
28	1.376	2.065	2.488	2.860	3.298	4.227	5.003	5.682
29	1.373	2.059	2.480	2.850	3.286	4.210	4.982	5.657
30	1.371	2.054	2.473	2.841	3.275	4.194	4.962	5.634
31	1.368	2.049	2.466	2.833	3.265	4.180	4.943	5.612
32	1.366	2.044	2.460	2.825	3.255	4.166	4.926	5.592
33	1.364	2.040	2.454	2.818	3.246	4.153	4.910	5.572
34	1.362	2.036	2.448	2.811	3.238	4.141	4.894	5.554
35	1.360	2.032	2.443	2.804	3.229	4.129	4.880	5.537
36	1.358	2.028	2.438	2.798	3.222	4.118	4.866	5.521
37	1.356	2.025	2.433	2.792	3.215	4.108	4.853	5.505
38	1.354	2.021	2.429	2.787	3.208	4.098	4.840	5.491
39	1.353	2.018	2.425	2.782	3.201	4.088	4.829	5.477
40	1.351	2.015	2.421	2.777	3.195	4.079	4.817	5.463
41	1.350	2.013	2.417	2.772	3.189	4.071	4.807	5.451
42	1.349	2.010	2.413	2.767	3.183	4.063	4.796	5.439
43	1.348	2.007	2.410	2.763	3.178	4.055	4.787	5.427
44	1.346	2.005	2.407	2.759	3.173	4.048	4.777	5.416
45	1.345	2.003	2.404	2.755	3.168	4.041	4.768	5.405

4.2.7 Values of k for $\gamma = .95$ and $n = 7$ (Continued)

$$\Pr\left\{T_f \leq k\sqrt{n} \,\middle|\, K_p\sqrt{n}\right\} = \gamma$$

	P							
f	.75000	.90000	.95000	.97500	.99000	.99900	.99990	.99999
46	1.344	2.001	2.401	2.751	3.163	4.034	4.760	5.395
47	1.343	1.998	2.398	2.748	3.159	4.027	4.751	5.385
48	1.342	1.996	2.395	2.744	3.155	4.021	4.743	5.376
49	1.341	1.995	2.392	2.741	3.150	4.015	4.736	5.367
50	1.340	1.993	2.390	2.738	3.146	4.009	4.728	5.358
51	1.339	1.991	2.387	2.735	3.143	4.004	4.721	5.350
52	1.338	1.989	2.385	2.732	3.139	3.998	4.715	5.342
53	1.338	1.988	2.383	2.729	3.135	3.993	4.708	5.334
54	1.337	1.986	2.381	2.726	3.132	3.988	4.702	5.326
55	1.336	1.984	2.379	2.724	3.129	3.983	4.696	5.319
56	1.335	1.983	2.377	2.721	3.126	3.979	4.690	5.312
57	1.335	1.982	2.375	2.719	3.122	3.974	4.684	5.305
58	1.334	1.980	2.373	2.716	3.120	3.970	4.678	5.298
59	1.333	1.979	2.371	2.714	3.117	3.966	4.673	5.292
60	1.333	1.978	2.369	2.712	3.114	3.962	4.668	5.286
61	1.332	1.976	2.368	2.710	3.111	3.958	4.663	5.280
62	1.332	1.975	2.366	2.708	3.109	3.954	4.658	5.274
63	1.331	1.974	2.364	2.706	3.106	3.950	4.653	5.268
64	1.330	1.973	2.363	2.704	3.104	3.947	4.649	5.263
65	1.330	1.972	2.361	2.702	3.101	3.943	4.644	5.258
66	1.329	1.971	2.360	2.700	3.099	3.940	4.640	5.253
67	1.329	1.970	2.358	2.698	3.097	3.937	4.636	5.248
68	1.328	1.969	2.357	2.697	3.095	3.934	4.632	5.243
69	1.328	1.968	2.356	2.695	3.093	3.930	4.628	5.238
70	1.327	1.967	2.355	2.694	3.091	3.927	4.624	5.233
71	1.327	1.966	2.353	2.692	3.089	3.925	4.620	5.229
72	1.327	1.965	2.352	2.690	3.087	3.922	4.617	5.224
73	1.326	1.964	2.351	2.689	3.085	3.919	4.613	5.220
74	1.326	1.963	2.350	2.687	3.083	3.916	4.610	5.216
75	1.325	1.963	2.349	2.686	3.081	3.914	4.606	5.212
80	1.323	1.959	2.344	2.680	3.073	3.902	4.591	5.193
85	1.322	1.956	2.339	2.674	3.066	3.891	4.577	5.176
90	1.320	1.953	2.335	2.669	3.059	3.881	4.564	5.161
95	1.319	1.950	2.331	2.664	3.054	3.873	4.553	5.148
100	1.318	1.948	2.328	2.660	3.048	3.865	4.543	5.136
110	1.316	1.944	2.323	2.653	3.039	3.851	4.526	5.115
120	1.314	1.940	2.318	2.647	3.032	3.840	4.511	5.097
130	1.313	1.937	2.314	2.642	3.025	3.830	4.498	5.081
140	1.312	1.935	2.311	2.638	3.020	3.822	4.488	5.068
150	1.311	1.933	2.308	2.634	3.015	3.815	4.478	5.057
200	1.307	1.925	2.297	2.621	2.999	3.790	4.445	5.016
300	1.303	1.918	2.287	2.608	2.982	3.764	4.411	4.974
500	1.300	1.912	2.279	2.597	2.968	3.743	4.383	4.940
1000	1.298	1.908	2.273	2.590	2.958	3.728	4.362	4.913
∞	1.296	1.903	2.267	2.582	2.948	3.712	4.341	4.887

4.2.8 Values of k for $\gamma = .95$ and $n = 8$

$$\Pr\left\{T_f \le k\sqrt{n} \,\middle|\, K_p\sqrt{n}\right\} = \gamma$$

	P							
f	.75000	.90000	.95000	.97500	.99000	.99900	.99990	.99999
1	10.812	20.434	26.228	31.254	37.097	49.279	59.307	68.012
2	3.326	5.849	7.412	8.780	10.378	13.725	16.487	18.889
3	2.339	3.964	4.979	5.873	6.920	9.120	10.940	12.524
4	1.982	3.281	4.096	4.815	5.660	7.439	8.913	10.197
5	1.800	2.933	3.645	4.274	5.014	6.574	7.868	8.997
6	1.691	2.723	3.371	3.945	4.620	6.045	7.229	8.262
7	1.618	2.582	3.187	3.723	4.354	5.688	6.796	7.763
8	1.566	2.481	3.055	3.563	4.162	5.428	6.482	7.402
9	1.527	2.405	2.955	3.442	4.017	5.232	6.243	7.126
10	1.497	2.346	2.877	3.348	3.902	5.077	6.055	6.909
11	1.472	2.299	2.815	3.272	3.810	4.951	5.902	6.732
12	1.453	2.260	2.763	3.209	3.734	4.848	5.775	6.586
13	1.436	2.227	2.720	3.156	3.671	4.760	5.669	6.463
14	1.422	2.200	2.684	3.111	3.616	4.686	5.577	6.357
15	1.410	2.176	2.652	3.073	3.569	4.621	5.498	6.265
16	1.400	2.156	2.625	3.039	3.528	4.565	5.429	6.185
17	1.391	2.138	2.601	3.010	3.492	4.515	5.368	6.114
18	1.383	2.122	2.579	2.984	3.460	4.470	5.313	6.050
19	1.376	2.108	2.561	2.960	3.432	4.431	5.264	5.993
20	1.370	2.095	2.544	2.939	3.406	4.395	5.220	5.942
21	1.364	2.084	2.528	2.920	3.383	4.363	5.180	5.896
22	1.359	2.073	2.514	2.903	3.362	4.333	5.144	5.853
23	1.354	2.064	2.502	2.888	3.342	4.306	5.110	5.814
24	1.350	2.055	2.490	2.873	3.325	4.281	5.080	5.778
25	1.346	2.047	2.479	2.860	3.308	4.258	5.051	5.745
26	1.342	2.040	2.470	2.848	3.293	4.237	5.025	5.714
27	1.339	2.033	2.460	2.837	3.279	4.218	5.000	5.686
28	1.336	2.027	2.452	2.826	3.267	4.199	4.978	5.659
29	1.333	2.021	2.444	2.816	3.255	4.182	4.956	5.634
30	1.330	2.016	2.437	2.807	3.243	4.166	4.937	5.611
31	1.328	2.011	2.430	2.799	3.233	4.151	4.918	5.589
32	1.326	2.006	2.424	2.791	3.223	4.137	4.900	5.568
33	1.323	2.002	2.418	2.783	3.214	4.124	4.884	5.549
34	1.321	1.998	2.412	2.776	3.205	4.112	4.868	5.530
35	1.319	1.994	2.407	2.770	3.197	4.100	4.853	5.513
36	1.318	1.990	2.402	2.763	3.189	4.089	4.839	5.496
37	1.316	1.987	2.397	2.757	3.181	4.078	4.826	5.481
38	1.314	1.983	2.392	2.752	3.174	4.068	4.813	5.466
39	1.313	1.980	2.388	2.746	3.168	4.058	4.801	5.452
40	1.311	1.977	2.384	2.741	3.161	4.049	4.790	5.438
41	1.310	1.974	2.380	2.737	3.155	4.041	4.779	5.425
42	1.309	1.972	2.377	2.732	3.150	4.032	4.769	5.413
43	1.307	1.969	2.373	2.728	3.144	4.025	4.759	5.401
44	1.306	1.967	2.370	2.723	3.139	4.017	4.749	5.390
45	1.305	1.964	2.367	2.719	3.134	4.010	4.740	5.379

4.2.8 Values of k for $\gamma = .95$ and $n = 8$ (Continued)

$$\Pr\left\{T_f \le k\sqrt{n} \,\middle|\, K_p\sqrt{n}\right\} = \gamma$$

	P							
f	.75000	.90000	.95000	.97500	.99000	.99900	.99990	.99999
46	1.304	1.962	2.363	2.716	3.129	4.003	4.731	5.369
47	1.303	1.960	2.361	2.712	3.125	3.996	4.723	5.359
48	1.302	1.958	2.358	2.708	3.120	3.990	4.715	5.349
49	1.301	1.956	2.355	2.705	3.116	3.984	4.707	5.340
50	1.300	1.954	2.352	2.702	3.112	3.978	4.700	5.331
51	1.299	1.952	2.350	2.699	3.108	3.972	4.692	5.323
52	1.298	1.951	2.348	2.696	3.104	3.967	4.685	5.314
53	1.297	1.949	2.345	2.693	3.101	3.961	4.679	5.306
54	1.297	1.947	2.343	2.690	3.097	3.956	4.672	5.299
55	1.296	1.946	2.341	2.687	3.094	3.951	4.666	5.291
56	1.295	1.944	2.339	2.685	3.090	3.947	4.660	5.284
57	1.294	1.943	2.337	2.682	3.087	3.942	4.654	5.277
58	1.294	1.941	2.335	2.680	3.084	3.938	4.649	5.271
59	1.293	1.940	2.333	2.678	3.081	3.933	4.643	5.264
60	1.292	1.939	2.331	2.675	3.079	3.929	4.638	5.258
61	1.292	1.937	2.330	2.673	3.076	3.925	4.633	5.252
62	1.291	1.936	2.328	2.671	3.073	3.921	4.628	5.246
63	1.291	1.935	2.326	2.669	3.071	3.918	4.623	5.240
64	1.290	1.934	2.325	2.667	3.068	3.914	4.618	5.234
65	1.290	1.933	2.323	2.665	3.066	3.911	4.614	5.229
66	1.289	1.932	2.322	2.663	3.063	3.907	4.609	5.224
67	1.289	1.931	2.321	2.661	3.061	3.904	4.605	5.219
68	1.288	1.930	2.319	2.660	3.059	3.900	4.601	5.214
69	1.288	1.929	2.318	2.658	3.057	3.897	4.597	5.209
70	1.287	1.928	2.316	2.656	3.055	3.894	4.593	5.204
71	1.287	1.927	2.315	2.655	3.053	3.891	4.589	5.200
72	1.286	1.926	2.314	2.653	3.051	3.888	4.585	5.195
73	1.286	1.925	2.313	2.652	3.049	3.886	4.582	5.191
74	1.285	1.924	2.312	2.650	3.047	3.883	4.578	5.187
75	1.285	1.924	2.310	2.649	3.045	3.880	4.575	5.182
80	1.283	1.920	2.305	2.642	3.037	3.868	4.559	5.163
85	1.282	1.916	2.301	2.636	3.029	3.857	4.545	5.146
90	1.280	1.913	2.296	2.631	3.023	3.847	4.532	5.131
95	1.279	1.911	2.293	2.626	3.017	3.838	4.520	5.117
100	1.278	1.908	2.289	2.622	3.011	3.830	4.510	5.104
110	1.276	1.904	2.284	2.615	3.002	3.816	4.492	5.083
120	1.274	1.901	2.279	2.609	2.994	3.805	4.477	5.064
130	1.273	1.898	2.275	2.604	2.988	3.795	4.464	5.049
140	1.272	1.895	2.271	2.599	2.982	3.786	4.453	5.035
150	1.270	1.893	2.268	2.595	2.977	3.779	4.443	5.023
200	1.267	1.886	2.258	2.582	2.960	3.753	4.409	4.981
300	1.263	1.878	2.247	2.569	2.943	3.726	4.374	4.938
500	1.260	1.872	2.239	2.558	2.929	3.705	4.345	4.902
1000	1.258	1.868	2.233	2.550	2.918	3.688	4.323	4.875
∞	1.256	1.863	2.226	2.542	2.908	3.672	4.301	4.846

4.2.9 Values of k for $\gamma = .95$ and $n = 9$

$$\Pr\left\{T_f \leq k\sqrt{n} \,\middle|\, K_p\sqrt{n}\right\} = \gamma$$

	P							
f	.75000	.90000	.95000	.97500	.99000	.99900	.99990	.99999
1	10.794	20.435	26.229	31.254	37.097	49.280	59.307	68.012
2	3.290	5.828	7.396	8.766	10.366	13.716	16.480	18.883
3	2.304	3.940	4.960	5.856	6.906	9.109	10.931	12.516
4	1.947	3.256	4.076	4.798	5.645	7.427	8.903	10.188
5	1.766	2.907	3.623	4.255	4.997	6.561	7.858	8.987
6	1.657	2.696	3.349	3.925	4.602	6.032	7.218	8.252
7	1.584	2.555	3.164	3.702	4.336	5.673	6.784	7.753
8	1.532	2.454	3.031	3.542	4.143	5.413	6.469	7.390
9	1.493	2.377	2.931	3.420	3.997	5.216	6.230	7.114
10	1.463	2.318	2.853	3.325	3.882	5.060	6.041	6.896
11	1.439	2.270	2.789	3.249	3.790	4.935	5.887	6.719
12	1.419	2.231	2.738	3.185	3.713	4.830	5.760	6.573
13	1.403	2.198	2.694	3.132	3.649	4.743	5.653	6.449
14	1.389	2.171	2.657	3.087	3.594	4.667	5.562	6.343
15	1.377	2.147	2.625	3.048	3.547	4.602	5.482	6.251
16	1.367	2.126	2.598	3.014	3.506	4.546	5.412	6.170
17	1.358	2.108	2.574	2.985	3.469	4.495	5.351	6.099
18	1.350	2.092	2.552	2.958	3.437	4.451	5.296	6.035
19	1.343	2.078	2.533	2.935	3.408	4.411	5.247	5.978
20	1.336	2.065	2.516	2.913	3.382	4.375	5.202	5.926
21	1.331	2.053	2.500	2.894	3.359	4.342	5.162	5.879
22	1.325	2.043	2.486	2.877	3.337	4.312	5.125	5.836
23	1.321	2.033	2.473	2.861	3.318	4.285	5.092	5.797
24	1.316	2.025	2.461	2.846	3.300	4.260	5.061	5.761
25	1.313	2.017	2.451	2.833	3.283	4.237	5.032	5.728
26	1.309	2.009	2.441	2.821	3.268	4.215	5.006	5.697
27	1.306	2.003	2.432	2.809	3.254	4.196	4.981	5.668
28	1.303	1.996	2.423	2.799	3.241	4.177	4.958	5.641
29	1.300	1.990	2.415	2.789	3.229	4.160	4.936	5.616
30	1.297	1.985	2.408	2.780	3.217	4.144	4.916	5.592
31	1.295	1.980	2.401	2.771	3.207	4.129	4.898	5.570
32	1.292	1.975	2.394	2.763	3.197	4.114	4.880	5.549
33	1.290	1.971	2.388	2.755	3.187	4.101	4.863	5.530
34	1.288	1.966	2.382	2.748	3.178	4.088	4.847	5.511
35	1.286	1.962	2.377	2.741	3.170	4.076	4.832	5.494
36	1.284	1.959	2.372	2.735	3.162	4.065	4.818	5.477
37	1.283	1.955	2.367	2.729	3.154	4.054	4.805	5.461
38	1.281	1.952	2.362	2.723	3.147	4.044	4.792	5.446
39	1.279	1.949	2.358	2.718	3.141	4.034	4.780	5.432
40	1.278	1.946	2.354	2.713	3.134	4.025	4.768	5.418
41	1.277	1.943	2.350	2.708	3.128	4.016	4.757	5.405
42	1.275	1.940	2.346	2.703	3.122	4.008	4.747	5.393
43	1.274	1.938	2.343	2.699	3.117	4.000	4.736	5.381
44	1.273	1.935	2.339	2.694	3.111	3.992	4.727	5.369
45	1.272	1.933	2.336	2.690	3.106	3.985	4.717	5.358

4.2.9 **Values of k for $\gamma = .95$ and $n = 9$ (Continued)**

$$Pr\left\{T_f \leq k\sqrt{n} \,\middle|\, K_p\sqrt{n}\right\} = \gamma$$

	P							
f	.75000	.90000	.95000	.97500	.99000	.99900	.99990	.99999
46	1.271	1.930	2.333	2.686	3.101	3.978	4.709	5.348
47	1.270	1.928	2.330	2.683	3.097	3.971	4.700	5.338
48	1.269	1.926	2.327	2.679	3.092	3.965	4.692	5.328
49	1.268	1.924	2.325	2.676	3.088	3.958	4.684	5.319
50	1.267	1.922	2.322	2.672	3.084	3.952	4.676	5.310
51	1.266	1.920	2.319	2.669	3.080	3.947	4.669	5.301
52	1.265	1.919	2.317	2.666	3.076	3.941	4.662	5.293
53	1.264	1.917	2.315	2.663	3.072	3.936	4.655	5.285
54	1.263	1.915	2.312	2.660	3.069	3.931	4.649	5.277
55	1.263	1.914	2.310	2.658	3.065	3.926	4.642	5.269
56	1.262	1.912	2.308	2.655	3.062	3.921	4.636	5.262
57	1.261	1.911	2.306	2.652	3.059	3.916	4.630	5.255
58	1.261	1.909	2.304	2.650	3.056	3.912	4.625	5.248
59	1.260	1.908	2.302	2.648	3.053	3.907	4.619	5.242
60	1.259	1.907	2.300	2.645	3.050	3.903	4.614	5.235
61	1.259	1.905	2.299	2.643	3.047	3.899	4.609	5.229
62	1.258	1.904	2.297	2.641	3.044	3.895	4.603	5.223
63	1.257	1.903	2.295	2.639	3.042	3.891	4.599	5.217
64	1.257	1.902	2.294	2.637	3.039	3.888	4.594	5.212
65	1.256	1.901	2.292	2.635	3.037	3.884	4.589	5.206
66	1.256	1.900	2.291	2.633	3.034	3.880	4.585	5.201
67	1.255	1.899	2.289	2.631	3.032	3.877	4.580	5.196
68	1.255	1.898	2.288	2.629	3.030	3.874	4.576	5.190
69	1.254	1.897	2.287	2.628	3.028	3.870	4.572	5.186
70	1.254	1.896	2.285	2.626	3.025	3.867	4.568	5.181
71	1.254	1.895	2.284	2.624	3.023	3.864	4.564	5.176
72	1.253	1.894	2.283	2.623	3.021	3.861	4.560	5.172
73	1.253	1.893	2.281	2.621	3.019	3.858	4.557	5.167
74	1.252	1.892	2.280	2.620	3.017	3.856	4.553	5.163
75	1.252	1.891	2.279	2.618	3.016	3.853	4.550	5.159
80	1.250	1.887	2.274	2.611	3.007	3.840	4.533	5.139
85	1.248	1.884	2.269	2.605	2.999	3.829	4.519	5.122
90	1.247	1.881	2.265	2.600	2.993	3.819	4.506	5.106
95	1.246	1.878	2.261	2.595	2.987	3.810	4.494	5.092
100	1.245	1.876	2.258	2.591	2.981	3.802	4.483	5.079
110	1.243	1.872	2.252	2.584	2.972	3.787	4.465	5.057
120	1.241	1.868	2.247	2.577	2.964	3.775	4.449	5.038
130	1.239	1.865	2.243	2.572	2.957	3.765	4.436	5.022
140	1.238	1.863	2.239	2.568	2.951	3.757	4.425	5.008
150	1.237	1.860	2.236	2.564	2.946	3.749	4.415	4.996
200	1.234	1.853	2.225	2.550	2.928	3.722	4.379	4.953
300	1.230	1.845	2.215	2.536	2.911	3.695	4.343	4.908
500	1.227	1.839	2.206	2.525	2.896	3.673	4.313	4.871
1000	1.225	1.834	2.200	2.517	2.886	3.656	4.291	4.843
∞	1.223	1.830	2.193	2.508	2.875	3.639	4.267	4.813

4.2.10 Values of k for $\gamma = .95$ and $n = 10$

$$\Pr\left\{T_f \leq k\sqrt{n} \,\middle|\, K_p\sqrt{n}\right\} = \gamma$$

	P							
f	.75000	.90000	.95000	.97500	.99000	.99900	.99990	.99999
1	10.781	20.435	26.229	31.254	37.097	49.280	59.307	68.012
2	3.260	5.812	7.382	8.755	10.357	13.709	16.474	18.878
3	2.275	3.921	4.945	5.843	6.895	9.101	10.924	12.510
4	1.919	3.236	4.059	4.783	5.633	7.418	8.895	10.181
5	1.738	2.887	3.606	4.240	4.984	6.551	7.849	8.980
6	1.629	2.675	3.330	3.909	4.588	6.021	7.209	8.244
7	1.556	2.533	3.145	3.685	4.321	5.662	6.774	7.744
8	1.504	2.431	3.012	3.524	4.128	5.401	6.459	7.381
9	1.465	2.355	2.911	3.402	3.981	5.203	6.219	7.105
10	1.435	2.295	2.832	3.307	3.866	5.047	6.029	6.886
11	1.411	2.247	2.769	3.230	3.773	4.921	5.876	6.709
12	1.391	2.207	2.716	3.166	3.696	4.816	5.748	6.562
13	1.375	2.174	2.673	3.113	3.631	4.728	5.641	6.438
14	1.361	2.146	2.635	3.067	3.576	4.653	5.549	6.331
15	1.349	2.122	2.603	3.028	3.529	4.587	5.469	6.239
16	1.339	2.102	2.576	2.994	3.487	4.530	5.399	6.158
17	1.330	2.083	2.551	2.964	3.450	4.480	5.337	6.086
18	1.322	2.067	2.529	2.937	3.418	4.435	5.282	6.023
19	1.315	2.053	2.510	2.913	3.389	4.395	5.233	5.965
20	1.308	2.040	2.493	2.892	3.362	4.358	5.188	5.913
21	1.303	2.028	2.477	2.873	3.339	4.325	5.148	5.866
22	1.297	2.018	2.463	2.855	3.317	4.295	5.111	5.823
23	1.293	2.008	2.450	2.839	3.297	4.268	5.077	5.784
24	1.288	1.999	2.438	2.824	3.279	4.243	5.045	5.747
25	1.285	1.991	2.427	2.811	3.263	4.219	5.017	5.714
26	1.281	1.984	2.417	2.798	3.247	4.198	4.990	5.682
27	1.278	1.977	2.407	2.787	3.233	4.178	4.965	5.653
28	1.275	1.970	2.399	2.776	3.220	4.159	4.942	5.626
29	1.272	1.965	2.391	2.766	3.207	4.142	4.920	5.601
30	1.269	1.959	2.383	2.757	3.196	4.125	4.900	5.577
31	1.267	1.954	2.376	2.748	3.185	4.110	4.881	5.555
32	1.264	1.949	2.370	2.740	3.175	4.096	4.863	5.534
33	1.262	1.945	2.363	2.732	3.165	4.082	4.846	5.514
34	1.260	1.940	2.358	2.725	3.156	4.069	4.830	5.496
35	1.258	1.936	2.352	2.718	3.148	4.057	4.815	5.478
36	1.256	1.933	2.347	2.711	3.140	4.046	4.801	5.461
37	1.255	1.929	2.342	2.705	3.132	4.035	4.787	5.445
38	1.253	1.926	2.337	2.699	3.125	4.024	4.774	5.430
39	1.251	1.922	2.333	2.694	3.118	4.015	4.762	5.415
40	1.250	1.919	2.329	2.689	3.112	4.005	4.750	5.402
41	1.249	1.916	2.325	2.684	3.105	3.996	4.739	5.389
42	1.247	1.914	2.321	2.679	3.099	3.988	4.728	5.376
43	1.246	1.911	2.318	2.674	3.094	3.980	4.718	5.364
44	1.245	1.909	2.314	2.670	3.088	3.972	4.708	5.352
45	1.244	1.906	2.311	2.666	3.083	3.965	4.699	5.341

4.2.10 Values of k for $\gamma = .95$ and $n = 10$ (Continued)

$$Pr\left\{T_f \leq k\sqrt{n} \,\middle|\, K_p\sqrt{n}\right\} = \gamma$$

	P							
f	.75000	.90000	.95000	.97500	.99000	.99900	.99990	.99999
46	1.243	1.904	2.308	2.662	3.078	3.957	4.690	5.331
47	1.242	1.902	2.305	2.658	3.073	3.951	4.681	5.321
48	1.241	1.900	2.302	2.655	3.069	3.944	4.673	5.311
49	1.240	1.898	2.299	2.651	3.065	3.938	4.665	5.301
50	1.239	1.896	2.296	2.648	3.060	3.932	4.657	5.292
51	1.238	1.894	2.294	2.645	3.056	3.926	4.650	5.283
52	1.237	1.892	2.291	2.641	3.052	3.920	4.643	5.275
53	1.236	1.890	2.289	2.638	3.049	3.915	4.636	5.267
54	1.235	1.889	2.287	2.636	3.045	3.909	4.629	5.259
55	1.235	1.887	2.284	2.633	3.042	3.904	4.623	5.251
56	1.234	1.885	2.282	2.630	3.038	3.899	4.617	5.244
57	1.233	1.884	2.280	2.628	3.035	3.895	4.611	5.237
58	1.232	1.883	2.278	2.625	3.032	3.890	4.605	5.230
59	1.232	1.881	2.276	2.623	3.029	3.886	4.599	5.223
60	1.231	1.880	2.275	2.620	3.026	3.881	4.594	5.217
61	1.231	1.879	2.273	2.618	3.023	3.877	4.589	5.211
62	1.230	1.877	2.271	2.616	3.020	3.873	4.583	5.204
63	1.229	1.876	2.269	2.614	3.018	3.869	4.578	5.199
64	1.229	1.875	2.268	2.612	3.015	3.866	4.574	5.193
65	1.228	1.874	2.266	2.610	3.012	3.862	4.569	5.187
66	1.228	1.873	2.265	2.608	3.010	3.858	4.564	5.182
67	1.227	1.872	2.263	2.606	3.008	3.855	4.560	5.177
68	1.227	1.871	2.262	2.604	3.005	3.852	4.556	5.171
69	1.226	1.870	2.260	2.602	3.003	3.848	4.552	5.166
70	1.226	1.869	2.259	2.601	3.001	3.845	4.547	5.162
71	1.225	1.868	2.258	2.599	2.999	3.842	4.543	5.157
72	1.225	1.867	2.256	2.597	2.997	3.839	4.540	5.152
73	1.225	1.866	2.255	2.596	2.995	3.836	4.536	5.148
74	1.224	1.865	2.254	2.594	2.993	3.833	4.532	5.143
75	1.224	1.864	2.253	2.593	2.991	3.830	4.529	5.139
80	1.222	1.860	2.247	2.586	2.982	3.817	4.512	5.119
85	1.220	1.857	2.242	2.580	2.974	3.806	4.497	5.101
90	1.219	1.854	2.238	2.574	2.967	3.796	4.484	5.086
95	1.218	1.851	2.234	2.569	2.961	3.786	4.472	5.071
100	1.216	1.849	2.231	2.565	2.956	3.778	4.461	5.058
110	1.214	1.844	2.225	2.557	2.946	3.763	4.442	5.035
120	1.213	1.841	2.220	2.551	2.938	3.751	4.427	5.016
130	1.211	1.838	2.216	2.546	2.931	3.741	4.413	5.000
140	1.210	1.835	2.212	2.541	2.925	3.732	4.401	4.986
150	1.209	1.833	2.209	2.537	2.920	3.724	4.391	4.973
200	1.205	1.825	2.198	2.523	2.902	3.697	4.355	4.929
300	1.202	1.817	2.187	2.509	2.884	3.668	4.318	4.883
500	1.199	1.811	2.178	2.497	2.869	3.646	4.287	4.845
1000	1.197	1.806	2.172	2.489	2.858	3.628	4.263	4.815
∞	1.195	1.802	2.165	2.480	2.846	3.610	4.239	4.785

4.2.11 Values of k for $\gamma = .95$ and $n = 17$

$$\Pr\left\{T_f \le k\sqrt{n} \,\middle|\, K_p\sqrt{n}\right\} = \gamma$$

	P							
f	.75000	.90000	.95000	.97500	.99000	.99900	.99990	.99999
1	10.757	20.436	26.230	31.255	37.098	49.280	59.308	68.013
2	3.147	5.749	7.333	8.713	10.322	13.682	16.452	18.858
3	2.160	3.850	4.888	5.794	6.853	9.069	10.897	12.487
4	1.803	3.159	3.996	4.730	5.587	7.382	8.866	10.155
5	1.622	2.806	3.539	4.182	4.934	6.512	7.817	8.951
6	1.513	2.591	3.260	3.847	4.535	5.980	7.174	8.213
7	1.440	2.446	3.072	3.621	4.265	5.618	6.737	7.712
8	1.388	2.342	2.936	3.457	4.069	5.355	6.420	7.347
9	1.348	2.264	2.833	3.333	3.920	5.155	6.178	7.069
10	1.318	2.202	2.752	3.235	3.803	4.997	5.987	6.849
11	1.294	2.153	2.686	3.156	3.708	4.869	5.832	6.670
12	1.274	2.112	2.633	3.091	3.629	4.763	5.703	6.522
13	1.257	2.078	2.587	3.036	3.563	4.673	5.594	6.396
14	1.243	2.049	2.549	2.989	3.506	4.596	5.501	6.289
15	1.231	2.023	2.515	2.948	3.457	4.530	5.420	6.195
16	1.220	2.002	2.486	2.913	3.414	4.471	5.348	6.113
17	1.211	1.983	2.461	2.882	3.376	4.420	5.285	6.040
18	1.203	1.966	2.438	2.854	3.343	4.374	5.229	5.975
19	1.196	1.950	2.418	2.829	3.312	4.332	5.179	5.917
20	1.190	1.937	2.399	2.807	3.285	4.295	5.133	5.864
21	1.184	1.925	2.383	2.786	3.260	4.261	5.091	5.816
22	1.179	1.914	2.368	2.768	3.238	4.230	5.054	5.772
23	1.174	1.903	2.354	2.751	3.217	4.201	5.019	5.732
24	1.170	1.894	2.342	2.735	3.198	4.175	4.987	5.694
25	1.166	1.886	2.330	2.721	3.181	4.151	4.957	5.660
26	1.162	1.878	2.319	2.708	3.165	4.128	4.929	5.628
27	1.158	1.870	2.309	2.696	3.150	4.108	4.904	5.598
28	1.155	1.864	2.300	2.684	3.136	4.088	4.880	5.571
29	1.152	1.857	2.292	2.674	3.123	4.070	4.857	5.545
30	1.150	1.851	2.284	2.664	3.110	4.053	4.836	5.520
31	1.147	1.846	2.276	2.654	3.099	4.037	4.817	5.497
32	1.145	1.841	2.269	2.646	3.088	4.022	4.798	5.476
33	1.143	1.836	2.262	2.637	3.078	4.008	4.781	5.455
34	1.140	1.831	2.256	2.630	3.068	3.994	4.764	5.436
35	1.139	1.827	2.250	2.622	3.059	3.981	4.748	5.417
36	1.137	1.823	2.245	2.615	3.051	3.969	4.733	5.400
37	1.135	1.819	2.239	2.609	3.042	3.958	4.719	5.383
38	1.133	1.816	2.234	2.602	3.035	3.947	4.706	5.368
39	1.132	1.812	2.230	2.597	3.027	3.937	4.693	5.353
40	1.130	1.809	2.225	2.591	3.020	3.927	4.680	5.338
41	1.129	1.806	2.221	2.585	3.014	3.917	4.669	5.325
42	1.127	1.803	2.217	2.580	3.007	3.908	4.657	5.312
43	1.126	1.800	2.213	2.575	3.001	3.900	4.647	5.299
44	1.125	1.797	2.209	2.571	2.995	3.891	4.636	5.287
45	1.124	1.795	2.206	2.566	2.990	3.884	4.627	5.275

4.2.11 Values of k for $\gamma = .95$ and $n = 17$ (Continued)

$$\Pr\left\{T_f \le k\sqrt{n} \,\middle|\, K_p\sqrt{n}\right\} = \gamma$$

	P							
f	.75000	.90000	.95000	.97500	.99000	.99900	.99990	.99999
46	1.123	1.792	2.202	2.562	2.985	3.876	4.617	5.264
47	1.122	1.790	2.199	2.558	2.979	3.869	4.608	5.254
48	1.121	1.788	2.196	2.554	2.974	3.862	4.599	5.243
49	1.120	1.785	2.193	2.550	2.970	3.855	4.591	5.233
50	1.119	1.783	2.190	2.546	2.965	3.848	4.583	5.224
51	1.118	1.781	2.187	2.543	2.961	3.842	4.575	5.215
52	1.117	1.779	2.184	2.540	2.957	3.836	4.567	5.206
53	1.116	1.778	2.182	2.536	2.952	3.830	4.560	5.197
54	1.115	1.776	2.179	2.533	2.949	3.825	4.553	5.189
55	1.114	1.774	2.177	2.530	2.945	3.819	4.546	5.181
56	1.114	1.772	2.175	2.527	2.941	3.814	4.540	5.173
57	1.113	1.771	2.172	2.524	2.938	3.809	4.533	5.166
58	1.112	1.769	2.170	2.522	2.934	3.804	4.527	5.158
59	1.112	1.768	2.168	2.519	2.931	3.799	4.521	5.151
60	1.111	1.766	2.166	2.517	2.928	3.794	4.515	5.144
61	1.110	1.765	2.164	2.514	2.925	3.790	4.510	5.138
62	1.110	1.764	2.162	2.512	2.921	3.786	4.504	5.131
63	1.109	1.762	2.160	2.509	2.919	3.781	4.499	5.125
64	1.109	1.761	2.159	2.507	2.916	3.777	4.494	5.119
65	1.108	1.760	2.157	2.505	2.913	3.773	4.489	5.113
66	1.108	1.759	2.155	2.503	2.910	3.769	4.484	5.107
67	1.107	1.757	2.154	2.501	2.908	3.766	4.479	5.102
68	1.107	1.756	2.152	2.499	2.905	3.762	4.474	5.096
69	1.106	1.755	2.150	2.497	2.903	3.758	4.470	5.091
70	1.106	1.754	2.149	2.495	2.900	3.755	4.465	5.086
71	1.105	1.753	2.148	2.493	2.898	3.752	4.461	5.081
72	1.105	1.752	2.146	2.491	2.896	3.748	4.457	5.076
73	1.104	1.751	2.145	2.489	2.894	3.745	4.453	5.071
74	1.104	1.750	2.143	2.488	2.891	3.742	4.449	5.066
75	1.103	1.749	2.142	2.486	2.889	3.739	4.445	5.062
80	1.101	1.745	2.136	2.478	2.880	3.725	4.427	5.040
85	1.100	1.741	2.131	2.472	2.871	3.712	4.411	5.021
90	1.098	1.738	2.126	2.466	2.863	3.701	4.397	5.004
95	1.097	1.735	2.122	2.460	2.856	3.691	4.384	4.989
100	1.096	1.732	2.118	2.455	2.850	3.681	4.372	4.975
110	1.094	1.728	2.111	2.447	2.839	3.665	4.351	4.950
120	1.092	1.724	2.106	2.440	2.830	3.652	4.334	4.929
130	1.091	1.720	2.101	2.434	2.823	3.640	4.319	4.911
140	1.089	1.717	2.097	2.428	2.816	3.630	4.306	4.895
150	1.088	1.715	2.094	2.424	2.810	3.621	4.294	4.882
200	1.085	1.706	2.081	2.408	2.789	3.590	4.253	4.832
300	1.081	1.698	2.069	2.392	2.769	3.558	4.211	4.780
500	1.078	1.691	2.059	2.379	2.751	3.531	4.175	4.736
1000	1.076	1.686	2.051	2.369	2.738	3.510	4.147	4.701
∞	1.073	1.680	2.044	2.359	2.725	3.489	4.118	4.664

4.2.12 Values of k for $\gamma = .95$ and $n = 37$

$$\Pr\left\{T_\ell \le k\sqrt{n} \,\middle|\, K_p\sqrt{n}\right\} = \gamma$$

	P							
F	.75000	.90000	.95000	.97500	.99000	.99900	.99990	.99999
1	10.755	20.437	26.230	31.256	37.098	49.280	59.308	68.013
2	3.057	5.700	7.295	8.681	10.295	13.662	16.435	18.844
3	2.062	3.792	4.842	5.756	6.821	9.045	10.877	12.469
4	1.701	3.096	3.946	4.687	5.550	7.355	8.843	10.135
5	1.517	2.738	3.485	4.135	4.895	6.482	7.792	8.929
6	1.405	2.520	3.202	3.798	4.493	5.947	7.147	8.189
7	1.331	2.372	3.011	3.569	4.220	5.583	6.709	7.686
8	1.277	2.265	2.872	3.403	4.022	5.319	6.390	7.320
9	1.237	2.184	2.767	3.276	3.871	5.117	6.146	7.041
10	1.205	2.121	2.684	3.176	3.752	4.958	5.954	6.820
11	1.180	2.069	2.616	3.095	3.655	4.828	5.797	6.640
12	1.159	2.027	2.560	3.028	3.575	4.720	5.667	6.490
13	1.142	1.991	2.513	2.971	3.507	4.629	5.557	6.364
14	1.127	1.960	2.473	2.923	3.448	4.551	5.462	6.255
15	1.114	1.934	2.438	2.881	3.398	4.483	5.380	6.160
16	1.103	1.911	2.408	2.844	3.354	4.423	5.308	6.077
17	1.094	1.890	2.381	2.811	3.314	4.371	5.244	6.004
18	1.085	1.872	2.357	2.782	3.279	4.323	5.187	5.938
19	1.077	1.856	2.336	2.756	3.248	4.281	5.135	5.878
20	1.071	1.841	2.316	2.732	3.220	4.242	5.088	5.825
21	1.064	1.828	2.299	2.711	3.194	4.207	5.046	5.776
22	1.059	1.816	2.283	2.691	3.170	4.176	5.007	5.731
23	1.054	1.805	2.268	2.673	3.149	4.146	4.972	5.690
24	1.049	1.795	2.254	2.657	3.129	4.119	4.939	5.652
25	1.045	1.786	2.242	2.642	3.110	4.094	4.908	5.617
26	1.041	1.777	2.230	2.628	3.093	4.071	4.880	5.584
27	1.037	1.769	2.220	2.615	3.077	4.049	4.854	5.554
28	1.034	1.762	2.210	2.602	3.062	4.029	4.829	5.525
29	1.031	1.755	2.200	2.591	3.048	4.010	4.806	5.499
30	1.028	1.749	2.192	2.580	3.035	3.992	4.784	5.474
31	1.025	1.743	2.183	2.570	3.023	3.975	4.764	5.450
32	1.023	1.737	2.176	2.561	3.012	3.960	4.744	5.428
33	1.020	1.732	2.168	2.552	3.001	3.945	4.726	5.407
34	1.018	1.726	2.162	2.543	2.991	3.931	4.709	5.387
35	1.016	1.722	2.155	2.535	2.981	3.917	4.693	5.368
36	1.014	1.717	2.149	2.528	2.972	3.904	4.677	5.350
37	1.012	1.713	2.143	2.521	2.963	3.892	4.662	5.333
38	1.010	1.709	2.138	2.514	2.954	3.881	4.648	5.316
39	1.009	1.705	2.132	2.507	2.947	3.870	4.635	5.301
40	1.007	1.701	2.127	2.501	2.939	3.859	4.622	5.286
41	1.005	1.698	2.123	2.495	2.932	3.849	4.610	5.272
42	1.004	1.695	2.118	2.490	2.925	3.840	4.598	5.258
43	1.003	1.691	2.114	2.484	2.918	3.831	4.587	5.245
44	1.001	1.688	2.110	2.479	2.912	3.822	4.576	5.233
45	1.000	1.686	2.106	2.474	2.906	3.813	4.566	5.221

4.2.12 Values of k for $\gamma = .95$ and $n = 37$ (Continued)

$$\Pr\left\{T_f \leq k\sqrt{n} \mid K_p\sqrt{n}\right\} = \gamma$$

	P							
f	.75000	.90000	.95000	.97500	.99000	.99900	.99990	.99999
46	.999	1.683	2.102	2.469	2.900	3.805	4.556	5.209
47	.998	1.680	2.098	2.465	2.894	3.798	4.546	5.198
48	.997	1.678	2.095	2.460	2.889	3.790	4.537	5.187
49	.996	1.675	2.091	2.456	2.884	3.783	4.528	5.177
50	.995	1.673	2.088	2.452	2.879	3.776	4.519	5.167
51	.994	1.670	2.085	2.448	2.874	3.769	4.511	5.157
52	.993	1.668	2.082	2.444	2.869	3.763	4.503	5.148
53	.992	1.666	2.079	2.441	2.865	3.756	4.495	5.139
54	.991	1.664	2.076	2.437	2.860	3.750	4.488	5.130
55	.990	1.662	2.073	2.434	2.856	3.744	4.481	5.122
56	.989	1.660	2.071	2.431	2.852	3.739	4.473	5.114
57	.988	1.658	2.068	2.427	2.848	3.733	4.467	5.106
58	.988	1.657	2.066	2.424	2.844	3.728	4.460	5.098
59	.987	1.655	2.063	2.421	2.841	3.723	4.454	5.091
60	.986	1.653	2.061	2.418	2.837	3.718	4.448	5.083
61	.986	1.652	2.059	2.416	2.834	3.713	4.441	5.076
62	.985	1.650	2.057	2.413	2.830	3.708	4.436	5.070
63	.984	1.649	2.055	2.410	2.827	3.703	4.430	5.063
64	.984	1.647	2.053	2.408	2.824	3.699	4.424	5.057
65	.983	1.646	2.051	2.405	2.821	3.695	4.419	5.050
66	.982	1.644	2.049	2.403	2.818	3.690	4.414	5.044
67	.982	1.643	2.047	2.401	2.815	3.686	4.409	5.038
68	.981	1.642	2.045	2.398	2.812	3.682	4.404	5.032
69	.981	1.641	2.043	2.396	2.809	3.678	4.399	5.027
70	.980	1.639	2.042	2.394	2.807	3.675	4.394	5.021
71	.980	1.638	2.040	2.392	2.804	3.671	4.390	5.016
72	.979	1.637	2.038	2.390	2.801	3.667	4.385	5.011
73	.979	1.636	2.037	2.388	2.799	3.664	4.381	5.005
74	.978	1.635	2.035	2.386	2.797	3.660	4.376	5.000
75	.978	1.634	2.034	2.384	2.794	3.657	4.372	4.996
80	.976	1.629	2.027	2.375	2.783	3.641	4.353	4.973
85	.974	1.624	2.021	2.367	2.773	3.627	4.335	4.952
90	.972	1.621	2.015	2.360	2.765	3.615	4.319	4.934
95	.971	1.617	2.010	2.354	2.757	3.603	4.305	4.917
100	.970	1.614	2.006	2.348	2.749	3.593	4.292	4.902
110	.967	1.608	1.998	2.338	2.737	3.575	4.269	4.875
120	.966	1.604	1.991	2.330	2.726	3.559	4.250	4.852
130	.964	1.600	1.986	2.323	2.717	3.546	4.233	4.832
140	.963	1.597	1.981	2.317	2.709	3.534	4.218	4.814
150	.961	1.594	1.977	2.311	2.702	3.524	4.205	4.799
200	.957	1.583	1.962	2.292	2.678	3.487	4.158	4.743
300	.953	1.573	1.947	2.272	2.652	3.448	4.108	4.682
500	.950	1.565	1.934	2.256	2.631	3.415	4.064	4.629
1000	.947	1.558	1.925	2.243	2.614	3.389	4.028	4.585
∞	.945	1.552	1.915	2.230	2.597	3.361	3.989	4.535

4.2.13 Values of k for $\gamma = .95$ and $n = 145$

$$Pr\left\{T_f \leq k\sqrt{n} \,\middle|\, K_p\sqrt{n}\right\} = \gamma$$

f	P .75000	.90000	.95000	.97500	.99000	.99900	.99990	.99999
1	10.756	20.437	26.231	31.256	37.099	49.281	59.308	68.013
2	2.998	5.669	7.271	8.661	10.278	13.649	16.425	18.834
3	1.994	3.755	4.813	5.732	6.800	9.029	10.864	12.457
4	1.627	3.055	3.914	4.659	5.527	7.337	8.828	10.122
5	1.439	2.693	3.449	4.105	4.869	6.463	7.776	8.915
6	1.324	2.472	3.164	3.765	4.465	5.926	7.129	8.174
7	1.246	2.321	2.970	3.534	4.191	5.561	6.690	7.670
8	1.189	2.212	2.830	3.366	3.991	5.296	6.370	7.303
9	1.147	2.129	2.722	3.238	3.839	5.093	6.126	7.023
10	1.113	2.063	2.637	3.136	3.718	4.932	5.932	6.801
11	1.086	2.009	2.568	3.054	3.620	4.801	5.775	6.620
12	1.063	1.965	2.511	2.985	3.538	4.692	5.644	6.470
13	1.044	1.927	2.462	2.927	3.469	4.600	5.533	6.342
14	1.028	1.895	2.420	2.877	3.410	4.521	5.437	6.233
15	1.014	1.867	2.384	2.834	3.358	4.452	5.354	6.138
16	1.002	1.843	2.352	2.796	3.313	4.392	5.281	6.054
17	.991	1.821	2.324	2.762	3.272	4.338	5.217	5.980
18	.982	1.802	2.299	2.732	3.236	4.290	5.159	5.913
19	.973	1.784	2.276	2.705	3.204	4.247	5.107	5.853
20	.965	1.768	2.256	2.680	3.175	4.208	5.059	5.799
21	.958	1.754	2.237	2.658	3.148	4.172	5.016	5.750
22	.952	1.741	2.220	2.637	3.123	4.139	4.977	5.704
23	.946	1.729	2.204	2.618	3.101	4.109	4.941	5.663
24	.941	1.718	2.190	2.601	3.080	4.081	4.907	5.624
25	.936	1.708	2.176	2.585	3.061	4.056	4.876	5.589
26	.931	1.698	2.164	2.570	3.043	4.032	4.847	5.555
27	.927	1.689	2.152	2.556	3.026	4.010	4.820	5.524
28	.923	1.681	2.142	2.543	3.011	3.989	4.795	5.496
29	.920	1.673	2.132	2.531	2.996	3.969	4.771	5.468
30	.916	1.666	2.122	2.519	2.982	3.951	4.749	5.443
31	.913	1.659	2.113	2.508	2.970	3.933	4.728	5.419
32	.910	1.653	2.105	2.498	2.957	3.917	4.708	5.396
33	.907	1.647	2.097	2.489	2.946	3.902	4.690	5.375
34	.904	1.641	2.089	2.480	2.935	3.887	4.672	5.354
35	.902	1.636	2.082	2.471	2.925	3.873	4.655	5.335
36	.899	1.631	2.075	2.463	2.915	3.860	4.639	5.317
37	.897	1.626	2.069	2.455	2.905	3.847	4.624	5.299
38	.895	1.621	2.063	2.447	2.896	3.835	4.610	5.282
39	.893	1.617	2.057	2.440	2.888	3.824	4.596	5.266
40	.891	1.612	2.051	2.434	2.880	3.813	4.582	5.251
41	.889	1.608	2.046	2.427	2.872	3.802	4.570	5.237
42	.887	1.604	2.041	2.421	2.865	3.792	4.558	5.223
43	.886	1.601	2.036	2.415	2.857	3.783	4.546	5.209
44	.884	1.597	2.031	2.409	2.851	3.773	4.535	5.196
45	.883	1.594	2.026	2.404	2.844	3.765	4.524	5.184

4.2.13 Values of k for $\gamma = .95$ and $n = 145$ (Continued)

$$\Pr\left\{T_f \leq k\sqrt{n} \,\middle|\, K_p\sqrt{n}\right\} = \gamma$$

	P							
f	.75000	.90000	.95000	.97500	.99000	.99900	.99990	.99999
46	.881	1.591	2.022	2.398	2.838	3.756	4.514	5.172
47	.880	1.587	2.018	2.393	2.831	3.748	4.504	5.161
48	.878	1.584	2.014	2.389	2.826	3.740	4.494	5.149
49	.877	1.581	2.010	2.384	2.820	3.732	4.485	5.139
50	.876	1.579	2.006	2.379	2.814	3.725	4.476	5.128
51	.875	1.576	2.003	2.375	2.809	3.718	4.467	5.118
52	.873	1.573	1.999	2.371	2.804	3.711	4.459	5.109
53	.872	1.571	1.996	2.367	2.799	3.704	4.451	5.100
54	.871	1.568	1.993	2.363	2.794	3.698	4.443	5.091
55	.870	1.566	1.989	2.359	2.790	3.691	4.435	5.082
56	.869	1.564	1.986	2.355	2.785	3.685	4.428	5.073
57	.868	1.562	1.983	2.351	2.781	3.679	4.421	5.065
58	.867	1.559	1.981	2.348	2.777	3.674	4.414	5.057
59	.866	1.557	1.978	2.345	2.773	3.668	4.407	5.049
60	.865	1.555	1.975	2.341	2.769	3.663	4.401	5.042
61	.865	1.553	1.972	2.338	2.765	3.657	4.394	5.034
62	.864	1.552	1.970	2.335	2.761	3.652	4.388	5.027
63	.863	1.550	1.967	2.332	2.757	3.647	4.382	5.020
64	.862	1.548	1.965	2.329	2.754	3.643	4.376	5.014
65	.861	1.546	1.963	2.326	2.750	3.638	4.370	5.007
66	.861	1.545	1.960	2.323	2.747	3.633	4.365	5.001
67	.860	1.543	1.958	2.321	2.744	3.629	4.360	4.995
68	.859	1.541	1.956	2.318	2.741	3.625	4.354	4.988
69	.859	1.540	1.954	2.316	2.737	3.620	4.349	4.983
70	.858	1.538	1.952	2.313	2.734	3.616	4.344	4.977
71	.857	1.537	1.950	2.311	2.731	3.612	4.339	4.971
72	.857	1.535	1.948	2.308	2.729	3.608	4.334	4.966
73	.856	1.534	1.946	2.306	2.726	3.604	4.330	4.960
74	.856	1.533	1.944	2.304	2.723	3.601	4.325	4.955
75	.855	1.531	1.942	2.301	2.720	3.597	4.321	4.950
80	.852	1.525	1.934	2.291	2.708	3.580	4.300	4.926
85	.850	1.519	1.927	2.282	2.696	3.565	4.281	4.904
90	.848	1.514	1.920	2.273	2.686	3.551	4.264	4.884
95	.846	1.510	1.914	2.266	2.677	3.538	4.249	4.867
100	.844	1.506	1.908	2.259	2.669	3.526	4.234	4.850
110	.841	1.499	1.898	2.247	2.654	3.506	4.209	4.821
120	.839	1.493	1.890	2.236	2.641	3.488	4.188	4.796
130	.837	1.488	1.883	2.227	2.630	3.473	4.169	4.775
140	.835	1.483	1.876	2.220	2.620	3.460	4.153	4.756
150	.834	1.479	1.871	2.213	2.612	3.448	4.138	4.739
200	.828	1.465	1.851	2.188	2.581	3.404	4.084	4.676
300	.822	1.450	1.830	2.160	2.547	3.355	4.024	4.606
500	.818	1.438	1.812	2.137	2.516	3.311	3.968	4.541
1000	.815	1.428	1.797	2.118	2.491	3.273	3.919	4.483
∞	.811	1.418	1.781	2.097	2.463	3.227	3.856	4.401

4.2.14 Values of k for $\gamma = .95$ and $n = 500$

$$\Pr\left\{T_f \leq k\sqrt{n} \,\middle|\, K_p\sqrt{n}\right\} = \gamma$$

f	P .75000	.90000	.95000	.97500	.99000	.99900	.99990	.99999
1	10.756	20.437	26.231	31.256	37.099	49.281	59.308	68.013
2	2.984	5.662	7.265	8.656	10.273	13.646	16.422	18.832
3	1.977	3.746	4.806	5.726	6.795	9.025	10.861	12.455
4	1.608	3.045	3.905	4.653	5.521	7.333	8.824	10.119
5	1.418	2.682	3.440	4.098	4.863	6.458	7.772	8.912
6	1.301	2.460	3.155	3.757	4.459	5.921	7.125	8.171
7	1.222	2.308	2.960	3.526	4.184	5.556	6.685	7.666
8	1.165	2.198	2.819	3.357	3.984	5.290	6.365	7.299
9	1.121	2.114	2.711	3.228	3.831	5.087	6.121	7.018
10	1.086	2.048	2.625	3.126	3.709	4.926	5.927	6.796
11	1.058	1.994	2.556	3.043	3.611	4.795	5.769	6.615
12	1.035	1.949	2.498	2.974	3.529	4.686	5.638	6.465
13	1.015	1.911	2.449	2.916	3.459	4.593	5.527	6.337
14	.998	1.878	2.407	2.866	3.400	4.514	5.431	6.228
15	.983	1.849	2.370	2.822	3.348	4.445	5.348	6.132
16	.970	1.824	2.338	2.784	3.302	4.384	5.275	6.048
17	.959	1.802	2.309	2.749	3.262	4.330	5.210	5.974
18	.949	1.782	2.284	2.719	3.225	4.282	5.152	5.907
19	.940	1.765	2.261	2.691	3.193	4.238	5.099	5.847
20	.931	1.748	2.240	2.667	3.163	4.199	5.052	5.793
21	.924	1.734	2.221	2.644	3.136	4.163	5.009	5.743
22	.917	1.720	2.203	2.623	3.111	4.130	4.969	5.698
23	.911	1.708	2.187	2.604	3.089	4.100	4.933	5.656
24	.905	1.696	2.173	2.586	3.068	4.072	4.899	5.617
25	.900	1.686	2.159	2.570	3.048	4.046	4.868	5.582
26	.895	1.676	2.146	2.555	3.030	4.022	4.839	5.548
27	.890	1.667	2.134	2.541	3.013	4.000	4.812	5.517
28	.886	1.658	2.123	2.527	2.997	3.979	4.787	5.488
29	.882	1.650	2.113	2.515	2.983	3.959	4.763	5.461
30	.878	1.643	2.103	2.503	2.969	3.940	4.740	5.435
31	.874	1.635	2.094	2.492	2.956	3.923	4.719	5.411
32	.871	1.629	2.085	2.482	2.943	3.906	4.699	5.388
33	.868	1.622	2.077	2.472	2.932	3.891	4.681	5.367
34	.865	1.616	2.069	2.463	2.920	3.876	4.663	5.346
35	.862	1.611	2.062	2.454	2.910	3.862	4.646	5.327
36	.859	1.605	2.055	2.445	2.900	3.848	4.630	5.308
37	.856	1.600	2.048	2.437	2.890	3.836	4.614	5.291
38	.854	1.595	2.042	2.430	2.881	3.824	4.600	5.274
39	.852	1.590	2.036	2.422	2.872	3.812	4.586	5.258
40	.849	1.586	2.030	2.415	2.864	3.801	4.572	5.242
41	.847	1.582	2.024	2.409	2.856	3.790	4.560	5.228
42	.845	1.577	2.019	2.402	2.849	3.780	4.547	5.214
43	.843	1.574	2.014	2.396	2.841	3.770	4.536	5.200
44	.842	1.570	2.009	2.390	2.834	3.761	4.524	5.187
45	.840	1.566	2.004	2.385	2.827	3.752	4.513	5.175

4.2.14 Values of k for $\gamma = .95$ and $n = 500$ (Continued)

$$\Pr\left\{T_f \leq k\sqrt{n} \,\middle|\, K_p\sqrt{n}\right\} = \gamma$$

	P							
f	.75000	.90000	.95000	.97500	.99000	.99900	.99990	.99999
46	.838	1.563	1.999	2.379	2.821	3.743	4.503	5.163
47	.836	1.559	1.995	2.374	2.815	3.735	4.493	5.151
48	.835	1.556	1.991	2.369	2.809	3.727	4.483	5.140
49	.833	1.553	1.987	2.364	2.803	3.719	4.474	5.129
50	.832	1.550	1.983	2.359	2.797	3.712	4.465	5.119
51	.830	1.547	1.979	2.355	2.792	3.704	4.456	5.109
52	.829	1.544	1.975	2.350	2.787	3.697	4.447	5.099
53	.828	1.541	1.972	2.346	2.781	3.690	4.439	5.090
54	.826	1.539	1.968	2.342	2.776	3.684	4.431	5.080
55	.825	1.536	1.965	2.338	2.772	3.678	4.424	5.072
56	.824	1.534	1.962	2.334	2.767	3.671	4.416	5.063
57	.823	1.531	1.959	2.330	2.763	3.665	4.409	5.055
58	.822	1.529	1.956	2.326	2.758	3.660	4.402	5.047
59	.821	1.527	1.953	2.323	2.754	3.654	4.395	5.039
60	.820	1.525	1.950	2.320	2.750	3.648	4.389	5.031
61	.819	1.522	1.947	2.316	2.746	3.643	4.382	5.024
62	.818	1.520	1.944	2.313	2.742	3.638	4.376	5.017
63	.817	1.518	1.942	2.310	2.738	3.633	4.370	5.010
64	.816	1.516	1.939	2.307	2.735	3.628	4.364	5.003
65	.815	1.514	1.937	2.304	2.731	3.623	4.358	4.996
66	.814	1.513	1.934	2.301	2.728	3.618	4.352	4.990
67	.813	1.511	1.932	2.298	2.724	3.614	4.347	4.983
68	.812	1.509	1.930	2.295	2.721	3.609	4.342	4.977
69	.811	1.507	1.927	2.292	2.718	3.605	4.336	4.971
70	.811	1.506	1.925	2.290	2.714	3.601	4.331	4.965
71	.810	1.504	1.923	2.287	2.711	3.597	4.326	4.960
72	.809	1.502	1.921	2.285	2.708	3.593	4.321	4.954
73	.808	1.501	1.919	2.282	2.705	3.589	4.317	4.949
74	.808	1.499	1.917	2.280	2.703	3.585	4.312	4.943
75	.807	1.498	1.915	2.278	2.700	3.581	4.307	4.938
80	.804	1.491	1.906	2.267	2.687	3.564	4.286	4.914
85	.801	1.485	1.898	2.257	2.675	3.548	4.267	4.892
90	.798	1.479	1.890	2.248	2.664	3.533	4.250	4.872
95	.796	1.474	1.883	2.240	2.654	3.520	4.234	4.853
100	.794	1.469	1.877	2.232	2.645	3.508	4.219	4.837
110	.790	1.461	1.866	2.219	2.630	3.487	4.193	4.807
120	.787	1.454	1.857	2.208	2.616	3.469	4.171	4.782
130	.784	1.448	1.849	2.198	2.604	3.453	4.152	4.759
140	.782	1.443	1.842	2.189	2.594	3.439	4.135	4.740
150	.780	1.438	1.835	2.181	2.584	3.426	4.120	4.722
200	.772	1.421	1.812	2.153	2.550	3.380	4.063	4.658
300	.765	1.402	1.786	2.121	2.511	3.327	4.000	4.585
500	.758	1.385	1.763	2.092	2.475	3.277	3.941	4.520
1000	.753	1.371	1.743	2.066	2.443	3.231	3.895	4.531
∞	.748	1.355	1.718	2.034	2.400	3.164	3.793	4.338

4.2.15 Values of k for $\gamma = .95$ and $n = \infty$

$$\Pr\left\{T_g \le k\sqrt{n} \,\middle|\, K_p\sqrt{n}\right\} = \gamma$$

f	P .75000	.90000	.95000	.97500	.99000	.99900	.99990	.99999
1	10.756	20.437	26.231	31.256	37.099	49.281	59.308	68.013
2	2.978	5.659	7.263	8.654	10.272	13.645	16.421	18.831
3	1.970	3.742	4.803	5.723	6.793	9.024	10.860	12.454
4	1.600	3.040	3.902	4.650	5.519	7.331	8.823	10.118
5	1.409	2.677	3.437	4.095	4.860	6.456	7.770	8.910
6	1.292	2.455	3.151	3.754	4.456	5.919	7.124	8.169
7	1.212	2.303	2.956	3.522	4.181	5.554	6.684	7.665
8	1.154	2.193	2.814	3.354	3.980	5.287	6.363	7.297
9	1.110	2.108	2.706	3.225	3.827	5.084	6.119	7.017
10	1.075	2.042	2.620	3.122	3.706	4.923	5.925	6.794
11	1.046	1.987	2.551	3.039	3.607	4.792	5.767	6.613
12	1.022	1.942	2.492	2.970	3.525	4.683	5.636	6.463
13	1.002	1.904	2.443	2.911	3.456	4.590	5.524	6.335
14	.985	1.871	2.401	2.861	3.396	4.511	5.429	6.225
15	.969	1.842	2.364	2.817	3.344	4.442	5.345	6.130
16	.956	1.817	2.332	2.778	3.298	4.381	5.272	6.046
17	.944	1.794	2.303	2.744	3.257	4.327	5.207	5.971
18	.934	1.774	2.277	2.714	3.221	4.278	5.149	5.905
19	.924	1.756	2.254	2.686	3.188	4.235	5.097	5.845
20	.916	1.740	2.233	2.661	3.158	4.195	5.049	5.790
21	.908	1.725	2.214	2.638	3.131	4.159	5.006	5.741
22	.901	1.711	2.196	2.617	3.106	4.126	4.966	5.695
23	.894	1.699	2.180	2.598	3.084	4.096	4.930	5.653
24	.888	1.687	2.165	2.580	3.063	4.068	4.896	5.615
25	.882	1.676	2.152	2.564	3.043	4.042	4.865	5.579
26	.877	1.666	2.139	2.548	3.025	4.018	4.836	5.545
27	.872	1.657	2.127	2.534	3.008	3.995	4.808	5.514
28	.867	1.648	2.115	2.521	2.992	3.974	4.783	5.485
29	.863	1.640	2.105	2.508	2.977	3.955	4.759	5.458
30	.859	1.632	2.095	2.496	2.963	3.936	4.737	5.432
31	.855	1.625	2.086	2.485	2.950	3.918	4.716	5.408
32	.852	1.618	2.077	2.475	2.937	3.902	4.696	5.385
33	.848	1.612	2.069	2.465	2.926	3.886	4.677	5.363
34	.845	1.605	2.061	2.455	2.914	3.871	4.659	5.343
35	.842	1.600	2.053	2.446	2.904	3.857	4.642	5.323
36	.839	1.594	2.046	2.438	2.894	3.844	4.626	5.305
37	.836	1.589	2.039	2.430	2.884	3.831	4.610	5.287
38	.834	1.584	2.033	2.422	2.875	3.819	4.596	5.270
39	.831	1.579	2.026	2.415	2.866	3.807	4.582	5.254
40	.829	1.574	2.020	2.408	2.858	3.796	4.568	5.239
41	.826	1.570	2.015	2.401	2.850	3.785	4.555	5.224
42	.824	1.566	2.009	2.394	2.842	3.775	4.543	5.210
43	.822	1.561	2.004	2.388	2.834	3.765	4.531	5.196
44	.820	1.558	1.999	2.382	2.827	3.756	4.520	5.183
45	.818	1.554	1.994	2.376	2.821	3.747	4.509	5.171

4.2.15 Values of k' for $\gamma = .95$ and $n = \infty$ (Continued)

$$\Pr\left\{T_f \le k\sqrt{n} \,\middle|\, K_p\sqrt{n}\right\} = \gamma$$

	P							
f	.75000	.90000	.95000	.97500	.99000	.99900	.99990	.99999
46	.816	1.550	1.990	2.371	2.814	3.738	4.499	5.159
47	.814	1.547	1.985	2.365	2.808	3.730	4.488	5.147
48	.812	1.543	1.981	2.360	2.802	3.721	4.479	5.136
49	.811	1.540	1.977	2.355	2.796	3.714	4.469	5.125
50	.809	1.537	1.973	2.351	2.790	3.706	4.460	5.115
51	.807	1.534	1.969	2.346	2.784	3.699	4.451	5.105
52	.806	1.531	1.965	2.341	2.779	3.692	4.443	5.095
53	.804	1.528	1.961	2.337	2.774	3.685	4.435	5.085
54	.803	1.525	1.958	2.333	2.769	3.678	4.427	5.076
55	.801	1.523	1.954	2.329	2.764	3.672	4.419	5.067
56	.800	1.520	1.951	2.325	2.759	3.666	4.411	5.059
57	.799	1.518	1.948	2.321	2.755	3.659	4.404	5.051
58	.797	1.515	1.945	2.317	2.750	3.654	4.397	5.042
59	.796	1.513	1.942	2.314	2.746	3.648	4.390	5.035
60	.795	1.511	1.939	2.310	2.742	3.642	4.384	5.027
61	.794	1.508	1.936	2.307	2.738	3.637	4.377	5.019
62	.793	1.506	1.933	2.303	2.734	3.632	4.371	5.012
63	.792	1.504	1.930	2.300	2.730	3.627	4.365	5.005
64	.790	1.502	1.928	2.297	2.726	3.622	4.359	4.998
65	.789	1.500	1.925	2.294	2.723	3.617	4.353	4.992
66	.788	1.498	1.923	2.291	2.719	3.612	4.347	4.985
67	.787	1.496	1.920	2.288	2.716	3.608	4.342	4.979
68	.786	1.494	1.918	2.285	2.712	3.603	4.336	4.973
69	.785	1.492	1.915	2.282	2.709	3.599	4.331	4.967
70	.785	1.491	1.913	2.280	2.706	3.594	4.326	4.961
71	.784	1.489	1.911	2.277	2.703	3.590	4.321	4.955
72	.783	1.487	1.909	2.275	2.700	3.586	4.316	4.949
73	.782	1.486	1.907	2.272	2.697	3.582	4.311	4.944
74	.781	1.484	1.905	2.270	2.694	3.578	4.306	4.939
75	.780	1.482	1.903	2.267	2.691	3.575	4.302	4.933
80	.776	1.475	1.893	2.256	2.678	3.557	4.280	4.909
85	.773	1.468	1.885	2.246	2.665	3.541	4.261	4.887
90	.770	1.462	1.877	2.236	2.654	3.526	4.244	4.866
95	.767	1.457	1.870	2.228	2.644	3.513	4.228	4.848
100	.764	1.452	1.863	2.220	2.635	3.501	4.213	4.831
110	.759	1.443	1.852	2.207	2.619	3.479	4.187	4.801
120	.755	1.435	1.842	2.195	2.605	3.460	4.164	4.776
130	.752	1.428	1.833	2.184	2.593	3.444	4.145	4.753
140	.749	1.422	1.826	2.175	2.582	3.430	4.128	4.733
150	.746	1.417	1.819	2.167	2.572	3.417	4.112	4.716
200	.735	1.397	1.793	2.137	2.536	3.369	4.054	4.650
300	.723	1.374	1.764	2.102	2.495	3.314	3.988	4.574
500	.712	1.352	1.735	2.068	2.455	3.260	3.924	4.500
1000	.700	1.331	1.708	2.035	2.415	3.209	3.861	4.428
∞	.674	1.282	1.645	1.960	2.326	3.090	3.719	4.265

4.3 Values of k for $\gamma = .99$

4.3.1 Values of k for $\gamma = .99$ and n = 1

$$\Pr\left\{T_f \leq k\sqrt{n} \,\middle|\, K_p\sqrt{n}\right\} = \gamma$$

	P							
f	.75000	.90000	.95000	.97500	.99000	.99900	.99990	.99999
1	65.709	106.023	132.900	157.129	185.878	246.578	296.727	340.280
2	11.331	16.041	19.115	21.892	25.217	32.369	38.389	43.673
3	6.805	9.154	10.671	12.038	13.677	17.221	20.225	22.875
4	5.394	7.063	8.131	9.091	10.242	12.732	14.849	16.722
5	4.731	6.093	6.959	7.735	8.664	10.673	12.384	13.898
6	4.352	5.542	6.294	6.967	7.771	9.508	10.987	12.298
7	4.107	5.188	5.868	6.475	7.200	8.763	10.093	11.272
8	3.936	4.943	5.573	6.135	6.804	8.246	9.473	10.560
9	3.811	4.763	5.357	5.885	6.514	7.867	9.017	10.037
10	3.715	4.625	5.191	5.695	6.293	7.578	8.669	9.636
11	3.640	4.517	5.061	5.545	6.118	7.350	8.394	9.320
12	3.578	4.429	4.956	5.423	5.977	7.165	8.172	9.063
13	3.528	4.357	4.869	5.323	5.861	7.013	7.988	8.851
14	3.485	4.296	4.797	5.239	5.763	6.885	7.834	8.673
15	3.449	4.245	4.735	5.168	5.680	6.776	7.702	8.521
16	3.418	4.200	4.682	5.107	5.609	6.682	7.589	8.390
17	3.391	4.162	4.635	5.053	5.547	6.600	7.490	8.276
18	3.367	4.128	4.595	5.006	5.492	6.529	7.403	8.175
19	3.346	4.098	4.559	4.965	5.444	6.465	7.326	8.086
20	3.327	4.071	4.527	4.928	5.401	6.408	7.257	8.006
21	3.310	4.047	4.498	4.895	5.362	6.358	7.195	7.935
22	3.295	4.025	4.472	4.865	5.327	6.312	7.140	7.870
23	3.281	4.006	4.448	4.838	5.296	6.270	7.089	7.812
24	3.269	3.988	4.427	4.813	5.267	6.232	7.043	7.758
25	3.257	3.972	4.408	4.790	5.241	6.197	7.001	7.709
26	3.247	3.957	4.390	4.770	5.217	6.166	6.962	7.664
27	3.237	3.943	4.373	4.751	5.194	6.136	6.927	7.623
28	3.228	3.930	4.358	4.733	5.174	6.109	6.894	7.585
29	3.220	3.918	4.344	4.717	5.155	6.084	6.863	7.549
30	3.212	3.907	4.330	4.701	5.137	6.061	6.835	7.516
31	3.205	3.897	4.318	4.687	5.121	6.039	6.808	7.485
32	3.198	3.888	4.307	4.674	5.105	6.018	6.783	7.456
33	3.192	3.879	4.296	4.662	5.091	5.999	6.760	7.429
34	3.186	3.870	4.286	4.650	5.077	5.981	6.738	7.404
35	3.180	3.862	4.277	4.639	5.065	5.965	6.718	7.380
36	3.175	3.855	4.268	4.629	5.053	5.949	6.698	7.357
37	3.170	3.848	4.259	4.619	5.041	5.934	6.680	7.336
38	3.166	3.841	4.251	4.610	5.031	5.920	6.663	7.316
39	3.161	3.835	4.244	4.601	5.021	5.906	6.646	7.297
40	3.157	3.829	4.237	4.593	5.011	5.894	6.631	7.278
41	3.153	3.824	4.230	4.585	5.002	5.882	6.616	7.261
42	3.149	3.818	4.223	4.578	4.993	5.870	6.602	7.245
43	3.146	3.813	4.217	4.571	4.985	5.859	6.589	7.229
44	3.142	3.808	4.212	4.564	4.977	5.849	6.576	7.215
45	3.139	3.804	4.206	4.558	4.970	5.839	6.564	7.200

4.3.1 Values of k for $\gamma = .99$ and $n = 1$ (Continued)

$$\Pr\left\{T_f \leq k\sqrt{n} \,\middle|\, K_p\sqrt{n}\right\} = \gamma$$

	P							
f	.75000	.90000	.95000	.97500	.99000	.99900	.99990	.99999
46	3.136	3.799	4.201	4.552	4.963	5.829	6.552	7.187
47	3.133	3.795	4.196	4.546	4.956	5.820	6.541	7.174
48	3.130	3.791	4.191	4.540	4.949	5.812	6.531	7.162
49	3.127	3.787	4.186	4.535	4.943	5.803	6.521	7.150
50	3.125	3.783	4.182	4.530	4.937	5.795	6.511	7.138
51	3.122	3.780	4.177	4.525	4.931	5.788	6.502	7.127
52	3.120	3.776	4.173	4.520	4.926	5.780	6.493	7.117
53	3.118	3.773	4.169	4.515	4.920	5.773	6.484	7.107
54	3.115	3.770	4.166	4.511	4.915	5.767	6.476	7.097
55	3.113	3.767	4.162	4.507	4.910	5.760	6.468	7.088
56	3.111	3.764	4.158	4.503	4.906	5.754	6.460	7.079
57	3.109	3.761	4.155	4.499	4.901	5.748	6.453	7.070
58	3.107	3.758	4.152	4.495	4.897	5.742	6.445	7.062
59	3.105	3.756	4.149	4.491	4.892	5.736	6.438	7.054
60	3.104	3.753	4.146	4.488	4.888	5.731	6.432	7.046
61	3.102	3.751	4.143	4.484	4.884	5.725	6.425	7.038
62	3.100	3.748	4.140	4.481	4.880	5.720	6.419	7.031
63	3.098	3.746	4.137	4.478	4.877	5.715	6.413	7.024
64	3.097	3.744	4.134	4.475	4.873	5.711	6.407	7.017
65	3.095	3.742	4.132	4.472	4.870	5.706	6.402	7.010
66	3.094	3.740	4.129	4.469	4.866	5.702	6.396	7.004
67	3.093	3.738	4.127	4.466	4.863	5.697	6.391	6.998
68	3.091	3.736	4.125	4.464	4.860	5.693	6.386	6.992
69	3.090	3.734	4.122	4.461	4.857	5.689	6.381	6.986
70	3.088	3.732	4.120	4.458	4.854	5.685	6.376	6.980
71	3.087	3.730	4.118	4.456	4.851	5.681	6.371	6.974
72	3.086	3.728	4.116	4.453	4.848	5.677	6.366	6.969
73	3.085	3.727	4.114	4.451	4.845	5.674	6.362	6.964
74	3.084	3.725	4.112	4.449	4.843	5.670	6.358	6.959
75	3.083	3.724	4.110	4.447	4.840	5.667	6.353	6.954
80	3.077	3.716	4.101	4.436	4.828	5.651	6.334	6.931
85	3.073	3.710	4.093	4.427	4.818	5.637	6.317	6.911
90	3.069	3.704	4.086	4.419	4.808	5.624	6.301	6.893
95	3.065	3.699	4.080	4.412	4.800	5.613	6.288	6.877
100	3.062	3.694	4.075	4.406	4.792	5.603	6.275	6.862
110	3.056	3.686	4.065	4.395	4.780	5.586	6.254	6.838
120	3.051	3.680	4.057	4.386	4.769	5.572	6.237	6.817
130	3.048	3.674	4.050	4.378	4.760	5.560	6.222	6.799
140	3.044	3.669	4.045	4.371	4.752	5.549	6.209	6.784
150	3.041	3.665	4.040	4.366	4.745	5.540	6.198	6.771
200	3.031	3.651	4.022	4.346	4.722	5.509	6.160	6.726
300	3.021	3.636	4.005	4.326	4.699	5.478	6.122	6.681
500	3.013	3.625	3.992	4.310	4.680	5.454	6.091	6.645
1000	3.007	3.616	3.981	4.298	4.666	5.435	6.068	6.618
∞	3.001	3.608	3.971	4.286	4.653	5.417	6.045	6.591

4.3.2 Values of k for $\gamma = .99$ and $n = 2$

$$\Pr\left\{T_f \leq k\sqrt{n} \,\middle|\, K_p\sqrt{n}\right\} = \gamma$$

f	P .75000	.90000	.95000	.97500	.99000	.99900	.99990	.99999
1	58.939	103.029	131.426	156.424	185.617	246.558	296.727	340.280
2	9.491	14.553	17.830	20.761	24.234	31.606	37.748	43.111
3	5.554	8.055	9.671	11.120	12.847	16.539	19.636	22.350
4	4.343	6.108	7.242	8.260	9.475	12.082	14.277	16.206
5	3.779	5.210	6.126	6.948	7.928	10.036	11.815	13.382
6	3.457	4.702	5.495	6.205	7.053	8.877	10.418	11.777
7	3.249	4.376	5.091	5.730	6.492	8.133	9.521	10.746
8	3.105	4.151	4.811	5.401	6.104	7.617	8.897	10.027
9	3.000	3.985	4.606	5.160	5.819	7.238	8.438	9.498
10	2.919	3.859	4.449	4.975	5.602	6.947	8.086	9.092
11	2.855	3.760	4.326	4.830	5.430	6.718	7.807	8.770
12	2.804	3.679	4.226	4.713	5.291	6.532	7.581	8.509
13	2.761	3.613	4.144	4.616	5.176	6.378	7.394	8.292
14	2.725	3.558	4.075	4.535	5.080	6.248	7.237	8.109
15	2.695	3.510	4.016	4.465	4.998	6.138	7.102	7.953
16	2.669	3.470	3.966	4.406	4.927	6.043	6.986	7.818
17	2.646	3.434	3.922	4.354	4.865	5.960	6.884	7.700
18	2.626	3.403	3.883	4.308	4.811	5.887	6.795	7.596
19	2.609	3.376	3.849	4.268	4.764	5.822	6.716	7.504
20	2.593	3.351	3.819	4.232	4.721	5.765	6.645	7.422
21	2.579	3.329	3.791	4.200	4.682	5.713	6.581	7.347
22	2.566	3.309	3.767	4.171	4.648	5.666	6.523	7.280
23	2.554	3.291	3.745	4.144	4.616	5.623	6.471	7.219
24	2.544	3.275	3.724	4.120	4.588	5.584	6.423	7.163
25	2.534	3.260	3.706	4.098	4.562	5.549	6.380	7.112
26	2.525	3.246	3.689	4.078	4.538	5.516	6.339	7.065
27	2.517	3.234	3.673	4.060	4.516	5.486	6.302	7.021
28	2.510	3.222	3.658	4.042	4.495	5.458	6.268	6.981
29	2.503	3.211	3.645	4.026	4.476	5.432	6.236	6.944
30	2.496	3.201	3.632	4.012	4.458	5.408	6.206	6.909
31	2.490	3.192	3.621	3.998	4.442	5.386	6.178	6.876
32	2.485	3.183	3.610	3.985	4.427	5.365	6.152	6.846
33	2.479	3.175	3.600	3.973	4.412	5.345	6.128	6.817
34	2.474	3.167	3.590	3.962	4.399	5.326	6.105	6.790
35	2.470	3.160	3.581	3.951	4.386	5.309	6.083	6.765
36	2.465	3.153	3.573	3.941	4.374	5.293	6.063	6.741
37	2.461	3.147	3.565	3.931	4.363	5.277	6.044	6.718
38	2.457	3.141	3.557	3.922	4.352	5.263	6.026	6.697
39	2.454	3.135	3.550	3.914	4.342	5.249	6.009	6.677
40	2.450	3.130	3.543	3.906	4.332	5.236	5.992	6.658
41	2.447	3.124	3.537	3.898	4.323	5.223	5.977	6.639
42	2.444	3.119	3.531	3.891	4.315	5.211	5.962	6.622
43	2.441	3.115	3.525	3.884	4.306	5.200	5.948	6.605
44	2.438	3.110	3.519	3.878	4.298	5.189	5.934	6.589
45	2.435	3.106	3.514	3.871	4.291	5.179	5.922	6.574

4.3.2 Values of k for $\gamma = .99$ and $n = 2$ (Continued)

$$\Pr\left\{T_f \leq k\sqrt{n} \,\middle|\, K_p\sqrt{n}\right\} = \gamma$$

	P							
f	.75000	.90000	.95000	.97500	.99000	.99900	.99990	.99999
46	2.432	3.102	3.509	3.865	4.284	5.169	5.909	6.560
47	2.430	3.098	3.504	3.860	4.277	5.160	5.898	6.546
48	2.428	3.094	3.499	3.854	4.270	5.151	5.886	6.533
49	2.425	3.091	3.495	3.849	4.264	5.142	5.876	6.520
50	2.423	3.088	3.491	3.844	4.258	5.134	5.865	6.508
51	2.421	3.084	3.487	3.839	4.252	5.126	5.855	6.496
52	2.419	3.081	3.483	3.834	4.247	5.118	5.846	6.485
53	2.417	3.078	3.479	3.830	4.241	5.111	5.837	6.474
54	2.415	3.075	3.475	3.826	4.236	5.104	5.828	6.464
55	2.413	3.072	3.472	3.822	4.231	5.097	5.819	6.454
56	2.412	3.070	3.469	3.818	4.227	5.090	5.811	6.444
57	2.410	3.067	3.465	3.814	4.222	5.084	5.803	6.435
58	2.408	3.065	3.462	3.810	4.218	5.078	5.796	6.426
59	2.407	3.062	3.459	3.806	4.213	5.072	5.788	6.417
60	2.405	3.060	3.456	3.803	4.209	5.066	5.781	6.408
61	2.404	3.058	3.454	3.800	4.205	5.061	5.774	6.400
62	2.402	3.055	3.451	3.796	4.201	5.055	5.768	6.392
63	2.401	3.053	3.448	3.793	4.198	5.050	5.761	6.385
64	2.400	3.051	3.446	3.790	4.194	5.045	5.755	6.377
65	2.399	3.049	3.443	3.787	4.190	5.040	5.749	6.370
66	2.397	3.047	3.441	3.785	4.187	5.036	5.743	6.363
67	2.396	3.046	3.439	3.782	4.184	5.031	5.737	6.357
68	2.395	3.044	3.436	3.779	4.181	5.027	5.732	6.350
69	2.394	3.042	3.434	3.777	4.178	5.023	5.727	6.344
70	2.393	3.040	3.432	3.774	4.175	5.018	5.721	6.337
71	2.392	3.039	3.430	3.772	4.172	5.014	5.716	6.331
72	2.391	3.037	3.428	3.769	4.169	5.010	5.711	6.326
73	2.390	3.036	3.426	3.767	4.166	5.007	5.707	6.320
74	2.389	3.034	3.424	3.765	4.163	5.003	5.702	6.314
75	2.388	3.033	3.422	3.763	4.161	4.999	5.697	6.309
80	2.383	3.026	3.414	3.753	4.149	4.983	5.677	6.284
85	2.380	3.020	3.406	3.744	4.138	4.968	5.658	6.262
90	2.376	3.015	3.400	3.736	4.129	4.955	5.642	6.243
95	2.373	3.010	3.394	3.729	4.120	4.943	5.627	6.225
100	2.370	3.006	3.389	3.723	4.113	4.933	5.614	6.210
110	2.366	2.998	3.380	3.712	4.100	4.915	5.591	6.183
120	2.362	2.992	3.372	3.703	4.089	4.900	5.572	6.160
130	2.358	2.987	3.366	3.695	4.080	4.887	5.556	6.141
140	2.356	2.983	3.360	3.689	4.072	4.876	5.542	6.124
150	2.353	2.979	3.355	3.683	4.065	4.867	5.531	6.110
200	2.345	2.966	3.339	3.663	4.042	4.834	5.489	6.060
300	2.336	2.953	3.322	3.644	4.018	4.801	5.447	6.010
500	2.330	2.942	3.309	3.628	3.999	4.775	5.414	5.970
1000	2.324	2.934	3.300	3.617	3.985	4.755	5.389	5.940
∞	2.319	2.927	3.290	3.605	3.971	4.735	5.364	5.910

4.3.3 Values of k for $\gamma = .99$ and $n = 3$

$$\Pr\left\{T_f \leq k\sqrt{n} \,\middle|\, K_p\sqrt{n}\right\} = \gamma$$

f	P .75000	.90000	.95000	.97500	.99000	.99900	.99990	.99999
1	56.570	102.461	131.265	156.381	185.611	246.558	296.727	340.280
2	8.728	13.995	17.370	20.365	23.896	31.348	37.533	42.922
3	5.021	7.618	9.288	10.778	12.544	16.298	19.431	22.169
4	3.891	5.718	6.890	7.939	9.186	11.846	14.074	16.025
5	3.366	4.845	5.791	6.637	7.645	9.801	11.610	13.198
6	3.067	4.350	5.168	5.900	6.772	8.639	10.210	11.589
7	2.876	4.034	4.770	5.429	6.213	7.894	9.309	10.554
8	2.742	3.815	4.494	5.102	5.825	7.375	8.682	9.831
9	2.645	3.654	4.292	4.862	5.540	6.993	8.219	9.298
10	2.570	3.532	4.138	4.678	5.321	6.701	7.864	8.888
11	2.511	3.435	4.016	4.534	5.149	6.469	7.582	8.563
12	2.464	3.357	3.918	4.417	5.010	6.281	7.353	8.298
13	2.425	3.293	3.836	4.320	4.894	6.125	7.164	8.079
14	2.392	3.239	3.768	4.239	4.797	5.994	7.004	7.893
15	2.364	3.193	3.710	4.170	4.715	5.882	6.867	7.735
16	2.340	3.153	3.660	4.110	4.643	5.785	6.748	7.597
17	2.319	3.119	3.617	4.058	4.581	5.701	6.645	7.477
18	2.300	3.089	3.578	4.012	4.527	5.626	6.554	7.371
19	2.284	3.062	3.545	3.972	4.478	5.560	6.472	7.276
20	2.269	3.038	3.514	3.936	4.435	5.501	6.400	7.192
21	2.256	3.017	3.487	3.904	4.396	5.448	6.335	7.116
22	2.245	2.998	3.463	3.875	4.361	5.400	6.276	7.047
23	2.234	2.980	3.441	3.848	4.329	5.357	6.222	6.984
24	2.224	2.964	3.421	3.824	4.300	5.317	6.173	6.927
25	2.215	2.950	3.402	3.802	4.274	5.280	6.128	6.874
26	2.207	2.936	3.385	3.782	4.250	5.247	6.086	6.825
27	2.200	2.924	3.370	3.763	4.227	5.216	6.048	6.781
28	2.193	2.913	3.355	3.746	4.206	5.187	6.012	6.739
29	2.186	2.902	3.342	3.730	4.187	5.161	5.979	6.700
30	2.180	2.892	3.330	3.715	4.169	5.136	5.949	6.664
31	2.175	2.883	3.318	3.701	4.152	5.113	5.920	6.630
32	2.170	2.875	3.307	3.688	4.137	5.091	5.893	6.599
33	2.165	2.867	3.297	3.676	4.122	5.071	5.868	6.569
34	2.160	2.859	3.287	3.664	4.108	5.052	5.844	6.541
35	2.156	2.852	3.279	3.653	4.095	5.034	5.822	6.515
36	2.152	2.846	3.270	3.643	4.083	5.017	5.801	6.490
37	2.148	2.839	3.262	3.634	4.071	5.001	5.781	6.467
38	2.145	2.834	3.255	3.625	4.061	4.986	5.762	6.444
39	2.141	2.828	3.248	3.616	4.050	4.971	5.744	6.423
40	2.138	2.823	3.241	3.608	4.040	4.958	5.727	6.403
41	2.135	2.818	3.234	3.600	4.031	4.945	5.711	6.384
42	2.132	2.813	3.228	3.593	4.022	4.932	5.695	6.366
43	2.129	2.808	3.223	3.586	4.014	4.921	5.681	6.349
44	2.127	2.804	3.217	3.580	4.006	4.910	5.667	6.332
45	2.124	2.800	3.212	3.573	3.998	4.899	5.653	6.316

4.3.3 Values of k for $\gamma = .99$ and $n = 3$ (Continued)

$$\Pr\left\{T_f \le k\sqrt{n} \,\middle|\, K_p\sqrt{n}\right\} = \gamma$$

	P							
f	.75000	.90000	.95000	.97500	.99000	.99900	.99990	.99999
46	2.122	2.796	3.207	3.567	3.991	4.889	5.640	6.301
47	2.119	2.792	3.202	3.561	3.984	4.879	5.628	6.287
48	2.117	2.788	3.197	3.556	3.977	4.870	5.616	6.273
49	2.115	2.785	3.193	3.551	3.971	4.861	5.605	6.259
50	2.113	2.782	3.189	3.545	3.965	4.852	5.594	6.247
51	2.111	2.779	3.185	3.541	3.959	4.844	5.584	6.234
52	2.109	2.775	3.181	3.536	3.953	4.836	5.574	6.223
53	2.107	2.773	3.177	3.531	3.948	4.828	5.565	6.211
54	2.106	2.770	3.173	3.527	3.942	4.821	5.555	6.200
55	2.104	2.767	3.170	3.523	3.937	4.814	5.546	6.190
56	2.102	2.764	3.167	3.519	3.932	4.807	5.538	6.179
57	2.101	2.762	3.163	3.515	3.928	4.800	5.529	6.170
58	2.099	2.759	3.160	3.511	3.923	4.794	5.521	6.160
59	2.098	2.757	3.157	3.508	3.919	4.788	5.514	6.151
60	2.097	2.755	3.154	3.504	3.915	4.782	5.506	6.142
61	2.095	2.753	3.152	3.501	3.910	4.776	5.499	6.134
62	2.094	2.750	3.149	3.498	3.907	4.771	5.492	6.125
63	2.093	2.748	3.146	3.494	3.903	4.765	5.485	6.117
64	2.092	2.746	3.144	3.491	3.899	4.760	5.479	6.109
65	2.090	2.745	3.141	3.488	3.895	4.755	5.472	6.102
66	2.089	2.743	3.139	3.486	3.892	4.750	5.466	6.094
67	2.088	2.741	3.137	3.483	3.889	4.745	5.460	6.087
68	2.087	2.739	3.134	3.480	3.885	4.741	5.454	6.080
69	2.086	2.737	3.132	3.477	3.882	4.736	5.449	6.074
70	2.085	2.736	3.130	3.475	3.879	4.732	5.443	6.067
71	2.084	2.734	3.128	3.472	3.876	4.728	5.438	6.061
72	2.083	2.733	3.126	3.470	3.873	4.724	5.433	6.055
73	2.082	2.731	3.124	3.468	3.870	4.720	5.428	6.049
74	2.081	2.730	3.122	3.465	3.868	4.716	5.423	6.043
75	2.080	2.728	3.120	3.463	3.865	4.712	5.418	6.037
80	2.076	2.722	3.112	3.453	3.853	4.694	5.396	6.011
85	2.073	2.716	3.105	3.444	3.842	4.679	5.377	5.987
90	2.070	2.711	3.098	3.436	3.832	4.665	5.359	5.967
95	2.067	2.706	3.092	3.429	3.823	4.653	5.344	5.948
100	2.064	2.702	3.087	3.423	3.816	4.642	5.330	5.931
110	2.060	2.695	3.078	3.412	3.802	4.623	5.306	5.903
120	2.057	2.689	3.070	3.403	3.791	4.607	5.285	5.878
130	2.054	2.684	3.064	3.395	3.782	4.594	5.268	5.858
140	2.051	2.680	3.058	3.388	3.774	4.582	5.254	5.840
150	2.049	2.676	3.054	3.382	3.767	4.573	5.241	5.825
200	2.041	2.663	3.037	3.363	3.742	4.538	5.197	5.771
300	2.033	2.650	3.021	3.343	3.718	4.503	5.152	5.717
500	2.027	2.640	3.008	3.327	3.698	4.475	5.116	5.674
1000	2.022	2.632	2.998	3.315	3.684	4.454	5.089	5.641
∞	2.018	2.625	2.988	3.303	3.669	4.433	5.062	5.608

4.3.4 Values of k for $\gamma = .99$ and $n = 4$

$$\Pr\left\{T_f \leq k\sqrt{n} \,\middle|\, K_p\sqrt{n}\right\} = \gamma$$

f	P .75000	.90000	.95000	.97500	.99000	.99900	.99990	.99999
1	55.448	102.315	131.241	156.378	185.611	246.558	296.727	340.280
2	8.300	13.704	17.135	20.165	23.725	31.218	37.424	42.828
3	4.715	7.380	9.083	10.598	12.387	16.176	19.327	22.078
4	3.629	5.501	6.699	7.768	9.033	11.724	13.970	15.933
5	3.126	4.639	5.606	6.469	7.494	9.677	11.504	13.103
6	2.840	4.151	4.987	5.734	6.621	8.514	10.101	11.492
7	2.656	3.838	4.591	5.262	6.061	7.767	9.198	10.454
8	2.529	3.622	4.316	4.935	5.671	7.246	8.568	9.729
9	2.436	3.464	4.115	4.695	5.385	6.862	8.103	9.193
10	2.365	3.343	3.961	4.512	5.166	6.567	7.746	8.781
11	2.308	3.247	3.839	4.367	4.993	6.334	7.462	8.454
12	2.263	3.170	3.741	4.249	4.853	6.144	7.231	8.187
13	2.226	3.107	3.660	4.152	4.736	5.987	7.039	7.965
14	2.194	3.053	3.592	4.070	4.639	5.854	6.878	7.778
15	2.167	3.008	3.534	4.001	4.555	5.741	6.739	7.617
16	2.144	2.969	3.484	3.941	4.483	5.643	6.619	7.478
17	2.124	2.935	3.440	3.889	4.421	5.557	6.514	7.357
18	2.107	2.905	3.402	3.843	4.365	5.482	6.422	7.249
19	2.091	2.879	3.368	3.802	4.316	5.415	6.339	7.153
20	2.078	2.855	3.338	3.766	4.273	5.355	6.266	7.067
21	2.065	2.834	3.311	3.733	4.233	5.301	6.199	6.990
22	2.054	2.815	3.286	3.704	4.198	5.252	6.139	6.920
23	2.044	2.798	3.264	3.677	4.165	5.207	6.084	6.856
24	2.035	2.782	3.244	3.653	4.136	5.167	6.034	6.797
25	2.026	2.767	3.225	3.630	4.109	5.130	5.988	6.744
26	2.018	2.754	3.208	3.610	4.084	5.095	5.946	6.694
27	2.011	2.742	3.193	3.591	4.061	5.064	5.907	6.648
28	2.005	2.731	3.178	3.574	4.040	5.034	5.870	6.606
29	1.998	2.720	3.165	3.557	4.021	5.007	5.836	6.566
30	1.993	2.711	3.152	3.542	4.002	4.982	5.805	6.529
31	1.987	2.702	3.141	3.528	3.985	4.958	5.776	6.495
32	1.983	2.693	3.130	3.515	3.969	4.936	5.748	6.462
33	1.978	2.685	3.120	3.503	3.954	4.915	5.722	6.432
34	1.974	2.678	3.110	3.491	3.940	4.896	5.698	6.403
35	1.969	2.671	3.101	3.480	3.927	4.877	5.675	6.376
36	1.966	2.664	3.093	3.470	3.915	4.860	5.653	6.351
37	1.962	2.658	3.085	3.460	3.903	4.843	5.633	6.327
38	1.959	2.652	3.077	3.451	3.892	4.828	5.613	6.304
39	1.955	2.647	3.070	3.442	3.881	4.813	5.595	6.282
40	1.952	2.641	3.063	3.434	3.871	4.799	5.577	6.261
41	1.949	2.636	3.057	3.426	3.862	4.786	5.560	6.242
42	1.947	2.632	3.051	3.419	3.853	4.773	5.545	6.223
43	1.944	2.627	3.045	3.412	3.844	4.761	5.529	6.205
44	1.941	2.623	3.039	3.405	3.836	4.749	5.515	6.188
45	1.939	2.619	3.034	3.399	3.828	4.738	5.501	6.172

4.3.4 Values of k for $\gamma = .99$ and $n = 4$ (Continued)

$$\Pr\left\{T_f \leq k\sqrt{n} \,\middle|\, K_p\sqrt{n}\right\} = \gamma$$

	P							
f	.75000	.90000	.95000	.97500	.99000	.99900	.99990	.99999
46	1.937	2.615	3.029	3.393	3.821	4.728	5.488	6.156
47	1.935	2.611	3.024	3.387	3.813	4.718	5.475	6.141
48	1.932	2.608	3.019	3.381	3.807	4.708	5.463	6.127
49	1.930	2.604	3.015	3.376	3.800	4.699	5.452	6.113
50	1.929	2.601	3.011	3.371	3.794	4.690	5.440	6.100
51	1.927	2.598	3.007	3.366	3.788	4.681	5.430	6.087
52	1.925	2.595	3.003	3.361	3.782	4.673	5.419	6.075
53	1.923	2.592	2.999	3.356	3.776	4.665	5.409	6.063
54	1.922	2.589	2.995	3.352	3.771	4.658	5.400	6.052
55	1.920	2.586	2.992	3.348	3.766	4.650	5.391	6.041
56	1.919	2.584	2.989	3.344	3.761	4.643	5.382	6.030
57	1.917	2.581	2.985	3.340	3.756	4.637	5.373	6.020
58	1.916	2.579	2.982	3.336	3.751	4.630	5.365	6.010
59	1.914	2.576	2.979	3.332	3.747	4.624	5.357	6.000
60	1.913	2.574	2.976	3.329	3.742	4.617	5.349	5.991
61	1.912	2.572	2.973	3.325	3.738	4.612	5.342	5.982
62	1.910	2.570	2.971	3.322	3.734	4.606	5.334	5.974
63	1.909	2.568	2.968	3.319	3.730	4.600	5.327	5.965
64	1.908	2.566	2.965	3.316	3.726	4.595	5.320	5.957
65	1.907	2.564	2.963	3.313	3.723	4.590	5.314	5.949
66	1.906	2.562	2.961	3.310	3.719	4.585	5.307	5.942
67	1.905	2.560	2.958	3.307	3.716	4.580	5.301	5.934
68	1.904	2.559	2.956	3.304	3.712	4.575	5.295	5.927
69	1.903	2.557	2.954	3.301	3.709	4.570	5.289	5.920
70	1.902	2.555	2.952	3.299	3.706	4.566	5.284	5.913
71	1.901	2.554	2.950	3.296	3.703	4.561	5.278	5.907
72	1.900	2.552	2.948	3.294	3.700	4.557	5.273	5.900
73	1.899	2.551	2.946	3.291	3.697	4.553	5.267	5.894
74	1.898	2.549	2.944	3.289	3.694	4.549	5.262	5.888
75	1.898	2.548	2.942	3.287	3.691	4.545	5.257	5.882
80	1.894	2.541	2.933	3.277	3.679	4.527	5.234	5.854
85	1.890	2.535	2.926	3.267	3.667	4.511	5.214	5.830
90	1.887	2.530	2.919	3.259	3.657	4.497	5.196	5.808
95	1.885	2.526	2.913	3.252	3.649	4.484	5.180	5.789
100	1.882	2.522	2.908	3.246	3.641	4.472	5.165	5.771
110	1.878	2.514	2.899	3.234	3.627	4.453	5.140	5.741
120	1.875	2.509	2.891	3.225	3.615	4.436	5.119	5.716
130	1.872	2.504	2.885	3.217	3.606	4.422	5.101	5.694
140	1.869	2.499	2.879	3.210	3.597	4.410	5.085	5.675
150	1.867	2.496	2.874	3.204	3.590	4.400	5.072	5.659
200	1.860	2.483	2.858	3.184	3.565	4.363	5.025	5.603
300	1.852	2.470	2.841	3.164	3.540	4.327	4.978	5.545
500	1.846	2.460	2.828	3.147	3.520	4.298	4.940	5.499
1000	1.842	2.452	2.818	3.135	3.505	4.275	4.911	5.464
∞	1.838	2.445	2.808	3.123	3.490	4.253	4.882	5.428

4.3.5 Values of k for $\gamma = .99$ and $n = 5$

$$Pr\left\{T_f \leq k\sqrt{n} \,\middle|\, K_p\sqrt{n}\right\} = \gamma$$

f	P .75000	.90000	.95000	.97500	.99000	.99900	.99990	.99999
1	54.839	102.271	131.237	156.378	185.611	246.558	296.727	340.280
2	8.023	13.525	16.992	20.043	23.622	31.140	37.359	42.770
3	4.513	7.229	8.956	10.487	12.291	16.101	19.265	22.023
4	3.454	5.362	6.578	7.660	8.939	11.649	13.906	15.877
5	2.965	4.505	5.488	6.363	7.399	9.601	11.439	13.046
6	2.687	4.020	4.870	5.627	6.525	8.437	10.035	11.433
7	2.509	3.710	4.475	5.156	5.964	7.687	9.130	10.393
8	2.385	3.496	4.200	4.828	5.574	7.165	8.498	9.666
9	2.295	3.338	3.999	4.588	5.287	6.780	8.031	9.129
10	2.226	3.218	3.845	4.404	5.067	6.483	7.672	8.715
11	2.171	3.123	3.723	4.258	4.893	6.249	7.387	8.386
12	2.127	3.046	3.625	4.140	4.751	6.058	7.155	8.118
13	2.091	2.983	3.544	4.043	4.634	5.899	6.961	7.895
14	2.060	2.930	3.475	3.960	4.536	5.765	6.798	7.706
15	2.035	2.885	3.417	3.891	4.452	5.651	6.659	7.544
16	2.012	2.846	3.367	3.830	4.379	5.552	6.538	7.404
17	1.993	2.812	3.323	3.777	4.316	5.465	6.432	7.281
18	1.976	2.782	3.285	3.731	4.260	5.389	6.338	7.172
19	1.961	2.756	3.251	3.690	4.210	5.321	6.255	7.076
20	1.947	2.732	3.221	3.653	4.166	5.260	6.180	6.989
21	1.935	2.711	3.193	3.621	4.126	5.206	6.113	6.910
22	1.924	2.692	3.169	3.591	4.090	5.156	6.052	6.839
23	1.915	2.675	3.146	3.564	4.058	5.111	5.996	6.775
24	1.906	2.659	3.126	3.539	4.028	5.070	5.945	6.715
25	1.897	2.645	3.107	3.517	4.000	5.032	5.899	6.661
26	1.890	2.632	3.090	3.496	3.975	4.997	5.856	6.611
27	1.883	2.619	3.075	3.477	3.952	4.965	5.816	6.564
28	1.877	2.608	3.060	3.459	3.931	4.935	5.779	6.521
29	1.871	2.598	3.046	3.443	3.911	4.907	5.745	6.481
30	1.865	2.588	3.034	3.427	3.892	4.882	5.712	6.443
31	1.860	2.579	3.022	3.413	3.875	4.857	5.682	6.408
32	1.855	2.571	3.011	3.400	3.859	4.835	5.654	6.375
33	1.851	2.563	3.001	3.387	3.843	4.814	5.628	6.344
34	1.847	2.555	2.991	3.376	3.829	4.794	5.603	6.315
35	1.843	2.548	2.982	3.365	3.816	4.775	5.580	6.287
36	1.839	2.542	2.974	3.354	3.803	4.757	5.557	6.261
37	1.835	2.536	2.966	3.344	3.791	4.740	5.537	6.236
38	1.832	2.530	2.958	3.335	3.780	4.724	5.517	6.213
39	1.829	2.524	2.951	3.326	3.769	4.709	5.498	6.191
40	1.826	2.519	2.944	3.318	3.759	4.695	5.480	6.170
41	1.823	2.514	2.937	3.310	3.749	4.681	5.463	6.150
42	1.820	2.509	2.931	3.302	3.740	4.668	5.447	6.131
43	1.818	2.505	2.925	3.295	3.731	4.656	5.431	6.112
44	1.815	2.500	2.920	3.288	3.723	4.644	5.416	6.095
45	1.813	2.496	2.914	3.282	3.715	4.633	5.402	6.078

4.3.5 Values of k for $\gamma = .99$ and $n = 5$ (Continued)

$$\Pr\left\{T_f \leq k\sqrt{n} \,\middle|\, K_p\sqrt{n}\right\} = \gamma$$

	P							
f	.75000	.90000	.95000	.97500	.99000	.99900	.99990	.99999
46	1.811	2.492	2.909	3.276	3.707	4.622	5.389	6.062
47	1.809	2.489	2.904	3.270	3.700	4.612	5.376	6.047
48	1.807	2.485	2.900	3.264	3.693	4.602	5.363	6.032
49	1.805	2.482	2.895	3.258	3.686	4.592	5.351	6.018
50	1.803	2.478	2.891	3.253	3.679	4.583	5.340	6.004
51	1.801	2.475	2.887	3.248	3.673	4.574	5.329	5.991
52	1.799	2.472	2.883	3.243	3.667	4.566	5.318	5.979
53	1.798	2.469	2.879	3.239	3.662	4.558	5.308	5.967
54	1.796	2.466	2.875	3.234	3.656	4.550	5.298	5.955
55	1.795	2.464	2.872	3.230	3.651	4.542	5.289	5.944
56	1.793	2.461	2.868	3.226	3.646	4.535	5.279	5.933
57	1.792	2.459	2.865	3.222	3.641	4.528	5.271	5.922
58	1.790	2.456	2.862	3.218	3.636	4.521	5.262	5.912
59	1.789	2.454	2.859	3.214	3.631	4.515	5.254	5.902
60	1.788	2.452	2.856	3.210	3.627	4.509	5.246	5.893
61	1.787	2.449	2.853	3.207	3.623	4.502	5.238	5.884
62	1.785	2.447	2.850	3.204	3.618	4.497	5.231	5.875
63	1.784	2.445	2.848	3.200	3.614	4.491	5.223	5.866
64	1.783	2.443	2.845	3.197	3.611	4.485	5.216	5.858
65	1.782	2.441	2.842	3.194	3.607	4.480	5.209	5.850
66	1.781	2.440	2.840	3.191	3.603	4.475	5.203	5.842
67	1.780	2.438	2.838	3.188	3.600	4.470	5.196	5.834
68	1.779	2.436	2.835	3.185	3.596	4.465	5.190	5.827
69	1.778	2.434	2.833	3.183	3.593	4.460	5.184	5.819
70	1.777	2.433	2.831	3.180	3.590	4.455	5.178	5.812
71	1.776	2.431	2.829	3.177	3.586	4.451	5.173	5.806
72	1.775	2.430	2.827	3.175	3.583	4.446	5.167	5.799
73	1.775	2.428	2.825	3.173	3.580	4.442	5.162	5.793
74	1.774	2.427	2.823	3.170	3.577	4.438	5.156	5.786
75	1.773	2.425	2.821	3.168	3.575	4.434	5.151	5.780
80	1.769	2.419	2.813	3.157	3.562	4.415	5.127	5.752
85	1.766	2.413	2.805	3.148	3.550	4.399	5.106	5.726
90	1.763	2.408	2.798	3.140	3.540	4.384	5.088	5.704
95	1.760	2.403	2.792	3.132	3.531	4.371	5.071	5.684
100	1.758	2.399	2.787	3.126	3.523	4.359	5.056	5.666
110	1.754	2.392	2.777	3.114	3.508	4.338	5.029	5.634
120	1.751	2.386	2.770	3.105	3.497	4.321	5.007	5.608
130	1.748	2.381	2.763	3.097	3.487	4.307	4.989	5.585
140	1.746	2.377	2.758	3.090	3.478	4.294	4.973	5.566
150	1.744	2.373	2.753	3.084	3.471	4.284	4.959	5.549
200	1.736	2.360	2.736	3.063	3.445	4.246	4.910	5.489
300	1.729	2.347	2.719	3.042	3.419	4.207	4.860	5.429
500	1.723	2.337	2.705	3.025	3.398	4.177	4.820	5.380
1000	1.719	2.330	2.695	3.013	3.382	4.154	4.790	5.343
∞	1.715	2.322	2.685	3.000	3.367	4.131	4.759	5.305

4.3.6 Values of k for $\gamma = .99$ and $n = 6$

$$\Pr\left\{T_f \leq k\sqrt{n} \,\middle|\, K_p\sqrt{n}\right\} = \gamma$$

	P							
f	.75000	.90000	.95000	.97500	.99000	.99900	.99990	.99999
1	54.482	102.257	131.237	156.378	185.611	246.558	296.727	340.280
2	7.830	13.404	16.896	19.962	23.553	31.087	37.315	42.733
3	4.369	7.125	8.870	10.412	12.226	16.051	19.222	21.986
4	3.328	5.264	6.495	7.587	8.875	11.599	13.864	15.840
5	2.848	4.411	5.406	6.290	7.335	9.550	11.396	13.007
6	2.576	3.928	4.788	5.554	6.460	8.384	9.989	11.393
7	2.401	3.619	4.393	5.082	5.898	7.633	9.083	10.351
8	2.280	3.405	4.118	4.754	5.507	7.110	8.450	9.623
9	2.192	3.248	3.917	4.513	5.219	6.723	7.982	9.085
10	2.124	3.128	3.763	4.328	4.998	6.426	7.622	8.670
11	2.071	3.033	3.641	4.182	4.823	6.190	7.335	8.340
12	2.028	2.957	3.542	4.063	4.681	5.998	7.102	8.070
13	1.992	2.894	3.461	3.965	4.563	5.838	6.908	7.846
14	1.962	2.841	3.392	3.882	4.464	5.704	6.744	7.657
15	1.937	2.795	3.334	3.812	4.379	5.588	6.603	7.494
16	1.915	2.756	3.283	3.751	4.306	5.489	6.481	7.353
17	1.896	2.723	3.239	3.698	4.242	5.401	6.375	7.229
18	1.880	2.693	3.201	3.651	4.185	5.324	6.280	7.120
19	1.865	2.666	3.166	3.610	4.135	5.256	6.196	7.022
20	1.852	2.643	3.136	3.573	4.091	5.194	6.121	6.935
21	1.840	2.622	3.108	3.540	4.050	5.139	6.053	6.856
22	1.829	2.603	3.084	3.510	4.014	5.089	5.991	6.784
23	1.820	2.586	3.061	3.482	3.981	5.043	5.935	6.718
24	1.811	2.570	3.041	3.458	3.951	5.001	5.884	6.659
25	1.803	2.555	3.022	3.435	3.923	4.963	5.836	6.603
26	1.796	2.542	3.005	3.414	3.898	4.928	5.793	6.553
27	1.789	2.530	2.989	3.395	3.874	4.895	5.752	6.506
28	1.783	2.519	2.974	3.377	3.852	4.865	5.715	6.462
29	1.777	2.508	2.960	3.360	3.832	4.837	5.680	6.421
30	1.771	2.499	2.948	3.345	3.813	4.811	5.648	6.383
31	1.766	2.490	2.936	3.330	3.796	4.786	5.617	6.347
32	1.762	2.481	2.925	3.317	3.779	4.763	5.589	6.314
33	1.757	2.473	2.914	3.304	3.764	4.741	5.562	6.282
34	1.753	2.466	2.905	3.292	3.749	4.721	5.537	6.253
35	1.749	2.459	2.896	3.281	3.735	4.702	5.513	6.225
36	1.746	2.452	2.887	3.270	3.723	4.684	5.490	6.198
37	1.742	2.446	2.879	3.260	3.710	4.667	5.469	6.173
38	1.739	2.440	2.871	3.251	3.699	4.651	5.449	6.150
39	1.736	2.435	2.864	3.242	3.688	4.635	5.429	6.127
40	1.733	2.429	2.857	3.234	3.677	4.621	5.411	6.106
41	1.730	2.424	2.850	3.225	3.668	4.607	5.394	6.085
42	1.728	2.420	2.844	3.218	3.658	4.594	5.377	6.066
43	1.725	2.415	2.838	3.211	3.649	4.581	5.362	6.047
44	1.723	2.411	2.832	3.204	3.641	4.569	5.346	6.029
45	1.720	2.407	2.827	3.197	3.633	4.557	5.332	6.012

4.3.6 Values of k for $\gamma = .99$ and $n = 6$ (Continued)

$$\Pr\left\{T_f \leq k\sqrt{n} \,\middle|\, K_p\sqrt{n}\right\} = \gamma$$

	P							
f	.75000	.90000	.95000	.97500	.99000	.99900	.99990	.99999
46	1.718	2.403	2.822	3.191	3.625	4.546	5.318	5.996
47	1.716	2.399	2.817	3.185	3.617	4.536	5.305	5.980
48	1.714	2.395	2.812	3.179	3.610	4.526	5.292	5.965
49	1.712	2.392	2.808	3.173	3.603	4.516	5.280	5.951
50	1.710	2.389	2.803	3.168	3.597	4.507	5.268	5.937
51	1.709	2.385	2.799	3.163	3.591	4.498	5.257	5.924
52	1.707	2.382	2.795	3.158	3.584	4.489	5.246	5.911
53	1.705	2.379	2.791	3.153	3.579	4.481	5.236	5.899
54	1.704	2.377	2.788	3.148	3.573	4.473	5.226	5.887
55	1.702	2.374	2.784	3.144	3.568	4.465	5.216	5.875
56	1.701	2.371	2.780	3.140	3.562	4.458	5.207	5.864
57	1.700	2.369	2.777	3.136	3.557	4.450	5.198	5.853
58	1.698	2.366	2.774	3.132	3.552	4.444	5.189	5.843
59	1.697	2.364	2.771	3.128	3.548	4.437	5.180	5.833
60	1.696	2.362	2.768	3.124	3.543	4.430	5.172	5.823
61	1.694	2.360	2.765	3.121	3.539	4.424	5.164	5.814
62	1.693	2.357	2.762	3.117	3.535	4.418	5.157	5.805
63	1.692	2.355	2.759	3.114	3.531	4.412	5.149	5.796
64	1.691	2.353	2.757	3.111	3.527	4.406	5.142	5.787
65	1.690	2.351	2.754	3.108	3.523	4.401	5.135	5.779
66	1.689	2.350	2.752	3.105	3.519	4.396	5.128	5.771
67	1.688	2.348	2.749	3.102	3.515	4.390	5.122	5.763
68	1.687	2.346	2.747	3.099	3.512	4.385	5.115	5.755
69	1.686	2.344	2.745	3.096	3.508	4.380	5.109	5.748
70	1.685	2.343	2.743	3.093	3.505	4.376	5.103	5.741
71	1.684	2.341	2.741	3.091	3.502	4.371	5.097	5.734
72	1.683	2.340	2.739	3.088	3.499	4.367	5.091	5.727
73	1.683	2.338	2.737	3.086	3.496	4.362	5.086	5.720
74	1.682	2.337	2.735	3.083	3.493	4.358	5.080	5.714
75	1.681	2.335	2.733	3.081	3.490	4.354	5.075	5.708
80	1.677	2.329	2.724	3.070	3.476	4.335	5.051	5.678
85	1.674	2.323	2.716	3.061	3.465	4.318	5.029	5.653
90	1.671	2.318	2.709	3.052	3.454	4.302	5.010	5.629
95	1.669	2.313	2.703	3.045	3.445	4.289	4.992	5.609
100	1.667	2.309	2.698	3.038	3.436	4.277	4.977	5.590
110	1.663	2.302	2.688	3.026	3.422	4.256	4.950	5.557
120	1.659	2.296	2.681	3.017	3.410	4.238	4.927	5.530
130	1.657	2.291	2.674	3.008	3.400	4.223	4.908	5.507
140	1.654	2.286	2.668	3.001	3.391	4.210	4.891	5.487
150	1.652	2.283	2.663	2.995	3.383	4.199	4.877	5.469
200	1.645	2.270	2.646	2.974	3.356	4.160	4.826	5.408
300	1.638	2.257	2.629	2.952	3.330	4.120	4.774	5.345
500	1.633	2.247	2.615	2.935	3.308	4.088	4.732	5.293
1000	1.628	2.239	2.605	2.922	3.292	4.064	4.701	5.254
∞	1.624	2.231	2.595	2.910	3.276	4.040	4.669	5.215

4.3.7 Values of k for $\gamma = .99$ and $n = 7$

$$Pr\left\{T_f \leq k\sqrt{n} \,\middle|\, K_p\sqrt{n}\right\} = \gamma$$

f	P .75000	.90000	.95000	.97500	.99000	.99900	.99990	.99999
1	54.261	102.252	131.237	156.378	185.611	246.558	296.727	340.280
2	7.686	13.317	16.827	19.904	23.503	31.050	37.284	42.705
3	4.260	7.048	8.806	10.357	12.179	16.015	19.192	21.959
4	3.233	5.192	6.434	7.533	8.828	11.563	13.833	15.813
5	2.759	4.341	5.345	6.236	7.287	9.513	11.364	12.979
6	2.491	3.859	4.728	5.500	6.412	8.346	9.957	11.364
7	2.319	3.551	4.332	5.027	5.849	7.594	9.050	10.322
8	2.200	3.337	4.057	4.698	5.457	7.069	8.415	9.592
9	2.113	3.180	3.856	4.457	5.168	6.682	7.946	9.053
10	2.046	3.060	3.701	4.271	4.946	6.383	7.585	8.637
11	1.994	2.965	3.579	4.124	4.771	6.147	7.298	8.306
12	1.951	2.889	3.480	4.005	4.628	5.954	7.064	8.036
13	1.916	2.826	3.398	3.907	4.510	5.794	6.869	7.811
14	1.887	2.773	3.329	3.824	4.410	5.658	6.704	7.621
15	1.862	2.727	3.270	3.753	4.325	5.542	6.563	7.457
16	1.840	2.688	3.220	3.692	4.251	5.442	6.440	7.316
17	1.822	2.654	3.176	3.638	4.186	5.354	6.333	7.191
18	1.805	2.625	3.137	3.591	4.130	5.276	6.238	7.081
19	1.791	2.598	3.102	3.550	4.079	5.207	6.153	6.983
20	1.778	2.575	3.072	3.512	4.034	5.145	6.077	6.895
21	1.766	2.554	3.044	3.479	3.993	5.089	6.009	6.815
22	1.756	2.534	3.019	3.448	3.957	5.039	5.947	6.743
23	1.746	2.517	2.996	3.421	3.923	4.993	5.890	6.677
24	1.738	2.501	2.976	3.396	3.893	4.951	5.838	6.617
25	1.730	2.487	2.957	3.373	3.865	4.912	5.790	6.561
26	1.723	2.474	2.939	3.352	3.839	4.876	5.746	6.510
27	1.716	2.461	2.923	3.332	3.815	4.843	5.706	6.462
28	1.710	2.450	2.909	3.314	3.793	4.813	5.668	6.418
29	1.704	2.440	2.895	3.297	3.773	4.784	5.632	6.377
30	1.699	2.430	2.882	3.282	3.753	4.758	5.600	6.339
31	1.694	2.421	2.870	3.267	3.736	4.733	5.569	6.303
32	1.689	2.412	2.859	3.253	3.719	4.709	5.540	6.269
33	1.685	2.404	2.848	3.240	3.703	4.687	5.513	6.237
34	1.681	2.397	2.839	3.228	3.689	4.667	5.487	6.207
35	1.677	2.390	2.829	3.217	3.675	4.647	5.463	6.179
36	1.673	2.383	2.821	3.206	3.662	4.629	5.440	6.152
37	1.670	2.377	2.812	3.196	3.649	4.612	5.418	6.127
38	1.667	2.371	2.805	3.187	3.638	4.595	5.398	6.103
39	1.664	2.366	2.797	3.178	3.626	4.580	5.379	6.080
40	1.661	2.360	2.790	3.169	3.616	4.565	5.360	6.058
41	1.658	2.355	2.784	3.161	3.606	4.551	5.342	6.037
42	1.656	2.350	2.777	3.153	3.596	4.537	5.326	6.018
43	1.653	2.346	2.771	3.146	3.587	4.524	5.310	5.999
44	1.651	2.342	2.766	3.139	3.579	4.512	5.294	5.981
45	1.649	2.337	2.760	3.132	3.570	4.501	5.280	5.963

4.3.7 Values of k for $\gamma = .99$ and n = 7 (Continued)

$$\Pr\left\{T_f \leq k\sqrt{n} \,\middle|\, K_p\sqrt{n}\right\} = \gamma$$

	P							
f	.75000	.90000	.95000	.97500	.99000	.99900	.99990	.99999
46	1.646	2.333	2.755	3.126	3.562	4.489	5.265	5.947
47	1.644	2.330	2.750	3.119	3.555	4.479	5.252	5.931
48	1.642	2.326	2.745	3.114	3.548	4.468	5.239	5.916
49	1.641	2.323	2.740	3.108	3.541	4.458	5.227	5.901
50	1.639	2.319	2.736	3.102	3.534	4.449	5.215	5.887
51	1.637	2.316	2.732	3.097	3.527	4.440	5.203	5.873
52	1.635	2.313	2.728	3.092	3.521	4.431	5.192	5.860
53	1.634	2.310	2.724	3.087	3.515	4.423	5.182	5.848
54	1.632	2.307	2.720	3.083	3.510	4.414	5.171	5.836
55	1.631	2.305	2.716	3.078	3.504	4.407	5.161	5.824
56	1.629	2.302	2.713	3.074	3.499	4.399	5.152	5.813
57	1.628	2.299	2.710	3.070	3.494	4.392	5.143	5.802
58	1.627	2.297	2.706	3.066	3.489	4.385	5.134	5.791
59	1.625	2.295	2.703	3.062	3.484	4.378	5.125	5.781
60	1.624	2.292	2.700	3.058	3.479	4.371	5.117	5.771
61	1.623	2.290	2.697	3.055	3.475	4.365	5.109	5.761
62	1.622	2.288	2.694	3.051	3.471	4.359	5.101	5.752
63	1.621	2.286	2.692	3.048	3.466	4.353	5.093	5.743
64	1.620	2.284	2.689	3.045	3.462	4.347	5.086	5.734
65	1.619	2.282	2.686	3.041	3.458	4.341	5.079	5.726
66	1.618	2.280	2.684	3.038	3.455	4.336	5.072	5.718
67	1.617	2.278	2.682	3.035	3.451	4.330	5.065	5.710
68	1.616	2.277	2.679	3.032	3.447	4.325	5.059	5.702
69	1.615	2.275	2.677	3.030	3.444	4.320	5.052	5.694
70	1.614	2.273	2.675	3.027	3.440	4.315	5.046	5.687
71	1.613	2.272	2.673	3.024	3.437	4.311	5.040	5.680
72	1.612	2.270	2.670	3.022	3.434	4.306	5.034	5.673
73	1.611	2.268	2.668	3.019	3.431	4.301	5.029	5.666
74	1.611	2.267	2.666	3.017	3.428	4.297	5.023	5.660
75	1.610	2.266	2.665	3.014	3.425	4.293	5.018	5.653
80	1.606	2.259	2.656	3.003	3.411	4.273	4.993	5.623
85	1.603	2.253	2.648	2.994	3.399	4.256	4.970	5.597
90	1.600	2.248	2.641	2.985	3.388	4.240	4.951	5.573
95	1.598	2.243	2.635	2.977	3.379	4.226	4.933	5.552
100	1.596	2.239	2.629	2.970	3.370	4.214	4.917	5.533
110	1.592	2.232	2.620	2.958	3.355	4.192	4.889	5.499
120	1.588	2.226	2.612	2.949	3.343	4.174	4.866	5.471
130	1.586	2.221	2.605	2.940	3.332	4.159	4.846	5.447
140	1.583	2.216	2.599	2.933	3.323	4.145	4.829	5.427
150	1.581	2.213	2.594	2.927	3.316	4.134	4.814	5.409
200	1.574	2.200	2.576	2.905	3.288	4.093	4.761	5.345
300	1.568	2.187	2.559	2.883	3.261	4.053	4.708	5.280
500	1.562	2.176	2.545	2.865	3.239	4.020	4.665	5.227
1000	1.558	2.169	2.535	2.852	3.222	3.995	4.632	5.186
∞	1.554	2.161	2.524	2.839	3.206	3.970	4.598	5.144

4.3.8 Values of k for $\gamma = .99$ and $n = 8$

$$\Pr\left\{T_f \leq k\sqrt{n} \,\middle|\, K_p\sqrt{n}\right\} = \gamma$$

f	P .75000	.90000	.95000	.97500	.99000	.99900	.99990	.99999
1	54.120	102.250	131.237	156.378	185.611	246.558	296.727	340.280
2	7.575	13.252	16.775	19.860	23.466	31.022	37.261	42.685
3	4.175	6.990	8.759	10.316	12.144	15.988	19.169	21.939
4	3.157	5.137	6.387	7.492	8.793	11.535	13.810	15.792
5	2.689	4.287	5.299	6.195	7.252	9.485	11.340	12.959
6	2.423	3.805	4.681	5.458	6.375	8.317	9.932	11.342
7	2.253	3.497	4.285	4.985	5.812	7.564	9.024	10.299
8	2.136	3.283	4.010	4.656	5.419	7.039	8.389	9.569
9	2.049	3.127	3.808	4.413	5.129	6.650	7.919	9.029
10	1.984	3.007	3.653	4.227	4.907	6.351	7.557	8.612
11	1.932	2.912	3.530	4.080	4.731	6.114	7.269	8.281
12	1.890	2.835	3.431	3.961	4.587	5.920	7.035	8.010
13	1.855	2.772	3.349	3.862	4.468	5.759	6.839	7.784
14	1.826	2.719	3.280	3.778	4.368	5.623	6.674	7.593
15	1.802	2.674	3.221	3.707	4.282	5.507	6.532	7.430
16	1.780	2.634	3.170	3.645	4.208	5.406	6.409	7.287
17	1.762	2.600	3.126	3.592	4.143	5.318	6.301	7.162
18	1.746	2.571	3.087	3.544	4.086	5.239	6.205	7.052
19	1.731	2.544	3.052	3.502	4.035	5.170	6.120	6.953
20	1.719	2.520	3.021	3.465	3.990	5.107	6.044	6.865
21	1.707	2.499	2.993	3.431	3.949	5.051	5.975	6.785
22	1.697	2.480	2.968	3.400	3.912	5.000	5.912	6.712
23	1.687	2.463	2.945	3.373	3.878	4.954	5.855	6.646
24	1.679	2.447	2.924	3.347	3.847	4.911	5.803	6.585
25	1.671	2.432	2.905	3.324	3.819	4.872	5.755	6.529
26	1.664	2.419	2.888	3.303	3.793	4.836	5.710	6.477
27	1.657	2.407	2.872	3.283	3.769	4.803	5.669	6.429
28	1.651	2.395	2.857	3.265	3.747	4.772	5.631	6.385
29	1.646	2.385	2.843	3.248	3.726	4.743	5.596	6.343
30	1.640	2.375	2.830	3.232	3.707	4.716	5.562	6.305
31	1.635	2.366	2.818	3.217	3.689	4.691	5.531	6.268
32	1.631	2.357	2.807	3.203	3.672	4.668	5.502	6.234
33	1.627	2.349	2.796	3.190	3.656	4.645	5.475	6.202
34	1.623	2.342	2.786	3.178	3.641	4.625	5.449	6.172
35	1.619	2.335	2.777	3.167	3.627	4.605	5.424	6.143
36	1.615	2.328	2.768	3.156	3.614	4.586	5.401	6.116
37	1.612	2.322	2.760	3.146	3.601	4.569	5.379	6.091
38	1.609	2.316	2.752	3.136	3.589	4.552	5.359	6.066
39	1.606	2.310	2.744	3.127	3.578	4.536	5.339	6.043
40	1.603	2.305	2.737	3.118	3.567	4.521	5.320	6.021
41	1.600	2.300	2.730	3.110	3.557	4.507	5.302	6.000
42	1.598	2.295	2.724	3.102	3.547	4.493	5.285	5.980
43	1.595	2.291	2.718	3.095	3.538	4.480	5.269	5.961
44	1.593	2.286	2.712	3.087	3.529	4.468	5.254	5.943
45	1.591	2.282	2.707	3.081	3.521	4.456	5.239	5.925

4.3.8 Values of k for $\gamma = .99$ and $n = 8$ (Continued)

$$\Pr\left\{T_f \leq k\sqrt{n} \,\middle|\, K_p\sqrt{n}\right\} = \gamma$$

	P							
f	.75000	.90000	.95000	.97500	.99000	.99900	.99990	.99999
46	1.589	2.278	2.701	3.074	3.513	4.445	5.224	5.909
47	1.587	2.274	2.696	3.068	3.505	4.434	5.211	5.893
48	1.585	2.271	2.691	3.062	3.498	4.423	5.198	5.877
49	1.583	2.267	2.687	3.056	3.491	4.413	5.185	5.862
50	1.581	2.264	2.682	3.051	3.484	4.404	5.173	5.848
51	1.579	2.261	2.678	3.045	3.478	4.394	5.161	5.834
52	1.578	2.258	2.674	3.040	3.471	4.385	5.150	5.821
53	1.576	2.255	2.670	3.035	3.465	4.377	5.139	5.808
54	1.575	2.252	2.666	3.031	3.459	4.369	5.129	5.796
55	1.573	2.249	2.663	3.026	3.454	4.361	5.119	5.784
56	1.572	2.246	2.659	3.022	3.448	4.353	5.109	5.773
57	1.570	2.244	2.656	3.018	3.443	4.345	5.100	5.762
58	1.569	2.241	2.652	3.013	3.438	4.338	5.091	5.751
59	1.568	2.239	2.649	3.010	3.433	4.331	5.082	5.741
60	1.567	2.237	2.646	3.006	3.429	4.325	5.074	5.730
61	1.565	2.234	2.643	3.002	3.424	4.318	5.065	5.721
62	1.564	2.232	2.640	2.999	3.420	4.312	5.057	5.711
63	1.563	2.230	2.637	2.995	3.415	4.306	5.050	5.702
64	1.562	2.228	2.635	2.992	3.411	4.300	5.042	5.693
65	1.561	2.226	2.632	2.989	3.407	4.294	5.035	5.685
66	1.560	2.224	2.630	2.985	3.403	4.288	5.028	5.676
67	1.559	2.223	2.627	2.982	3.400	4.283	5.021	5.668
68	1.558	2.221	2.625	2.979	3.396	4.278	5.014	5.660
69	1.557	2.219	2.623	2.977	3.392	4.273	5.008	5.653
70	1.556	2.217	2.620	2.974	3.389	4.268	5.002	5.645
71	1.556	2.216	2.618	2.971	3.386	4.263	4.996	5.638
72	1.555	2.214	2.616	2.968	3.382	4.258	4.990	5.631
73	1.554	2.213	2.614	2.966	3.379	4.254	4.984	5.624
74	1.553	2.211	2.612	2.963	3.376	4.249	4.978	5.617
75	1.552	2.210	2.610	2.961	3.373	4.245	4.973	5.611
80	1.549	2.203	2.601	2.950	3.359	4.225	4.947	5.580
85	1.546	2.197	2.593	2.940	3.347	4.207	4.924	5.553
90	1.543	2.192	2.586	2.931	3.336	4.191	4.904	5.529
95	1.540	2.187	2.580	2.923	3.326	4.177	4.886	5.507
100	1.538	2.183	2.574	2.916	3.318	4.164	4.870	5.488
110	1.534	2.176	2.564	2.904	3.302	4.142	4.841	5.454
120	1.531	2.170	2.556	2.894	3.290	4.123	4.817	5.425
130	1.529	2.165	2.549	2.885	3.279	4.108	4.797	5.400
140	1.526	2.160	2.544	2.878	3.270	4.094	4.780	5.379
150	1.524	2.156	2.538	2.872	3.262	4.082	4.764	5.361
200	1.517	2.143	2.521	2.849	3.234	4.041	4.710	5.295
300	1.511	2.130	2.503	2.827	3.206	3.999	4.655	5.228
500	1.505	2.120	2.489	2.809	3.183	3.965	4.610	5.173
1000	1.501	2.112	2.478	2.796	3.166	3.939	4.576	5.131
∞	1.497	2.104	2.467	2.782	3.149	3.913	4.542	5.087

4.3.9 Values of k for $\gamma = .99$ and $n = 9$

$$\Pr\left\{T_f \leq k\sqrt{n} \,\middle|\, K_p\sqrt{n}\right\} = \gamma$$

	P							
f	.75000	.90000	.95000	.97500	.99000	.99900	.99990	.99999
1	54.026	102.250	131.237	156.378	185.611	246.558	296.727	340.280
2	7.487	13.201	16.734	19.826	23.437	31.000	37.243	42.669
3	4.106	6.944	8.721	10.284	12.116	15.966	19.152	21.924
4	3.096	5.093	6.350	7.460	8.765	11.514	13.792	15.777
5	2.631	4.243	5.262	6.163	7.223	9.463	11.322	12.942
6	2.368	3.762	4.644	5.425	6.347	8.294	9.913	11.325
7	2.200	3.454	4.248	4.952	5.782	7.541	9.004	10.281
8	2.083	3.240	3.972	4.622	5.389	7.014	8.368	9.551
9	1.998	3.083	3.770	4.379	5.099	6.625	7.898	9.010
10	1.932	2.963	3.614	4.192	4.876	6.326	7.536	8.593
11	1.881	2.869	3.492	4.045	4.699	6.088	7.247	8.261
12	1.839	2.792	3.392	3.925	4.555	5.894	7.012	7.989
13	1.805	2.728	3.309	3.825	4.436	5.732	6.816	7.763
14	1.776	2.675	3.240	3.742	4.335	5.596	6.650	7.572
15	1.752	2.630	3.181	3.670	4.249	5.479	6.507	7.408
16	1.731	2.591	3.130	3.608	4.174	5.377	6.384	7.265
17	1.713	2.557	3.085	3.554	4.109	5.289	6.275	7.140
18	1.697	2.527	3.046	3.506	4.051	5.210	6.179	7.029
19	1.682	2.500	3.011	3.464	4.000	5.140	6.094	6.930
20	1.670	2.476	2.980	3.426	3.954	5.077	6.017	6.841
21	1.658	2.455	2.952	3.392	3.913	5.021	5.948	6.760
22	1.648	2.436	2.927	3.361	3.876	4.969	5.885	6.687
23	1.639	2.418	2.904	3.333	3.842	4.923	5.828	6.621
24	1.630	2.402	2.883	3.308	3.811	4.880	5.775	6.560
25	1.623	2.388	2.863	3.284	3.782	4.840	5.727	6.503
26	1.616	2.374	2.846	3.263	3.756	4.804	5.682	6.451
27	1.609	2.362	2.829	3.243	3.732	4.771	5.641	6.403
28	1.603	2.351	2.814	3.225	3.709	4.739	5.602	6.358
29	1.597	2.340	2.800	3.207	3.688	4.710	5.566	6.317
30	1.592	2.330	2.787	3.191	3.669	4.683	5.533	6.278
31	1.587	2.321	2.775	3.177	3.650	4.658	5.501	6.241
32	1.583	2.312	2.764	3.163	3.633	4.634	5.472	6.207
33	1.579	2.304	2.753	3.150	3.617	4.612	5.444	6.174
34	1.575	2.297	2.743	3.137	3.602	4.591	5.418	6.144
35	1.571	2.290	2.734	3.126	3.588	4.571	5.394	6.115
36	1.567	2.283	2.725	3.115	3.575	4.552	5.370	6.088
37	1.564	2.277	2.716	3.104	3.562	4.534	5.348	6.062
38	1.561	2.271	2.708	3.095	3.550	4.517	5.327	6.037
39	1.558	2.265	2.701	3.085	3.539	4.501	5.307	6.014
40	1.555	2.260	2.694	3.077	3.528	4.486	5.288	5.992
41	1.552	2.255	2.687	3.068	3.518	4.472	5.270	5.971
42	1.550	2.250	2.681	3.060	3.508	4.458	5.253	5.951
43	1.547	2.245	2.674	3.053	3.498	4.445	5.237	5.931
44	1.545	2.241	2.669	3.045	3.490	4.432	5.221	5.913
45	1.543	2.237	2.663	3.039	3.481	4.420	5.206	5.895

4.3.9 Values of k for $\gamma = .99$ and $n = 9$ (Continued)

$$\Pr\left\{T_f \leq k\sqrt{n} \,\middle|\, K_p\sqrt{n}\right\} = \gamma$$

	P							
f	.75000	.90000	.95000	.97500	.99000	.99900	.99990	.99999
46	1.541	2.233	2.658	3.032	3.473	4.409	5.192	5.878
47	1.539	2.229	2.653	3.026	3.465	4.398	5.178	5.862
48	1.537	2.225	2.648	3.020	3.458	4.387	5.165	5.846
49	1.535	2.222	2.643	3.014	3.450	4.377	5.152	5.831
50	1.533	2.218	2.638	3.008	3.444	4.367	5.140	5.817
51	1.532	2.215	2.634	3.003	3.437	4.358	5.128	5.803
52	1.530	2.212	2.630	2.998	3.431	4.349	5.116	5.790
53	1.528	2.209	2.626	2.993	3.424	4.340	5.105	5.777
54	1.527	2.206	2.622	2.988	3.419	4.331	5.095	5.764
55	1.526	2.203	2.618	2.983	3.413	4.323	5.085	5.752
56	1.524	2.201	2.615	2.979	3.407	4.316	5.075	5.741
57	1.523	2.198	2.611	2.975	3.402	4.308	5.065	5.730
58	1.521	2.196	2.608	2.971	3.397	4.301	5.056	5.719
59	1.520	2.193	2.605	2.967	3.392	4.294	5.047	5.708
60	1.519	2.191	2.602	2.963	3.387	4.287	5.039	5.698
61	1.518	2.189	2.599	2.959	3.383	4.280	5.030	5.688
62	1.517	2.186	2.596	2.955	3.378	4.274	5.022	5.679
63	1.516	2.184	2.593	2.952	3.374	4.268	5.015	5.669
64	1.515	2.182	2.590	2.949	3.370	4.262	5.007	5.660
65	1.514	2.180	2.588	2.945	3.366	4.256	5.000	5.652
66	1.513	2.179	2.585	2.942	3.362	4.250	4.992	5.643
67	1.512	2.177	2.583	2.939	3.358	4.245	4.985	5.635
68	1.511	2.175	2.580	2.936	3.354	4.239	4.979	5.627
69	1.510	2.173	2.578	2.933	3.351	4.234	4.972	5.619
70	1.509	2.171	2.576	2.930	3.347	4.229	4.966	5.611
71	1.508	2.170	2.573	2.928	3.344	4.224	4.960	5.604
72	1.507	2.168	2.571	2.925	3.340	4.219	4.953	5.597
73	1.506	2.167	2.569	2.922	3.337	4.215	4.948	5.590
74	1.506	2.165	2.567	2.920	3.334	4.210	4.942	5.583
75	1.505	2.164	2.565	2.917	3.331	4.206	4.936	5.576
80	1.501	2.157	2.556	2.906	3.317	4.185	4.910	5.546
85	1.498	2.151	2.548	2.896	3.304	4.167	4.887	5.518
90	1.496	2.146	2.541	2.887	3.293	4.151	4.867	5.494
95	1.493	2.141	2.535	2.879	3.283	4.137	4.848	5.471
100	1.491	2.137	2.529	2.872	3.274	4.124	4.832	5.451
110	1.487	2.129	2.519	2.860	3.259	4.101	4.802	5.417
120	1.484	2.123	2.511	2.849	3.246	4.082	4.778	5.387
130	1.481	2.118	2.504	2.841	3.235	4.066	4.757	5.362
140	1.479	2.114	2.498	2.833	3.226	4.052	4.739	5.341
150	1.477	2.110	2.493	2.827	3.217	4.040	4.724	5.322
200	1.470	2.097	2.474	2.804	3.189	3.997	4.669	5.255
300	1.463	2.083	2.456	2.781	3.160	3.954	4.612	5.186
500	1.458	2.073	2.442	2.763	3.137	3.919	4.566	5.129
1000	1.454	2.065	2.431	2.749	3.119	3.893	4.530	5.085
∞	1.450	2.057	2.420	2.735	3.102	3.866	4.494	5.040

4.3.10 Values of k for $\gamma = .99$ and $n = 10$

$$\Pr\left\{T_f \leq k\sqrt{n} \,\middle|\, K_p\sqrt{n}\right\} = \gamma$$

	P							
f	.75000	.90000	.95000	.97500	.99000	.99900	.99990	.99999
1	53.963	102.250	131.237	156.378	185.611	246.558	296.727	340.280
2	7.416	13.159	16.702	19.798	23.414	30.983	37.228	42.656
3	4.050	6.907	8.691	10.258	12.094	15.949	19.138	21.911
4	3.045	5.057	6.320	7.435	8.743	11.496	13.778	15.764
5	2.584	4.208	5.232	6.136	7.201	9.445	11.307	12.929
6	2.322	3.727	4.614	5.399	6.323	8.276	9.898	11.312
7	2.155	3.419	4.217	4.924	5.758	7.522	8.988	10.267
8	2.039	3.205	3.941	4.594	5.364	6.995	8.352	9.536
9	1.954	3.048	3.738	4.351	5.074	6.605	7.881	8.995
10	1.890	2.928	3.583	4.164	4.850	6.305	7.518	8.577
11	1.838	2.833	3.460	4.016	4.673	6.067	7.229	8.245
12	1.797	2.756	3.360	3.895	4.528	5.872	6.993	7.973
13	1.763	2.692	3.277	3.796	4.409	5.710	6.797	7.746
14	1.735	2.639	3.207	3.711	4.308	5.573	6.630	7.555
15	1.710	2.593	3.148	3.640	4.221	5.456	6.488	7.390
16	1.689	2.554	3.096	3.577	4.146	5.354	6.364	7.247
17	1.671	2.520	3.052	3.523	4.080	5.265	6.255	7.121
18	1.655	2.490	3.012	3.475	4.023	5.186	6.159	7.010
19	1.641	2.463	2.977	3.433	3.971	5.116	6.073	6.911
20	1.629	2.439	2.946	3.395	3.925	5.053	5.996	6.821
21	1.617	2.418	2.918	3.360	3.884	4.996	5.926	6.741
22	1.607	2.399	2.892	3.329	3.846	4.944	5.863	6.667
23	1.598	2.381	2.869	3.301	3.812	4.897	5.805	6.600
24	1.590	2.365	2.848	3.275	3.780	4.854	5.752	6.539
25	1.582	2.350	2.829	3.252	3.752	4.815	5.704	6.483
26	1.575	2.337	2.811	3.230	3.725	4.778	5.659	6.430
27	1.568	2.325	2.794	3.210	3.701	4.744	5.617	6.382
28	1.562	2.313	2.779	3.191	3.678	4.713	5.578	6.337
29	1.557	2.303	2.765	3.174	3.657	4.683	5.542	6.295
30	1.552	2.293	2.752	3.158	3.637	4.656	5.509	6.256
31	1.547	2.283	2.740	3.143	3.619	4.631	5.477	6.219
32	1.542	2.275	2.728	3.129	3.602	4.607	5.447	6.184
33	1.538	2.267	2.717	3.116	3.586	4.584	5.420	6.152
34	1.534	2.259	2.707	3.103	3.570	4.563	5.393	6.121
35	1.530	2.252	2.698	3.092	3.556	4.543	5.368	6.092
36	1.527	2.245	2.689	3.081	3.543	4.524	5.345	6.065
37	1.524	2.239	2.680	3.070	3.530	4.506	5.323	6.039
38	1.520	2.233	2.672	3.060	3.518	4.489	5.302	6.014
39	1.517	2.227	2.665	3.051	3.506	4.473	5.281	5.990
40	1.515	2.222	2.658	3.042	3.495	4.457	5.262	5.968
41	1.512	2.217	2.651	3.034	3.485	4.443	5.244	5.947
42	1.510	2.212	2.644	3.025	3.475	4.429	5.227	5.926
43	1.507	2.207	2.638	3.018	3.465	4.415	5.210	5.907
44	1.505	2.203	2.632	3.010	3.456	4.403	5.194	5.888
45	1.503	2.198	2.626	3.003	3.448	4.391	5.179	5.871

4.3.10 **Values of k for $\gamma = .99$ and $n = 10$ (Continued)**

$$\Pr\left\{T_f \le k\sqrt{n} \,\middle|\, K_p\sqrt{n}\right\} = \gamma$$

	P							
f	.75000	.90000	.95000	.97500	.99000	.99900	.99990	.99999
46	1.501	2.194	2.621	2.997	3.440	4.379	5.165	5.853
47	1.499	2.191	2.616	2.990	3.432	4.368	5.151	5.837
48	1.497	2.187	2.611	2.984	3.424	4.357	5.137	5.821
49	1.495	2.183	2.606	2.978	3.417	4.347	5.124	5.806
50	1.493	2.180	2.602	2.973	3.410	4.337	5.112	5.792
51	1.491	2.177	2.597	2.967	3.403	4.327	5.100	5.778
52	1.490	2.174	2.593	2.962	3.397	4.318	5.089	5.764
53	1.488	2.171	2.589	2.957	3.391	4.309	5.078	5.751
54	1.487	2.168	2.585	2.952	3.385	4.301	5.067	5.738
55	1.485	2.165	2.581	2.948	3.379	4.293	5.057	5.726
56	1.484	2.162	2.578	2.943	3.373	4.285	5.047	5.715
57	1.483	2.160	2.574	2.939	3.368	4.277	5.037	5.703
58	1.481	2.157	2.571	2.935	3.363	4.270	5.028	5.692
59	1.480	2.155	2.568	2.931	3.358	4.263	5.019	5.682
60	1.479	2.152	2.564	2.927	3.353	4.256	5.010	5.671
61	1.478	2.150	2.561	2.923	3.348	4.249	5.002	5.661
62	1.477	2.148	2.559	2.919	3.344	4.242	4.993	5.652
63	1.476	2.146	2.556	2.916	3.339	4.236	4.986	5.642
64	1.474	2.144	2.553	2.912	3.335	4.230	4.978	5.633
65	1.473	2.142	2.550	2.909	3.331	4.224	4.970	5.624
66	1.472	2.140	2.548	2.906	3.327	4.218	4.963	5.616
67	1.472	2.138	2.545	2.903	3.323	4.213	4.956	5.607
68	1.471	2.136	2.543	2.900	3.319	4.207	4.949	5.599
69	1.470	2.134	2.540	2.897	3.316	4.202	4.943	5.591
70	1.469	2.133	2.538	2.894	3.312	4.197	4.936	5.584
71	1.468	2.131	2.536	2.891	3.309	4.192	4.930	5.576
72	1.467	2.130	2.534	2.888	3.305	4.187	4.924	5.569
73	1.466	2.128	2.532	2.886	3.302	4.182	4.918	5.562
74	1.466	2.126	2.530	2.883	3.299	4.178	4.912	5.555
75	1.465	2.125	2.528	2.881	3.296	4.173	4.906	5.548
80	1.461	2.118	2.518	2.869	3.281	4.153	4.880	5.517
85	1.458	2.112	2.510	2.859	3.269	4.134	4.856	5.489
90	1.456	2.107	2.503	2.850	3.257	4.118	4.836	5.464
95	1.453	2.102	2.497	2.842	3.247	4.103	4.817	5.442
100	1.451	2.098	2.491	2.835	3.238	4.090	4.800	5.422
110	1.447	2.090	2.481	2.822	3.222	4.067	4.770	5.386
120	1.444	2.084	2.472	2.812	3.209	4.047	4.745	5.356
130	1.441	2.079	2.465	2.803	3.198	4.031	4.724	5.331
140	1.439	2.075	2.459	2.795	3.188	4.017	4.706	5.309
150	1.437	2.071	2.454	2.789	3.180	4.004	4.690	5.290
200	1.430	2.057	2.436	2.765	3.151	3.961	4.634	5.221
300	1.424	2.044	2.417	2.742	3.122	3.917	4.576	5.151
500	1.418	2.033	2.403	2.724	3.098	3.881	4.528	5.092
1000	1.414	2.025	2.392	2.710	3.080	3.854	4.492	5.047
∞	1.410	2.017	2.381	2.696	3.062	3.826	4.455	5.001

4.3.11 Values of k for $\gamma = .99$ and $n = 17$

$$Pr\left\{T_f \leq k\sqrt{n} \,\middle|\, K_p\sqrt{n}\right\} = \gamma$$

f	P .75000	.90000	.95000	.97500	.99000	.99900	.99990	.99999
1	53.830	102.250	131.237	156.378	185.611	246.558	296.727	340.280
2	7.142	13.006	16.581	19.697	23.328	30.918	37.174	42.609
3	3.825	6.764	8.576	10.161	12.011	15.886	19.085	21.865
4	2.840	4.918	6.207	7.337	8.659	11.432	13.724	15.717
5	2.389	4.070	5.117	6.037	7.115	9.378	11.251	12.880
6	2.133	3.588	4.497	5.297	6.235	8.207	9.839	11.261
7	1.970	3.279	4.098	4.820	5.667	7.451	8.928	10.214
8	1.857	3.064	3.820	4.487	5.271	6.921	8.289	9.481
9	1.774	2.906	3.615	4.242	4.978	6.529	7.817	8.938
10	1.710	2.784	3.458	4.053	4.752	6.227	7.451	8.519
11	1.660	2.688	3.333	3.902	4.572	5.986	7.160	8.184
12	1.620	2.610	3.231	3.780	4.426	5.790	6.923	7.911
13	1.587	2.546	3.147	3.679	4.304	5.626	6.725	7.683
14	1.559	2.492	3.076	3.593	4.201	5.488	6.557	7.489
15	1.535	2.445	3.015	3.519	4.113	5.368	6.412	7.323
16	1.514	2.405	2.963	3.456	4.037	5.265	6.287	7.178
17	1.496	2.370	2.917	3.400	3.970	5.174	6.176	7.051
18	1.481	2.339	2.876	3.351	3.910	5.094	6.079	6.939
19	1.467	2.312	2.840	3.307	3.858	5.022	5.992	6.838
20	1.455	2.288	2.808	3.268	3.810	4.958	5.913	6.748
21	1.443	2.266	2.779	3.232	3.767	4.900	5.842	6.666
22	1.433	2.246	2.752	3.200	3.729	4.847	5.778	6.591
23	1.424	2.228	2.728	3.171	3.693	4.798	5.719	6.523
24	1.416	2.211	2.707	3.145	3.661	4.754	5.665	6.461
25	1.409	2.196	2.687	3.120	3.631	4.713	5.615	6.403
26	1.402	2.182	2.668	3.097	3.604	4.676	5.569	6.350
27	1.395	2.169	2.651	3.077	3.578	4.641	5.526	6.300
28	1.389	2.158	2.635	3.057	3.555	4.608	5.487	6.254
29	1.384	2.147	2.620	3.039	3.533	4.578	5.450	6.211
30	1.379	2.136	2.607	3.022	3.512	4.550	5.415	6.171
31	1.374	2.127	2.594	3.007	3.493	4.523	5.383	6.134
32	1.369	2.118	2.582	2.992	3.475	4.499	5.352	6.098
33	1.365	2.109	2.571	2.978	3.458	4.475	5.323	6.065
34	1.361	2.101	2.560	2.965	3.442	4.453	5.296	6.033
35	1.358	2.094	2.550	2.953	3.427	4.432	5.270	6.003
36	1.354	2.087	2.541	2.941	3.413	4.412	5.246	5.975
37	1.351	2.080	2.532	2.930	3.399	4.394	5.223	5.948
38	1.348	2.074	2.523	2.920	3.387	4.376	5.201	5.923
39	1.345	2.068	2.515	2.910	3.375	4.359	5.180	5.899
40	1.342	2.063	2.508	2.900	3.363	4.343	5.161	5.875
41	1.340	2.057	2.500	2.891	3.352	4.328	5.142	5.853
42	1.337	2.052	2.494	2.883	3.342	4.313	5.124	5.832
43	1.335	2.047	2.487	2.875	3.332	4.299	5.106	5.812
44	1.333	2.043	2.481	2.867	3.322	4.286	5.090	5.793
45	1.330	2.038	2.475	2.860	3.313	4.273	5.074	5.774

4.3.11 Values of k for $\gamma = .99$ and $n = 17$ (Continued)

$$\Pr\left\{T_f \le k\sqrt{n} \,\middle|\, K_p\sqrt{n}\right\} = \gamma$$

	P							
f	.75000	.90000	.95000	.97500	.99000	.99900	.99990	.99999
46	1.328	2.034	2.469	2.853	3.304	4.261	5.059	5.757
47	1.326	2.030	2.464	2.846	3.296	4.249	5.044	5.740
48	1.324	2.026	2.458	2.839	3.288	4.238	5.030	5.723
49	1.323	2.022	2.453	2.833	3.280	4.227	5.017	5.708
50	1.321	2.019	2.448	2.827	3.273	4.216	5.004	5.692
51	1.319	2.015	2.444	2.821	3.266	4.206	4.991	5.678
52	1.318	2.012	2.439	2.816	3.259	4.197	4.979	5.664
53	1.316	2.009	2.435	2.810	3.252	4.187	4.967	5.650
54	1.315	2.006	2.431	2.805	3.246	4.178	4.956	5.637
55	1.313	2.003	2.427	2.800	3.240	4.170	4.945	5.624
56	1.312	2.000	2.423	2.795	3.234	4.161	4.935	5.612
57	1.311	1.997	2.419	2.791	3.228	4.153	4.925	5.600
58	1.309	1.995	2.416	2.786	3.222	4.145	4.915	5.589
59	1.308	1.992	2.412	2.782	3.217	4.138	4.906	5.578
60	1.307	1.990	2.409	2.778	3.212	4.130	4.896	5.567
61	1.306	1.987	2.406	2.774	3.207	4.123	4.887	5.556
62	1.305	1.985	2.403	2.770	3.202	4.116	4.879	5.546
63	1.304	1.983	2.400	2.766	3.197	4.109	4.870	5.536
64	1.303	1.981	2.397	2.762	3.193	4.103	4.862	5.527
65	1.302	1.979	2.394	2.759	3.188	4.097	4.854	5.517
66	1.301	1.977	2.391	2.755	3.184	4.090	4.847	5.508
67	1.300	1.975	2.388	2.752	3.180	4.085	4.839	5.500
68	1.299	1.973	2.386	2.749	3.176	4.079	4.832	5.491
69	1.298	1.971	2.383	2.746	3.172	4.073	4.825	5.483
70	1.297	1.969	2.381	2.743	3.168	4.068	4.818	5.475
71	1.296	1.967	2.378	2.740	3.164	4.062	4.811	5.467
72	1.295	1.966	2.376	2.737	3.161	4.057	4.805	5.459
73	1.294	1.964	2.374	2.734	3.157	4.052	4.798	5.451
74	1.294	1.962	2.372	2.731	3.154	4.047	4.792	5.444
75	1.293	1.961	2.369	2.728	3.150	4.042	4.786	5.437
80	1.290	1.954	2.360	2.716	3.135	4.020	4.758	5.404
85	1.286	1.947	2.351	2.705	3.121	4.000	4.733	5.374
90	1.284	1.942	2.343	2.695	3.109	3.982	4.710	5.348
95	1.281	1.937	2.336	2.686	3.098	3.966	4.690	5.324
100	1.279	1.932	2.330	2.678	3.088	3.952	4.672	5.302
110	1.275	1.924	2.319	2.665	3.070	3.927	4.640	5.264
120	1.272	1.918	2.310	2.653	3.056	3.905	4.613	5.232
130	1.270	1.912	2.302	2.644	3.044	3.887	4.590	5.204
140	1.268	1.907	2.296	2.635	3.033	3.872	4.570	5.180
150	1.266	1.903	2.290	2.628	3.024	3.858	4.552	5.159
200	1.259	1.889	2.270	2.602	2.991	3.810	4.489	5.084
300	1.252	1.875	2.250	2.577	2.958	3.760	4.424	5.005
500	1.247	1.863	2.233	2.556	2.932	3.719	4.370	4.938
1000	1.243	1.854	2.221	2.540	2.911	3.687	4.327	4.885
∞	1.239	1.846	2.209	2.524	2.891	3.654	4.283	4.829

4.3.12 Values of k for $\gamma = .99$ and $n = 37$

$$\Pr\left\{T_f \leq k\sqrt{n} \,\middle|\, K_p\sqrt{n}\right\} = \gamma$$

	P							
f	.75000	.90000	.95000	.97500	.99000	.99900	.99990	.99999
1	53.815	102.250	131.237	156.378	185.611	246.558	296.727	340.280
2	6.921	12.886	16.487	19.618	23.262	30.867	37.132	42.573
3	3.631	6.650	8.486	10.084	11.946	15.837	19.044	21.830
4	2.657	4.804	6.115	7.259	8.593	11.382	13.682	15.680
5	2.210	3.954	5.023	5.957	7.046	9.326	11.207	12.842
6	1.957	3.471	4.401	5.214	6.164	8.153	9.794	11.221
7	1.795	3.159	3.999	4.735	5.594	7.394	8.880	10.173
8	1.683	2.942	3.719	4.399	5.195	6.863	8.240	9.438
9	1.600	2.781	3.511	4.151	4.900	6.469	7.766	8.893
10	1.537	2.658	3.352	3.960	4.672	6.165	7.399	8.472
11	1.487	2.560	3.224	3.807	4.490	5.922	7.106	8.136
12	1.446	2.480	3.121	3.683	4.341	5.724	6.867	7.861
13	1.413	2.414	3.035	3.579	4.218	5.558	6.667	7.632
14	1.385	2.358	2.962	3.492	4.113	5.418	6.498	7.437
15	1.361	2.310	2.899	3.416	4.023	5.297	6.352	7.270
16	1.340	2.269	2.845	3.351	3.945	5.192	6.225	7.124
17	1.322	2.232	2.797	3.294	3.876	5.100	6.113	6.996
18	1.306	2.200	2.755	3.243	3.815	5.018	6.014	6.882
19	1.292	2.172	2.718	3.198	3.761	4.945	5.926	6.780
20	1.279	2.146	2.684	3.157	3.712	4.879	5.846	6.688
21	1.268	2.123	2.654	3.120	3.668	4.820	5.774	6.605
22	1.258	2.102	2.626	3.087	3.628	4.766	5.709	6.530
23	1.249	2.083	2.601	3.057	3.591	4.716	5.649	6.461
24	1.240	2.066	2.578	3.029	3.558	4.671	5.594	6.397
25	1.233	2.050	2.557	3.003	3.527	4.629	5.543	6.339
26	1.226	2.035	2.537	2.979	3.498	4.590	5.496	6.285
27	1.219	2.022	2.519	2.957	3.471	4.554	5.452	6.234
28	1.213	2.009	2.503	2.937	3.447	4.521	5.411	6.187
29	1.207	1.997	2.487	2.918	3.424	4.489	5.373	6.143
30	1.202	1.986	2.472	2.900	3.402	4.460	5.338	6.102
31	1.197	1.976	2.459	2.883	3.382	4.433	5.304	6.064
32	1.193	1.966	2.446	2.868	3.363	4.407	5.273	6.028
33	1.189	1.957	2.434	2.853	3.345	4.383	5.243	5.993
34	1.185	1.949	2.422	2.839	3.328	4.360	5.215	5.961
35	1.181	1.941	2.412	2.826	3.313	4.338	5.189	5.930
36	1.177	1.934	2.402	2.814	3.297	4.317	5.164	5.901
37	1.174	1.926	2.392	2.802	3.283	4.298	5.140	5.874
38	1.171	1.920	2.383	2.791	3.270	4.279	5.117	5.848
39	1.168	1.913	2.374	2.780	3.257	4.262	5.096	5.823
40	1.165	1.907	2.366	2.770	3.244	4.245	5.075	5.799
41	1.162	1.901	2.358	2.760	3.233	4.229	5.055	5.776
42	1.160	1.896	2.351	2.751	3.222	4.213	5.037	5.754
43	1.157	1.891	2.344	2.742	3.211	4.199	5.019	5.734
44	1.155	1.885	2.337	2.734	3.201	4.184	5.001	5.714
45	1.153	1.881	2.330	2.726	3.191	4.171	4.985	5.694

4.3.12 Values of k for $\gamma = .99$ and $n = 37$ (Continued)

$$Pr\left\{T_f \leq k\sqrt{n} \,\middle|\, K_p\sqrt{n}\right\} = \gamma$$

	P							
f	.75000	.90000	.95000	.97500	.99000	.99900	.99990	.99999
46	1.150	1.876	2.324	2.718	3.181	4.158	4.969	5.676
47	1.148	1.872	2.318	2.711	3.172	4.146	4.954	5.658
48	1.146	1.867	2.312	2.704	3.164	4.134	4.939	5.641
49	1.145	1.863	2.307	2.697	3.155	4.122	4.925	5.625
50	1.143	1.860	2.302	2.691	3.147	4.111	4.911	5.609
51	1.141	1.856	2.297	2.684	3.140	4.100	4.898	5.594
52	1.139	1.852	2.292	2.678	3.132	4.090	4.886	5.579
53	1.138	1.849	2.287	2.672	3.125	4.080	4.873	5.565
54	1.136	1.845	2.282	2.667	3.118	4.071	4.862	5.552
55	1.135	1.842	2.278	2.661	3.112	4.061	4.850	5.538
56	1.133	1.839	2.274	2.656	3.105	4.052	4.839	5.526
57	1.132	1.836	2.270	2.651	3.099	4.044	4.828	5.513
58	1.131	1.833	2.266	2.646	3.093	4.035	4.818	5.501
59	1.129	1.830	2.262	2.641	3.087	4.027	4.808	5.489
60	1.128	1.828	2.258	2.637	3.081	4.019	4.798	5.478
61	1.127	1.825	2.255	2.632	3.076	4.012	4.789	5.467
62	1.126	1.822	2.251	2.628	3.070	4.004	4.780	5.457
63	1.125	1.820	2.248	2.624	3.065	3.997	4.771	5.446
64	1.124	1.818	2.244	2.620	3.060	3.990	4.762	5.436
65	1.123	1.815	2.241	2.616	3.055	3.983	4.754	5.426
66	1.122	1.813	2.238	2.612	3.051	3.976	4.746	5.417
67	1.121	1.811	2.235	2.608	3.046	3.970	4.738	5.408
68	1.120	1.809	2.232	2.604	3.042	3.964	4.730	5.399
69	1.119	1.807	2.229	2.601	3.037	3.958	4.722	5.390
70	1.118	1.805	2.227	2.598	3.033	3.952	4.715	5.381
71	1.117	1.803	2.224	2.594	3.029	3.946	4.708	5.373
72	1.116	1.801	2.221	2.591	3.025	3.940	4.701	5.365
73	1.115	1.799	2.219	2.588	3.021	3.935	4.694	5.357
74	1.115	1.797	2.216	2.585	3.017	3.929	4.687	5.349
75	1.114	1.796	2.214	2.582	3.013	3.924	4.681	5.341
80	1.110	1.788	2.203	2.568	2.996	3.900	4.651	5.306
85	1.107	1.780	2.193	2.555	2.981	3.878	4.624	5.275
90	1.104	1.774	2.184	2.544	2.967	3.859	4.599	5.246
95	1.102	1.768	2.176	2.534	2.955	3.841	4.577	5.220
100	1.099	1.763	2.169	2.525	2.943	3.825	4.557	5.197
110	1.096	1.754	2.157	2.510	2.924	3.797	4.522	5.156
120	1.092	1.747	2.147	2.497	2.907	3.773	4.493	5.121
130	1.090	1.741	2.138	2.485	2.893	3.753	4.467	5.090
140	1.087	1.735	2.130	2.476	2.881	3.735	4.445	5.064
150	1.085	1.731	2.123	2.467	2.870	3.719	4.425	5.041
200	1.078	1.714	2.100	2.437	2.832	3.664	4.354	4.958
300	1.071	1.698	2.076	2.407	2.793	3.605	4.281	4.877
500	1.065	1.684	2.057	2.382	2.760	3.555	4.215	4.812
1000	1.061	1.674	2.042	2.362	2.735	3.515	4.160	4.793
∞	1.057	1.664	2.027	2.342	2.709	3.473	4.101	4.647

4.3.13 Values of k for $\gamma = .99$ and $n = 145$

$$\Pr\left\{T_f \leq k\sqrt{n} \,\middle|\, K_p\sqrt{n}\right\} = \gamma$$

	P							
f	.75000	.90000	.95000	.97500	.99000	.99900	.99990	.99999
1	53.815	102.250	131.237	156.378	185.611	246.558	296.727	340.280
2	6.778	12.810	16.428	19.568	23.220	30.836	37.106	42.550
3	3.496	6.576	8.427	10.035	11.905	15.806	19.018	21.807
4	2.524	4.729	6.056	7.209	8.551	11.350	13.655	15.657
5	2.077	3.877	4.962	5.905	7.002	9.293	11.179	12.818
6	1.822	3.390	4.337	5.160	6.118	8.118	9.765	11.195
7	1.658	3.076	3.933	4.678	5.546	7.358	8.850	10.146
8	1.544	2.856	3.650	4.341	5.145	6.825	8.209	9.410
9	1.459	2.693	3.440	4.091	4.848	6.430	7.733	8.865
10	1.394	2.567	3.278	3.897	4.618	6.124	7.365	8.442
11	1.342	2.467	3.149	3.743	4.435	5.880	7.071	8.105
12	1.300	2.385	3.044	3.617	4.285	5.680	6.830	7.830
13	1.265	2.317	2.955	3.511	4.160	5.514	6.630	7.599
14	1.236	2.259	2.881	3.422	4.053	5.372	6.459	7.404
15	1.211	2.209	2.816	3.345	3.962	5.250	6.312	7.235
16	1.189	2.166	2.760	3.278	3.882	5.144	6.185	7.088
17	1.169	2.128	2.711	3.219	3.812	5.051	6.072	6.959
18	1.152	2.094	2.668	3.167	3.750	4.968	5.972	6.845
19	1.137	2.064	2.629	3.121	3.694	4.894	5.883	6.742
20	1.124	2.037	2.594	3.079	3.644	4.827	5.802	6.650
21	1.112	2.013	2.562	3.041	3.599	4.766	5.729	6.566
22	1.101	1.990	2.533	3.006	3.558	4.711	5.663	6.490
23	1.091	1.970	2.506	2.974	3.520	4.661	5.602	6.420
24	1.081	1.952	2.482	2.945	3.485	4.615	5.546	6.356
25	1.073	1.934	2.460	2.918	3.453	4.572	5.495	6.296
26	1.065	1.919	2.439	2.894	3.424	4.532	5.447	6.242
27	1.058	1.904	2.420	2.870	3.396	4.495	5.402	6.191
28	1.051	1.890	2.402	2.849	3.370	4.461	5.361	6.143
29	1.045	1.877	2.385	2.829	3.346	4.429	5.322	6.099
30	1.039	1.865	2.370	2.810	3.324	4.399	5.286	6.057
31	1.034	1.854	2.355	2.792	3.303	4.371	5.252	6.018
32	1.029	1.844	2.341	2.776	3.283	4.344	5.220	5.981
33	1.024	1.834	2.328	2.760	3.264	4.319	5.189	5.946
34	1.020	1.824	2.316	2.745	3.247	4.295	5.161	5.913
35	1.015	1.816	2.304	2.731	3.230	4.273	5.134	5.882
36	1.011	1.807	2.293	2.718	3.214	4.252	5.108	5.852
37	1.008	1.799	2.283	2.706	3.199	4.231	5.083	5.824
38	1.004	1.792	2.273	2.694	3.185	4.212	5.060	5.797
39	1.001	1.784	2.264	2.682	3.171	4.194	5.038	5.772
40	.997	1.778	2.255	2.671	3.158	4.176	5.017	5.748
41	.994	1.771	2.246	2.661	3.145	4.160	4.997	5.724
42	.991	1.765	2.238	2.651	3.133	4.143	4.977	5.702
43	.989	1.759	2.230	2.641	3.122	4.128	4.959	5.681
44	.986	1.753	2.222	2.632	3.111	4.113	4.941	5.660
45	.983	1.748	2.215	2.624	3.101	4.099	4.924	5.641

4.3.13 Values of k for $\gamma = .99$ and $n = 145$ (Continued)

$$\Pr\left\{T_f \leq k\sqrt{n} \,\middle|\, K_p\sqrt{n}\right\} = \gamma$$

f	.75000	.90000	.95000	.97500	.99000	.99900	.99990	.99999
46	.981	1.743	2.208	2.615	3.091	4.086	4.907	5.622
47	.979	1.737	2.202	2.607	3.081	4.073	4.892	5.604
48	.976	1.733	2.195	2.599	3.072	4.060	4.876	5.586
49	.974	1.728	2.189	2.592	3.063	4.048	4.862	5.569
50	.972	1.724	2.183	2.585	3.054	4.037	4.848	5.553
51	.970	1.719	2.177	2.578	3.046	4.025	4.834	5.537
52	.968	1.715	2.172	2.571	3.038	4.014	4.821	5.522
53	.966	1.711	2.167	2.565	3.030	4.004	4.808	5.508
54	.965	1.707	2.161	2.558	3.022	3.994	4.796	5.494
55	.963	1.703	2.156	2.552	3.015	3.984	4.784	5.480
56	.961	1.700	2.152	2.547	3.008	3.974	4.773	5.467
57	.960	1.696	2.147	2.541	3.001	3.965	4.761	5.454
58	.958	1.693	2.143	2.535	2.995	3.956	4.751	5.441
59	.957	1.690	2.138	2.530	2.988	3.948	4.740	5.429
60	.955	1.687	2.134	2.525	2.982	3.939	4.730	5.418
61	.954	1.683	2.130	2.520	2.976	3.931	4.720	5.406
62	.952	1.680	2.126	2.515	2.970	3.923	4.711	5.395
63	.951	1.678	2.122	2.510	2.964	3.916	4.701	5.384
64	.950	1.675	2.118	2.506	2.959	3.908	4.692	5.374
65	.949	1.672	2.115	2.501	2.954	3.901	4.683	5.364
66	.947	1.669	2.111	2.497	2.948	3.894	4.675	5.354
67	.946	1.667	2.108	2.493	2.943	3.887	4.666	5.344
68	.945	1.664	2.104	2.489	2.938	3.880	4.658	5.335
69	.944	1.662	2.101	2.485	2.933	3.874	4.650	5.326
70	.943	1.659	2.098	2.481	2.929	3.867	4.642	5.317
71	.942	1.657	2.095	2.477	2.924	3.861	4.635	5.308
72	.941	1.655	2.092	2.473	2.920	3.855	4.627	5.299
73	.940	1.653	2.089	2.470	2.915	3.849	4.620	5.291
74	.939	1.651	2.086	2.466	2.911	3.843	4.613	5.283
75	.938	1.648	2.083	2.463	2.907	3.838	4.606	5.275
80	.934	1.639	2.070	2.447	2.887	3.811	4.574	5.238
85	.930	1.630	2.058	2.432	2.870	3.787	4.545	5.205
90	.927	1.622	2.048	2.420	2.854	3.766	4.519	5.175
95	.924	1.615	2.038	2.408	2.840	3.747	4.496	5.147
100	.921	1.609	2.030	2.397	2.827	3.729	4.474	5.123
110	.916	1.598	2.014	2.379	2.805	3.698	4.436	5.079
120	.912	1.589	2.002	2.363	2.785	3.671	4.404	5.041
130	.909	1.581	1.991	2.349	2.768	3.648	4.375	5.008
140	.906	1.574	1.981	2.337	2.754	3.628	4.351	4.979
150	.903	1.568	1.973	2.327	2.741	3.610	4.329	4.954
200	.895	1.546	1.942	2.289	2.694	3.544	4.248	4.860
300	.886	1.523	1.910	2.248	2.643	3.471	4.157	4.754
500	.878	1.504	1.883	2.213	2.598	3.406	4.075	4.657
1000	.873	1.490	1.861	2.184	2.561	3.350	4.002	4.570
∞	.868	1.475	1.838	2.153	2.520	3.283	3.912	4.458

4.3.14 Values of k for $\gamma = .99$ and $n = 500$

$$\Pr\left\{T_f \leq k\sqrt{n} \,\middle|\, K_p\sqrt{n}\right\} = \gamma$$

f	P .75000	.90000	.95000	.97500	.99000	.99900	.99990	.99999
1	53.815	102.250	131.237	156.378	185.611	246.558	296.727	340.280
2	6.742	12.791	16.413	19.555	23.209	30.828	37.100	42.544
3	3.462	6.558	8.413	10.023	11.895	15.798	19.012	21.801
4	2.489	4.710	6.041	7.197	8.540	11.342	13.648	15.651
5	2.041	3.857	4.946	5.892	6.991	9.285	11.172	12.812
6	1.785	3.370	4.321	5.146	6.107	8.109	9.758	11.189
7	1.620	3.055	3.916	4.664	5.534	7.349	8.843	10.140
8	1.504	2.834	3.633	4.326	5.133	6.816	8.201	9.404
9	1.418	2.670	3.422	4.075	4.835	6.420	7.725	8.858
10	1.352	2.544	3.260	3.882	4.605	6.114	7.356	8.435
11	1.299	2.443	3.130	3.727	4.421	5.870	7.062	8.098
12	1.256	2.360	3.024	3.600	4.271	5.670	6.822	7.822
13	1.220	2.291	2.935	3.494	4.145	5.503	6.620	7.591
14	1.190	2.232	2.860	3.404	4.038	5.361	6.450	7.395
15	1.164	2.182	2.795	3.327	3.946	5.239	6.303	7.227
16	1.141	2.138	2.738	3.260	3.866	5.132	6.175	7.080
17	1.121	2.099	2.689	3.200	3.796	5.038	6.062	6.950
18	1.103	2.065	2.644	3.148	3.733	4.955	5.962	6.836
19	1.087	2.035	2.605	3.101	3.677	4.881	5.872	6.733
20	1.073	2.007	2.569	3.058	3.627	4.814	5.791	6.640
21	1.060	1.982	2.537	3.020	3.581	4.753	5.718	6.556
22	1.049	1.959	2.508	2.985	3.540	4.698	5.652	6.480
23	1.038	1.938	2.481	2.953	3.502	4.647	5.591	6.410
24	1.028	1.919	2.456	2.923	3.467	4.600	5.534	6.345
25	1.019	1.902	2.434	2.896	3.434	4.557	5.483	6.286
26	1.011	1.885	2.413	2.871	3.404	4.518	5.435	6.231
27	1.003	1.870	2.393	2.848	3.377	4.481	5.390	6.180
28	.996	1.856	2.375	2.826	3.351	4.446	5.348	6.132
29	.989	1.843	2.358	2.805	3.326	4.414	5.309	6.087
30	.983	1.830	2.342	2.786	3.304	4.383	5.273	6.046
31	.977	1.819	2.327	2.768	3.282	4.355	5.239	6.006
32	.972	1.808	2.313	2.751	3.262	4.328	5.206	5.969
33	.966	1.798	2.299	2.735	3.243	4.303	5.176	5.934
34	.961	1.788	2.287	2.720	3.225	4.279	5.147	5.901
35	.957	1.779	2.275	2.706	3.208	4.256	5.120	5.870
36	.952	1.770	2.263	2.692	3.192	4.235	5.094	5.840
37	.948	1.761	2.253	2.680	3.177	4.214	5.069	5.812
38	.944	1.754	2.242	2.667	3.162	4.195	5.046	5.785
39	.940	1.746	2.233	2.656	3.148	4.176	5.024	5.759
40	.937	1.739	2.223	2.644	3.135	4.159	5.002	5.735
41	.933	1.732	2.214	2.634	3.122	4.142	4.982	5.711
42	.930	1.725	2.206	2.624	3.110	4.126	4.962	5.689
43	.927	1.719	2.198	2.614	3.098	4.110	4.944	5.667
44	.924	1.713	2.190	2.604	3.087	4.095	4.926	5.647
45	.921	1.707	2.182	2.595	3.077	4.081	4.908	5.627

4.3.14 **Values of k for $\gamma = .99$ and $n = 500$ (Continued)**

$$\Pr\left\{T_f \leq k\sqrt{n} \,\middle|\, K_p\sqrt{n}\right\} = \gamma$$

	P							
f	.75000	.90000	.95000	.97500	.99000	.99900	.99990	.99999
46	.918	1.702	2.175	2.587	3.066	4.067	4.892	5.608
47	.916	1.696	2.168	2.578	3.056	4.054	4.876	5.590
48	.913	1.691	2.161	2.570	3.047	4.041	4.861	5.572
49	.911	1.686	2.155	2.563	3.038	4.029	4.846	5.555
50	.908	1.682	2.149	2.555	3.029	4.017	4.832	5.539
51	.906	1.677	2.143	2.548	3.020	4.006	4.818	5.523
52	.904	1.672	2.137	2.541	3.012	3.995	4.805	5.508
53	.902	1.668	2.132	2.535	3.004	3.984	4.792	5.493
54	.900	1.664	2.126	2.528	2.996	3.974	4.779	5.479
55	.898	1.660	2.121	2.522	2.989	3.964	4.767	5.465
56	.896	1.656	2.116	2.516	2.982	3.954	4.756	5.452
57	.894	1.652	2.111	2.510	2.975	3.945	4.744	5.439
58	.892	1.649	2.106	2.504	2.968	3.936	4.733	5.426
59	.891	1.645	2.102	2.499	2.961	3.927	4.723	5.414
60	.889	1.642	2.097	2.493	2.955	3.918	4.712	5.402
61	.887	1.638	2.093	2.488	2.949	3.910	4.702	5.391
62	.886	1.635	2.089	2.483	2.943	3.902	4.693	5.379
63	.884	1.632	2.085	2.478	2.937	3.894	4.683	5.369
64	.883	1.629	2.081	2.473	2.931	3.887	4.674	5.358
65	.881	1.626	2.077	2.469	2.925	3.879	4.665	5.348
66	.880	1.623	2.073	2.464	2.920	3.872	4.656	5.338
67	.879	1.620	2.069	2.460	2.915	3.865	4.648	5.328
68	.877	1.618	2.066	2.455	2.910	3.858	4.640	5.318
69	.876	1.615	2.062	2.451	2.905	3.851	4.632	5.309
70	.875	1.612	2.059	2.447	2.900	3.845	4.624	5.300
71	.874	1.610	2.055	2.443	2.895	3.838	4.616	5.291
72	.873	1.607	2.052	2.439	2.890	3.832	4.608	5.283
73	.871	1.605	2.049	2.436	2.886	3.826	4.601	5.274
74	.870	1.603	2.046	2.432	2.881	3.820	4.594	5.266
75	.869	1.600	2.043	2.428	2.877	3.814	4.587	5.258
80	.864	1.590	2.029	2.411	2.857	3.787	4.554	5.221
85	.860	1.580	2.016	2.396	2.839	3.763	4.525	5.187
90	.855	1.571	2.005	2.382	2.822	3.741	4.498	5.156
95	.852	1.564	1.995	2.370	2.807	3.721	4.474	5.129
100	.849	1.556	1.985	2.359	2.794	3.703	4.452	5.103
110	.843	1.544	1.969	2.339	2.770	3.671	4.413	5.058
120	.838	1.533	1.955	2.321	2.749	3.643	4.380	5.020
130	.834	1.524	1.942	2.307	2.731	3.619	4.351	4.986
140	.830	1.516	1.932	2.294	2.716	3.598	4.325	4.957
150	.827	1.509	1.922	2.282	2.702	3.579	4.302	4.931
200	.816	1.483	1.887	2.239	2.650	3.509	4.218	4.834
300	.804	1.454	1.848	2.192	2.593	3.431	4.122	4.723
500	.794	1.429	1.814	2.149	2.539	3.357	4.032	4.618
1000	.786	1.409	1.784	2.111	2.492	3.290	3.948	4.521
∞	.779	1.386	1.749	2.064	2.430	3.194	3.823	4.369

4.3.15 Values of k for $\gamma = .99$ and $n = \infty$

$$\Pr\left\{T_f \leq k\sqrt{n} \,\middle|\, K_p\sqrt{n}\right\} = \gamma$$

f	P .75000	.90000	.95000	.97500	.99000	.99900	.99990	.99999
1	53.815	102.250	131.237	156.378	185.611	246.558	296.727	340.280
2	6.728	12.783	16.407	19.550	23.205	30.825	37.097	42.542
3	3.448	6.550	8.407	10.018	11.891	15.795	19.009	21.799
4	2.475	4.702	6.035	7.192	8.536	11.339	13.646	15.649
5	2.026	3.849	4.940	5.887	6.987	9.281	11.170	12.809
6	1.769	3.361	4.314	5.141	6.102	8.106	9.755	11.187
7	1.603	3.046	3.910	4.659	5.529	7.345	8.840	10.137
8	1.487	2.825	3.626	4.320	5.128	6.812	8.198	9.401
9	1.400	2.661	3.415	4.069	4.830	6.416	7.721	8.855
10	1.334	2.534	3.252	3.875	4.599	6.110	7.353	8.432
11	1.280	2.432	3.122	3.720	4.415	5.865	7.059	8.095
12	1.237	2.349	3.015	3.593	4.265	5.665	6.818	7.819
13	1.200	2.280	2.926	3.487	4.139	5.498	6.617	7.588
14	1.169	2.221	2.851	3.397	4.032	5.356	6.446	7.392
15	1.142	2.170	2.786	3.319	3.940	5.234	6.299	7.223
16	1.119	2.126	2.729	3.252	3.860	5.127	6.170	7.076
17	1.099	2.087	2.679	3.192	3.789	5.033	6.058	6.947
18	1.080	2.053	2.635	3.140	3.726	4.950	5.957	6.832
19	1.064	2.022	2.595	3.092	3.670	4.876	5.868	6.729
20	1.050	1.994	2.559	3.050	3.620	4.808	5.787	6.636
21	1.036	1.969	2.527	3.011	3.574	4.748	5.714	6.552
22	1.024	1.946	2.498	2.976	3.532	4.692	5.647	6.476
23	1.013	1.925	2.470	2.944	3.494	4.641	5.586	6.406
24	1.003	1.905	2.446	2.914	3.459	4.595	5.530	6.341
25	.993	1.888	2.423	2.887	3.426	4.552	5.478	6.282
26	.985	1.871	2.401	2.861	3.396	4.512	5.430	6.227
27	.977	1.856	2.382	2.838	3.368	4.474	5.385	6.175
28	.969	1.841	2.363	2.816	3.342	4.440	5.343	6.127
29	.962	1.828	2.346	2.795	3.318	4.407	5.304	6.083
30	.955	1.815	2.330	2.776	3.295	4.377	5.268	6.041
31	.949	1.803	2.315	2.758	3.274	4.348	5.233	6.001
32	.943	1.792	2.300	2.741	3.253	4.322	5.201	5.964
33	.938	1.782	2.287	2.725	3.234	4.296	5.170	5.929
34	.932	1.772	2.274	2.710	3.216	4.272	5.142	5.896
35	.928	1.762	2.262	2.695	3.199	4.249	5.114	5.865
36	.923	1.753	2.250	2.682	3.183	4.228	5.088	5.835
37	.918	1.745	2.239	2.668	3.167	4.207	5.063	5.807
38	.914	1.737	2.229	2.656	3.153	4.188	5.040	5.780
39	.910	1.729	2.219	2.644	3.139	4.169	5.018	5.754
40	.906	1.722	2.210	2.633	3.125	4.151	4.996	5.729
41	.902	1.715	2.201	2.622	3.112	4.134	4.976	5.706
42	.899	1.708	2.192	2.612	3.100	4.118	4.956	5.684
43	.895	1.701	2.184	2.602	3.088	4.103	4.937	5.662
44	.892	1.695	2.176	2.593	3.077	4.088	4.919	5.641
45	.889	1.689	2.168	2.583	3.066	4.073	4.902	5.622

4.3.15 Values of k for $\gamma = .99$ and $n = \infty$ (Continued)

$$Pr\left\{T_f \leq k\sqrt{n} \,\middle|\, K_p\sqrt{n}\right\} = \gamma$$

	P							
f	.75000	.90000	.95000	.97500	.99000	.99900	.99990	.99999
46	.886	1.683	2.161	2.575	3.056	4.059	4.885	5.602
47	.883	1.678	2.154	2.566	3.046	4.046	4.869	5.584
48	.880	1.673	2.147	2.558	3.036	4.033	4.854	5.566
49	.878	1.668	2.140	2.550	3.027	4.021	4.839	5.549
50	.875	1.663	2.134	2.543	3.018	4.009	4.825	5.533
51	.873	1.658	2.128	2.535	3.009	3.998	4.811	5.517
52	.870	1.653	2.122	2.528	3.001	3.987	4.798	5.502
53	.868	1.649	2.116	2.522	2.993	3.976	4.785	5.487
54	.866	1.645	2.111	2.515	2.985	3.965	4.772	5.473
55	.863	1.640	2.105	2.509	2.978	3.955	4.760	5.459
56	.861	1.636	2.100	2.503	2.970	3.946	4.749	5.446
57	.859	1.632	2.095	2.497	2.963	3.936	4.737	5.433
58	.857	1.629	2.090	2.491	2.956	3.927	4.726	5.420
59	.855	1.625	2.086	2.485	2.950	3.918	4.716	5.408
60	.853	1.621	2.081	2.480	2.943	3.910	4.705	5.396
61	.852	1.618	2.077	2.474	2.937	3.901	4.695	5.384
62	.850	1.615	2.072	2.469	2.931	3.893	4.685	5.373
63	.848	1.611	2.068	2.464	2.925	3.885	4.676	5.362
64	.846	1.608	2.064	2.459	2.919	3.878	4.667	5.351
65	.845	1.605	2.060	2.455	2.913	3.870	4.658	5.341
66	.843	1.602	2.056	2.450	2.908	3.863	4.649	5.331
67	.842	1.599	2.052	2.445	2.903	3.856	4.640	5.321
68	.840	1.596	2.049	2.441	2.897	3.849	4.632	5.312
69	.839	1.593	2.045	2.437	2.892	3.842	4.624	5.302
70	.837	1.591	2.041	2.433	2.887	3.835	4.616	5.293
71	.836	1.588	2.038	2.429	2.882	3.829	4.608	5.284
72	.834	1.585	2.035	2.425	2.878	3.823	4.601	5.276
73	.833	1.583	2.031	2.421	2.873	3.817	4.593	5.267
74	.832	1.580	2.028	2.417	2.869	3.811	4.586	5.259
75	.830	1.578	2.025	2.413	2.864	3.805	4.579	5.251
80	.824	1.567	2.011	2.396	2.844	3.777	4.546	5.213
85	.819	1.556	1.998	2.380	2.825	3.753	4.516	5.179
90	.814	1.547	1.986	2.366	2.808	3.731	4.490	5.149
95	.810	1.539	1.975	2.353	2.793	3.710	4.465	5.121
100	.806	1.531	1.965	2.342	2.779	3.692	4.443	5.095
110	.799	1.517	1.948	2.321	2.755	3.659	4.404	5.050
120	.792	1.506	1.933	2.303	2.733	3.631	4.370	5.011
130	.787	1.496	1.920	2.287	2.715	3.606	4.340	4.977
140	.782	1.487	1.908	2.274	2.699	3.585	4.314	4.947
150	.778	1.479	1.898	2.261	2.684	3.566	4.291	4.921
200	.763	1.449	1.860	2.216	2.630	3.494	4.205	4.822
300	.745	1.415	1.817	2.165	2.569	3.413	4.107	4.710
500	.728	1.383	1.775	2.115	2.510	3.335	4.013	4.602
1000	.711	1.352	1.735	2.067	2.454	3.259	3.923	4.498
∞	.674	1.282	1.645	1.960	2.326	3.090	3.719	4.265

5. TABLES OF VALUES OF λ FOR COMPUTING THE PERCENTAGE POINTS OF NONCENTRAL t.

Let $\eta = \frac{\delta}{\sqrt{2f}} \left(1 + \frac{\delta^2}{2f}\right)^{-\frac{1}{2}}$, and

$$t_o = \frac{\delta + \lambda\left(1 + \frac{\delta^2}{2f} - \frac{\lambda^2}{2f}\right)^{\frac{1}{2}}}{\left(1 - \frac{\lambda^2}{2f}\right)} .$$

Then

$$\Pr\left\{ T_f \leq t_o \mid \delta \right\} = \gamma,$$

where T_f has a noncentral t-distribution with f degrees of freedom and noncentrality parameter δ.

Starting with δ compute η; find value of λ in table; compute t_o, which is the 100γ percentile of the noncentral t-distribution.

5.1 Factors for Computing Critical Values of the Noncentral t-Distribution

Values of λ are given for each $\eta(\delta)$ to give $\Pr\left\{T_f \le t_o \middle| \delta\right\} = .50$

	f												
η	1	2	3	4	5	6	7	8	9	16	36	144	∞
-1.00	-.46034	-.33489	-.27419	-.23741	-.21221	-.19359	-.17913	-.16748	-.15783	-.11817	-.07867	-.03930	.00000
-.99	-.45602	-.33095	-.27069	-.23426	-.20933	-.19092	-.17663	-.16512	-.15560	-.11646	-.07751	-.03871	.00000
-.98	-.45158	-.32697	-.26719	-.23112	-.20646	-.18826	-.17414	-.16278	-.15338	-.11476	-.07636	-.03813	.00000
-.97	-.44702	-.32296	-.26369	-.22798	-.20359	-.18562	-.17167	-.16045	-.15117	-.11308	-.07522	-.03756	.00000
-.96	-.44233	-.31893	-.26018	-.22485	-.20074	-.18298	-.16921	-.15814	-.14898	-.11140	-.07410	-.03699	.00000
-.95	-.43751	-.31487	-.25668	-.22173	-.19790	-.18036	-.16677	-.15584	-.14680	-.10975	-.07298	-.03643	.00000
-.94	-.43256	-.31079	-.25317	-.21861	-.19507	-.17776	-.16434	-.15355	-.14464	-.10810	-.07187	-.03587	.00000
-.93	-.42748	-.30668	-.24966	-.21550	-.19226	-.17516	-.16192	-.15128	-.14249	-.10647	-.07077	-.03532	.00000
-.92	-.42226	-.30256	-.24615	-.21240	-.18945	-.17258	-.15952	-.14902	-.14035	-.10485	-.06969	-.03478	.00000
-.91	-.41693	-.29842	-.24265	-.20932	-.18666	-.17002	-.15713	-.14678	-.13824	-.10325	-.06861	-.03424	.00000
-.90	-.41149	-.29426	-.23915	-.20624	-.18389	-.16747	-.15476	-.14456	-.13613	-.10166	-.06754	-.03370	.00000
-.89	-.40596	-.29009	-.23566	-.20318	-.18112	-.16493	-.15241	-.14235	-.13405	-.10008	-.06649	-.03317	.00000
-.88	-.40036	-.28592	-.23217	-.20012	-.17838	-.16241	-.15007	-.14016	-.13197	-.09852	-.06544	-.03265	.00000
-.87	-.39469	-.28174	-.22870	-.19709	-.17564	-.15991	-.14774	-.13798	-.12992	-.09697	-.06440	-.03213	.00000
-.86	-.38897	-.27755	-.22524	-.19407	-.17293	-.15742	-.14544	-.13582	-.12788	-.09543	-.06337	-.03161	.00000
-.85	-.38321	-.27337	-.22178	-.19106	-.17023	-.15495	-.14315	-.13367	-.12585	-.09391	-.06236	-.03110	.00000
-.84	-.37743	-.26919	-.21835	-.18807	-.16755	-.15250	-.14087	-.13154	-.12384	-.09240	-.06135	-.03060	.00000
-.83	-.37164	-.26502	-.21492	-.18510	-.16489	-.15007	-.13862	-.12943	-.12185	-.09090	-.06035	-.03010	.00000
-.82	-.36584	-.26086	-.21152	-.18214	-.16224	-.14765	-.13638	-.12734	-.11988	-.08941	-.05936	-.02960	.00000
-.81	-.36005	-.25671	-.20812	-.17920	-.15961	-.14525	-.13416	-.12526	-.11792	-.08794	-.05838	-.02911	.00000
-.80	-.35426	-.25257	-.20475	-.17628	-.15700	-.14287	-.13195	-.12319	-.11597	-.08649	-.05741	-.02863	.00000
-.79	-.34849	-.24845	-.20140	-.17338	-.15441	-.14050	-.12976	-.12115	-.11404	-.08504	-.05644	-.02814	.00000
-.78	-.34274	-.24435	-.19806	-.17050	-.15184	-.13816	-.12759	-.11912	-.11213	-.08361	-.05549	-.02767	.00000
-.77	-.33701	-.24028	-.19475	-.16764	-.14928	-.13583	-.12544	-.11711	-.11024	-.08219	-.05455	-.02720	.00000
-.76	-.33131	-.23622	-.19146	-.16480	-.14675	-.13352	-.12331	-.11511	-.10836	-.08079	-.05361	-.02673	.00000
-.75	-.32565	-.23218	-.18819	-.16199	-.14424	-.13123	-.12119	-.11314	-.10649	-.07939	-.05268	-.02627	.00000
-.74	-.32001	-.22817	-.18494	-.15919	-.14174	-.12896	-.11909	-.11117	-.10465	-.07801	-.05177	-.02581	.00000
-.73	-.31442	-.22419	-.18172	-.15641	-.13927	-.12671	-.11701	-.10923	-.10281	-.07664	-.05086	-.02535	.00000
-.72	-.30886	-.22023	-.17851	-.15365	-.13681	-.12447	-.11494	-.10730	-.10100	-.07529	-.04996	-.02490	.00000
-.71	-.30334	-.21630	-.17534	-.15092	-.13438	-.12226	-.11289	-.10539	-.09920	-.07394	-.04906	-.02446	.00000
-.70	-.29785	-.21240	-.17218	-.14821	-.13196	-.12006	-.11086	-.10349	-.09741	-.07261	-.04818	-.02402	.00000
-.69	-.29241	-.20853	-.16905	-.14552	-.12957	-.11788	-.10885	-.10161	-.09564	-.07129	-.04730	-.02358	.00000
-.68	-.28701	-.20469	-.16595	-.14285	-.12719	-.11572	-.10686	-.09975	-.09389	-.06998	-.04643	-.02315	.00000
-.67	-.28166	-.20087	-.16287	-.14020	-.12484	-.11357	-.10488	-.09790	-.09215	-.06869	-.04557	-.02272	.00000
-.66	-.27634	-.19709	-.15981	-.13757	-.12250	-.11145	-.10292	-.09607	-.09043	-.06740	-.04472	-.02229	.00000
-.65	-.27107	-.19334	-.15678	-.13497	-.12018	-.10934	-.10097	-.09426	-.08872	-.06613	-.04387	-.02187	.00000
-.64	-.26585	-.18962	-.15378	-.13239	-.11789	-.10725	-.09904	-.09246	-.08703	-.06487	-.04304	-.02145	.00000
-.63	-.26066	-.18592	-.15080	-.12983	-.11561	-.10518	-.09713	-.09067	-.08535	-.06361	-.04221	-.02104	.00000
-.62	-.25552	-.18226	-.14784	-.12729	-.11335	-.10313	-.09523	-.08890	-.08368	-.06237	-.04138	-.02063	.00000
-.61	-.25042	-.17863	-.14491	-.12477	-.11111	-.10109	-.09336	-.08715	-.08203	-.06115	-.04057	-.02022	.00000

5.1 Factors for Computing Critical Values of the Noncentral t-Distribution

Values of λ are given for each $\eta(\delta)$ to give $\Pr\left\{T_f \le t_o \middle| \delta\right\} = .50$ (Continued)

	f												
η	1	2	3	4	5	6	7	8	9	16	36	144	∞
-.60	-.24536	-.17503	-.14200	-.12227	-.10889	-.09907	-.09149	-.08541	-.08039	-.05993	-.03976	-.01982	.00000
-.59	-.24035	-.17146	-.13912	-.11980	-.10669	-.09707	-.08964	-.08369	-.07877	-.05872	-.03896	-.01942	.00000
-.58	-.23538	-.16793	-.13626	-.11734	-.10450	-.09509	-.08781	-.08198	-.07716	-.05752	-.03816	-.01902	.00000
-.57	-.23045	-.16442	-.13342	-.11491	-.10234	-.09312	-.08600	-.08028	-.07557	-.05633	-.03738	-.01863	.00000
-.56	-.22556	-.16094	-.13061	-.11249	-.10019	-.09117	-.08420	-.07860	-.07399	-.05515	-.03660	-.01824	.00000
-.55	-.22072	-.15749	-.12783	-.11010	-.09806	-.08923	-.08241	-.07694	-.07242	-.05399	-.03582	-.01786	.00000
-.54	-.21591	-.15407	-.12506	-.10772	-.09595	-.08731	-.08064	-.07528	-.07086	-.05283	-.03505	-.01747	.00000
-.53	-.21115	-.15068	-.12232	-.10537	-.09386	-.08541	-.07888	-.07364	-.06932	-.05168	-.03429	-.01709	.00000
-.52	-.20642	-.14731	-.11960	-.10303	-.09178	-.08352	-.07714	-.07202	-.06779	-.05054	-.03354	-.01672	.00000
-.51	-.20174	-.14398	-.11691	-.10072	-.08972	-.08165	-.07541	-.07041	-.06628	-.04941	-.03279	-.01635	.00000
-.50	-.19709	-.14067	-.11424	-.09842	-.08768	-.07979	-.07370	-.06881	-.06477	-.04829	-.03205	-.01598	.00000
-.49	-.19249	-.13739	-.11158	-.09614	-.08565	-.07795	-.07200	-.06722	-.06328	-.04718	-.03131	-.01561	.00000
-.48	-.18792	-.13414	-.10895	-.09388	-.08364	-.07612	-.07031	-.06565	-.06180	-.04608	-.03058	-.01524	.00000
-.47	-.18338	-.13092	-.10635	-.09164	-.08165	-.07431	-.06864	-.06408	-.06033	-.04498	-.02985	-.01488	.00000
-.46	-.17889	-.12772	-.10376	-.08942	-.07967	-.07251	-.06698	-.06253	-.05887	-.04390	-.02913	-.01452	.00000
-.45	-.17443	-.12454	-.10119	-.08721	-.07770	-.07073	-.06533	-.06100	-.05742	-.04282	-.02842	-.01417	.00000
-.44	-.17001	-.12140	-.09864	-.08502	-.07576	-.06895	-.06369	-.05947	-.05598	-.04175	-.02771	-.01381	.00000
-.43	-.16562	-.11827	-.09612	-.08284	-.07382	-.06719	-.06207	-.05795	-.05456	-.04069	-.02700	-.01346	.00000
-.42	-.16127	-.11518	-.09361	-.08069	-.07190	-.06545	-.06046	-.05645	-.05314	-.03963	-.02630	-.01311	.00000
-.41	-.15695	-.11210	-.09112	-.07855	-.07000	-.06372	-.05886	-.05496	-.05174	-.03859	-.02561	-.01277	.00000
-.40	-.15266	-.10905	-.08865	-.07642	-.06810	-.06200	-.05727	-.05348	-.05034	-.03755	-.02492	-.01243	.00000
-.39	-.14841	-.10602	-.08619	-.07431	-.06623	-.06029	-.05569	-.05200	-.04896	-.03652	-.02424	-.01208	.00000
-.38	-.14419	-.10302	-.08376	-.07221	-.06436	-.05859	-.05413	-.05054	-.04758	-.03549	-.02356	-.01175	.00000
-.37	-.14000	-.10004	-.08134	-.07013	-.06251	-.05691	-.05257	-.04909	-.04622	-.03447	-.02288	-.01141	.00000
-.36	-.13584	-.09707	-.07894	-.06807	-.06067	-.05523	-.05103	-.04765	-.04486	-.03346	-.02221	-.01108	.00000
-.35	-.13171	-.09413	-.07655	-.06602	-.05884	-.05357	-.04949	-.04622	-.04351	-.03246	-.02155	-.01074	.00000
-.34	-.12760	-.09121	-.07419	-.06398	-.05703	-.05192	-.04797	-.04479	-.04217	-.03146	-.02088	-.01041	.00000
-.33	-.12353	-.08831	-.07183	-.06195	-.05522	-.05028	-.04645	-.04338	-.04084	-.03047	-.02023	-.01009	.00000
-.32	-.11949	-.08543	-.06950	-.05994	-.05343	-.04865	-.04494	-.04197	-.03952	-.02948	-.01957	-.00976	.00000
-.31	-.11547	-.08257	-.06717	-.05794	-.05165	-.04703	-.04345	-.04057	-.03820	-.02850	-.01892	-.00943	.00000
-.30	-.11148	-.07972	-.06486	-.05595	-.04988	-.04541	-.04196	-.03918	-.03689	-.02753	-.01827	-.00911	.00000
-.29	-.10751	-.07690	-.06257	-.05397	-.04812	-.04381	-.04048	-.03780	-.03559	-.02656	-.01763	-.00879	.00000
-.28	-.10357	-.07409	-.06029	-.05201	-.04637	-.04222	-.03901	-.03643	-.03430	-.02559	-.01699	-.00847	.00000
-.27	-.09966	-.07129	-.05802	-.05005	-.04462	-.04063	-.03754	-.03506	-.03301	-.02463	-.01635	-.00816	.00000
-.26	-.09576	-.06851	-.05576	-.04811	-.04289	-.03906	-.03609	-.03370	-.03173	-.02368	-.01572	-.00784	.00000
-.25	-.09189	-.06575	-.05352	-.04617	-.04117	-.03749	-.03464	-.03235	-.03046	-.02273	-.01509	-.00753	.00000
-.24	-.08804	-.06301	-.05129	-.04425	-.03946	-.03593	-.03320	-.03101	-.02919	-.02179	-.01446	-.00721	.00000
-.23	-.08422	-.06027	-.04907	-.04233	-.03775	-.03438	-.03176	-.02967	-.02793	-.02084	-.01384	-.00690	.00000
-.22	-.08041	-.05755	-.04685	-.04043	-.03605	-.03283	-.03034	-.02833	-.02668	-.01991	-.01322	-.00659	.00000
-.21	-.07662	-.05485	-.04465	-.03853	-.03436	-.03129	-.02891	-.02700	-.02543	-.01898	-.01260	-.00628	.00000

5.1 Factors for Computing Critical Values of the Noncentral t-Distribution
Values of λ are given for each $\eta(\delta)$ to give $Pr\{T_f \le t_o | \delta\} = .50$ (Continued)

η	f = 1	2	3	4	5	6	7	8	9	16	36	144	∞
-.20	-.07285	-.05215	-.04246	-.03664	-.03268	-.02976	-.02750	-.02568	-.02418	-.01805	-.01198	-.00598	.00000
-.19	-.06910	-.04947	-.04028	-.03476	-.03100	-.02823	-.02609	-.02437	-.02294	-.01712	-.01137	-.00567	.00000
-.18	-.06536	-.04680	-.03811	-.03289	-.02933	-.02671	-.02468	-.02305	-.02171	-.01620	-.01076	-.00537	.00000
-.17	-.06164	-.04414	-.03595	-.03102	-.02767	-.02520	-.02328	-.02175	-.02048	-.01528	-.01015	-.00506	.00000
-.16	-.05793	-.04149	-.03379	-.02916	-.02601	-.02369	-.02189	-.02044	-.01925	-.01437	-.00954	-.00476	.00000
-.15	-.05424	-.03885	-.03164	-.02731	-.02436	-.02218	-.02050	-.01915	-.01803	-.01346	-.00894	-.00446	.00000
-.14	-.05057	-.03622	-.02950	-.02546	-.02271	-.02068	-.01911	-.01785	-.01681	-.01255	-.00833	-.00416	.00000
-.13	-.04690	-.03360	-.02737	-.02362	-.02107	-.01919	-.01773	-.01656	-.01559	-.01164	-.00773	-.00386	.00000
-.12	-.04325	-.03098	-.02524	-.02178	-.01943	-.01770	-.01635	-.01527	-.01438	-.01074	-.00713	-.00356	.00000
-.11	-.03961	-.02838	-.02312	-.01995	-.01780	-.01621	-.01498	-.01399	-.01317	-.00983	-.00653	-.00326	.00000
-.10	-.03598	-.02578	-.02100	-.01812	-.01617	-.01472	-.01361	-.01271	-.01197	-.00893	-.00593	-.00296	.00000
-.09	-.03235	-.02318	-.01888	-.01630	-.01454	-.01324	-.01224	-.01143	-.01076	-.00803	-.00534	-.00266	.00000
-.08	-.02874	-.02059	-.01678	-.01448	-.01292	-.01176	-.01087	-.01015	-.00956	-.00714	-.00474	-.00236	.00000
-.07	-.02513	-.01801	-.01467	-.01266	-.01129	-.01029	-.00951	-.00888	-.00836	-.00624	-.00415	-.00207	.00000
-.06	-.02153	-.01543	-.01257	-.01085	-.00968	-.00881	-.00815	-.00761	-.00716	-.00535	-.00355	-.00177	.00000
-.05	-.01793	-.01285	-.01047	-.00904	-.00806	-.00734	-.00679	-.00634	-.00597	-.00446	-.00296	-.00148	.00000
-.04	-.01434	-.01028	-.00837	-.00723	-.00645	-.00587	-.00543	-.00507	-.00477	-.00356	-.00237	-.00118	.00000
-.03	-.01075	-.00771	-.00628	-.00542	-.00483	-.00440	-.00407	-.00380	-.00358	-.00267	-.00177	-.00088	.00000
-.02	-.00717	-.00514	-.00418	-.00361	-.00322	-.00293	-.00271	-.00253	-.00239	-.00178	-.00118	-.00059	.00000
-.01	-.00358	-.00257	-.00209	-.00181	-.00161	-.00147	-.00136	-.00127	-.00119	-.00089	-.00059	-.00029	.00000
.00	-.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000
.01	.00358	.00257	.00209	.00181	.00161	.00147	.00136	.00127	.00119	.00089	.00059	.00029	.00000
.02	.00717	.00514	.00418	.00361	.00322	.00293	.00271	.00253	.00239	.00178	.00118	.00059	.00000
.03	.01075	.00771	.00628	.00542	.00483	.00440	.00407	.00380	.00358	.00267	.00177	.00088	.00000
.04	.01434	.01028	.00837	.00723	.00645	.00587	.00543	.00507	.00477	.00356	.00237	.00118	.00000
.05	.01793	.01285	.01047	.00904	.00806	.00734	.00679	.00634	.00597	.00446	.00296	.00148	.00000
.06	.02153	.01543	.01257	.01085	.00968	.00881	.00815	.00761	.00716	.00535	.00355	.00177	.00000
.07	.02513	.01801	.01467	.01266	.01129	.01029	.00951	.00888	.00836	.00624	.00415	.00207	.00000
.08	.02874	.02059	.01678	.01448	.01292	.01176	.01087	.01015	.00956	.00714	.00474	.00236	.00000
.09	.03235	.02318	.01888	.01630	.01454	.01324	.01224	.01143	.01076	.00803	.00534	.00266	.00000
.10	.03598	.02578	.02100	.01812	.01617	.01472	.01361	.01271	.01197	.00893	.00593	.00296	.00000
.11	.03961	.02838	.02312	.01995	.01780	.01621	.01498	.01399	.01317	.00983	.00653	.00326	.00000
.12	.04325	.03098	.02524	.02178	.01943	.01770	.01635	.01527	.01438	.01074	.00713	.00356	.00000
.13	.04690	.03360	.02737	.02362	.02107	.01919	.01773	.01656	.01559	.01164	.00773	.00386	.00000
.14	.05057	.03622	.02950	.02546	.02271	.02068	.01911	.01785	.01681	.01255	.00833	.00416	.00000
.15	.05424	.03885	.03164	.02731	.02436	.02218	.02050	.01915	.01803	.01346	.00894	.00446	.00000
.16	.05793	.04149	.03379	.02916	.02601	.02369	.02189	.02044	.01925	.01437	.00954	.00476	.00000
.17	.06164	.04414	.03595	.03102	.02767	.02520	.02328	.02175	.02048	.01528	.01015	.00506	.00000
.18	.06536	.04680	.03811	.03289	.02933	.02671	.02468	.02305	.02171	.01620	.01076	.00537	.00000
.19	.06910	.04947	.04028	.03476	.03100	.02823	.02609	.02437	.02294	.01712	.01137	.00567	.00000
.20	.07285	.05215	.04246	.03664	.03268	.02976	.02750	.02568	.02418	.01805	.01198	.00598	.00000

5.1 Factors for Computing Critical Values of the Noncentral t-Distribution

Values of λ are given for each $\eta(\delta)$ to give $\Pr\left\{T_f \le t_o \mid \delta\right\} = .50$ (Continued)

	f												
η	1	2	3	4	5	6	7	8	9	16	36	144	∞
.21	.07662	.05485	.04465	.03853	.03436	.03129	.02891	.02700	.02543	.01898	.01260	.00628	.00000
.22	.08041	.05755	.04685	.04043	.03605	.03283	.03034	.02833	.02668	.01991	.01322	.00659	.00000
.23	.08422	.06027	.04907	.04233	.03775	.03438	.03176	.02967	.02793	.02084	.01384	.00690	.00000
.24	.08804	.06301	.05129	.04425	.03946	.03593	.03320	.03101	.02919	.02179	.01446	.00721	.00000
.25	.09189	.06575	.05352	.04617	.04117	.03749	.03464	.03235	.03046	.02273	.01509	.00753	.00000
.26	.09576	.06851	.05576	.04811	.04289	.03906	.03609	.03370	.03173	.02368	.01572	.00784	.00000
.27	.09966	.07129	.05802	.05005	.04462	.04063	.03754	.03506	.03301	.02463	.01635	.00816	.00000
.28	.10357	.07409	.06029	.05201	.04637	.04222	.03901	.03643	.03430	.02559	.01699	.00847	.00000
.29	.10751	.07690	.06257	.05397	.04812	.04381	.04048	.03780	.03559	.02656	.01763	.00879	.00000
.30	.11148	.07972	.06486	.05595	.04988	.04541	.04196	.03918	.03689	.02753	.01827	.00911	.00000
.31	.11547	.08257	.06717	.05794	.05165	.04703	.04345	.04057	.03820	.02850	.01892	.00943	.00000
.32	.11949	.08543	.06950	.05994	.05343	.04865	.04494	.04197	.03952	.02948	.01957	.00976	.00000
.33	.12353	.08831	.07183	.06195	.05522	.05028	.04645	.04338	.04084	.03047	.02023	.01009	.00000
.34	.12760	.09121	.07419	.06398	.05703	.05192	.04797	.04479	.04217	.03146	.02088	.01041	.00000
.35	.13171	.09413	.07655	.06602	.05884	.05357	.04949	.04622	.04351	.03246	.02155	.01074	.00000
.36	.13584	.09707	.07894	.06807	.06067	.05523	.05103	.04765	.04486	.03346	.02221	.01108	.00000
.37	.14000	.10004	.08134	.07013	.06251	.05691	.05257	.04909	.04622	.03447	.02288	.01141	.00000
.38	.14419	.10302	.08376	.07221	.06436	.05859	.05413	.05054	.04758	.03549	.02356	.01175	.00000
.39	.14841	.10602	.08619	.07431	.06623	.06029	.05569	.05200	.04896	.03652	.02424	.01208	.00000
.40	.15266	.10905	.08865	.07642	.06810	.06200	.05727	.05348	.05034	.03755	.02492	.01243	.00000
.41	.15695	.11210	.09112	.07855	.07000	.06372	.05886	.05496	.05174	.03859	.02561	.01277	.00000
.42	.16127	.11518	.09361	.08069	.07190	.06545	.06046	.05645	.05314	.03963	.02630	.01311	.00000
.43	.16562	.11827	.09612	.08284	.07382	.06719	.06207	.05795	.05456	.04069	.02700	.01346	.00000
.44	.17001	.12140	.09864	.08502	.07576	.06895	.06369	.05947	.05598	.04175	.02771	.01381	.00000
.45	.17443	.12454	.10119	.08721	.07770	.07073	.06533	.06100	.05742	.04282	.02842	.01417	.00000
.46	.17889	.12772	.10376	.08942	.07967	.07251	.06698	.06253	.05887	.04390	.02913	.01452	.00000
.47	.18338	.13092	.10635	.09164	.08165	.07431	.06864	.06408	.06033	.04498	.02985	.01488	.00000
.48	.18792	.13414	.10895	.09388	.08364	.07612	.07031	.06565	.06180	.04608	.03058	.01524	.00000
.49	.19249	.13739	.11158	.09614	.08565	.07795	.07200	.06722	.06328	.04718	.03131	.01561	.00000
.50	.19709	.14067	.11424	.09842	.08768	.07979	.07370	.06881	.06477	.04829	.03205	.01598	.00000
.51	.20174	.14398	.11691	.10072	.08972	.08165	.07541	.07041	.06628	.04941	.03279	.01635	.00000
.52	.20642	.14731	.11960	.10303	.09178	.08352	.07714	.07202	.06779	.05054	.03354	.01672	.00000
.53	.21115	.15068	.12232	.10537	.09386	.08541	.07888	.07364	.06932	.05168	.03429	.01709	.00000
.54	.21591	.15407	.12506	.10772	.09595	.08731	.08064	.07528	.07086	.05283	.03505	.01747	.00000
.55	.22072	.15749	.12783	.11010	.09806	.08923	.08241	.07694	.07242	.05399	.03582	.01786	.00000
.56	.22556	.16094	.13061	.11249	.10019	.09117	.08420	.07860	.07399	.05515	.03660	.01824	.00000
.57	.23045	.16442	.13342	.11491	.10234	.09312	.08600	.08028	.07557	.05633	.03738	.01863	.00000
.58	.23538	.16793	.13626	.11734	.10450	.09509	.08781	.08198	.07716	.05752	.03816	.01902	.00000
.59	.24035	.17146	.13912	.11980	.10669	.09707	.08964	.08369	.07877	.05872	.03896	.01942	.00000
.60	.24536	.17503	.14200	.12227	.10889	.09907	.09149	.08541	.08039	.05993	.03976	.01982	.00000

5.1 Factors for Computing Critical Values of the Noncentral t-Distribution

Values of λ are given for each $\eta(\delta)$ to give $Pr\{T_f \leq t_o | \delta\} = .50$ (Continued)

	f												
η	1	2	3	4	5	6	7	8	9	16	36	144	∞
.61	.25042	.17863	.14491	.12477	.11111	.10109	.09336	.08715	.08203	.06115	.04057	.02022	.00000
.62	.25552	.18226	.14784	.12729	.11335	.10313	.09523	.08890	.08368	.06237	.04138	.02063	.00000
.63	.26066	.18592	.15080	.12983	.11561	.10518	.09713	.09067	.08535	.06361	.04221	.02104	.00000
.64	.26585	.18962	.15378	.13239	.11789	.10725	.09904	.09246	.08703	.06487	.04304	.02145	.00000
.65	.27107	.19334	.15678	.13497	.12018	.10934	.10097	.09426	.08872	.06613	.04387	.02187	.00000
.66	.27634	.19709	.15981	.13757	.12250	.11145	.10292	.09607	.09043	.06740	.04472	.02229	.00000
.67	.28166	.20087	.16287	.14020	.12484	.11357	.10488	.09790	.09215	.06869	.04557	.02272	.00000
.68	.28701	.20469	.16595	.14285	.12719	.11572	.10686	.09975	.09389	.06998	.04643	.02315	.00000
.69	.29241	.20853	.16905	.14552	.12957	.11788	.10885	.10161	.09564	.07129	.04730	.02358	.00000
.70	.29785	.21240	.17218	.14821	.13196	.12006	.11086	.10349	.09741	.07261	.04818	.02402	.00000
.71	.30334	.21630	.17534	.15092	.13438	.12226	.11289	.10539	.09920	.07394	.04906	.02446	.00000
.72	.30886	.22023	.17851	.15365	.13681	.12447	.11494	.10730	.10100	.07529	.04996	.02490	.00000
.73	.31442	.22419	.18172	.15641	.13927	.12671	.11701	.10923	.10281	.07664	.05086	.02535	.00000
.74	.32001	.22817	.18494	.15919	.14174	.12896	.11909	.11117	.10465	.07801	.05177	.02581	.00000
.75	.32565	.23218	.18819	.16199	.14424	.13123	.12119	.11314	.10649	.07939	.05268	.02627	.00000
.76	.33131	.23622	.19146	.16480	.14675	.13352	.12331	.11511	.10836	.08079	.05361	.02673	.00000
.77	.33701	.24028	.19475	.16764	.14928	.13583	.12544	.11711	.11024	.08219	.05455	.02720	.00000
.78	.34274	.24435	.19806	.17050	.15184	.13816	.12759	.11912	.11213	.08361	.05549	.02767	.00000
.79	.34849	.24845	.20140	.17338	.15441	.14050	.12976	.12115	.11404	.08504	.05644	.02814	.00000
.80	.35426	.25257	.20475	.17628	.15700	.14287	.13195	.12319	.11597	.08649	.05741	.02863	.00000
.81	.36005	.25671	.20812	.17920	.15961	.14525	.13416	.12526	.11792	.08794	.05838	.02911	.00000
.82	.36584	.26086	.21152	.18214	.16224	.14765	.13638	.12734	.11988	.08941	.05936	.02960	.00000
.83	.37164	.26502	.21492	.18510	.16489	.15007	.13862	.12943	.12185	.09090	.06035	.03010	.00000
.84	.37743	.26919	.21835	.18807	.16755	.15250	.14087	.13154	.12384	.09240	.06135	.03060	.00000
.85	.38321	.27337	.22178	.19106	.17023	.15495	.14315	.13367	.12585	.09391	.06236	.03110	.00000
.86	.38897	.27755	.22524	.19407	.17293	.15742	.14544	.13582	.12788	.09543	.06337	.03161	.00000
.87	.39469	.28174	.22870	.19709	.17564	.15991	.14774	.13798	.12992	.09697	.06440	.03213	.00000
.88	.40036	.28592	.23217	.20012	.17838	.16241	.15007	.14016	.13197	.09852	.06544	.03265	.00000
.89	.40596	.29009	.23566	.20318	.18112	.16493	.15241	.14235	.13405	.10008	.06649	.03317	.00000
.90	.41149	.29426	.23915	.20624	.18389	.16747	.15476	.14456	.13613	.10166	.06754	.03370	.00000
.91	.41693	.29842	.24265	.20932	.18666	.17002	.15713	.14678	.13824	.10325	.06861	.03424	.00000
.92	.42226	.30256	.24615	.21240	.18945	.17258	.15952	.14902	.14035	.10485	.06969	.03478	.00000
.93	.42748	.30668	.24966	.21550	.19226	.17516	.16192	.15128	.14249	.10647	.07077	.03532	.00000
.94	.43256	.31079	.25317	.21861	.19507	.17776	.16434	.15355	.14464	.10810	.07187	.03587	.00000
.95	.43751	.31487	.25668	.22173	.19790	.18036	.16677	.15584	.14680	.10975	.07298	.03643	.00000
.96	.44233	.31893	.26018	.22485	.20074	.18298	.16921	.15814	.14898	.11140	.07410	.03699	.00000
.97	.44702	.32296	.26369	.22798	.20359	.18562	.17167	.16045	.15117	.11308	.07522	.03756	.00000
.98	.45158	.32697	.26719	.23112	.20646	.18826	.17414	.16278	.15338	.11476	.07636	.03813	.00000
.99	.45602	.33095	.27069	.23426	.20933	.19092	.17663	.16512	.15560	.11646	.07751	.03871	.00000
1.00	.46034	.33489	.27419	.23741	.21221	.19359	.17913	.16748	.15783	.11817	.07867	.03930	.00000

5.2 Factors for Computing Critical Values of the Noncentral t-Distribution

Values of λ are given for each $\eta(\delta)$ to give $Pr\{T_f \leq t_o | \delta\} = .75$

η	f = 1	2	3	4	5	6	7	8	9	16	36	144	∞
-1.00	.21263	.35482	.41699	.45342	.47796	.49590	.50973	.52081	.52994	.56711	.60357	.63935	.67449
-.99	.22068	.36036	.42136	.45711	.48119	.49879	.51237	.52325	.53221	.56874	.60460	.63984	.67449
-.98	.22895	.36595	.42574	.46079	.48441	.50168	.51500	.52568	.53448	.57036	.60562	.64032	.67449
-.97	.23744	.37159	.43014	.46448	.48762	.50456	.51763	.52810	.53674	.57197	.60664	.64080	.67449
-.96	.24617	.37727	.43455	.46816	.49084	.50743	.52024	.53051	.53899	.57357	.60765	.64127	.67449
-.95	.25514	.38299	.43896	.47185	.49404	.51029	.52285	.53292	.54123	.57516	.60865	.64175	.67449
-.94	.26437	.38876	.44339	.47552	.49724	.51315	.52544	.53531	.54345	.57675	.60965	.64221	.67449
-.93	.27385	.39455	.44781	.47920	.50043	.51599	.52803	.53769	.54567	.57832	.61064	.64268	.67449
-.92	.28357	.40038	.45224	.48287	.50361	.51883	.53060	.54006	.54788	.57989	.61163	.64314	.67449
-.91	.29351	.40623	.45667	.48652	.50677	.52165	.53317	.54242	.55007	.58145	.61260	.64360	.67449
-.90	.30363	.41211	.46109	.49017	.50993	.52446	.53572	.54477	.55226	.58299	.61357	.64406	.67449
-.89	.31389	.41799	.46550	.49381	.51307	.52725	.53825	.54710	.55443	.58453	.61454	.64451	.67449
-.88	.32426	.42389	.46991	.49743	.51620	.53003	.54077	.54942	.55658	.58605	.61549	.64496	.67449
-.87	.33471	.42978	.47430	.50104	.51931	.53280	.54328	.55173	.55873	.58757	.61645	.64540	.67449
-.86	.34518	.43567	.47868	.50463	.52240	.53555	.54577	.55402	.56086	.58907	.61739	.64585	.67449
-.85	.35566	.44155	.48303	.50820	.52548	.53828	.54825	.55630	.56297	.59057	.61833	.64629	.67449
-.84	.36611	.44741	.48737	.51175	.52853	.54099	.55071	.55856	.56507	.59205	.61926	.64672	.67449
-.83	.37650	.45324	.49169	.51527	.53157	.54369	.55315	.56080	.56716	.59353	.62018	.64716	.67449
-.82	.38682	.45905	.49597	.51878	.53459	.54636	.55557	.56303	.56923	.59499	.62110	.64759	.67449
-.81	.39704	.46481	.50023	.52226	.53758	.54902	.55798	.56524	.57128	.59644	.62201	.64802	.67449
-.80	.40714	.47054	.50446	.52572	.54056	.55166	.56037	.56744	.57332	.59788	.62291	.64844	.67449
-.79	.41712	.47621	.50866	.52915	.54351	.55428	.56274	.56962	.57535	.59931	.62381	.64886	.67449
-.78	.42696	.48184	.51282	.53255	.54643	.55687	.56509	.57178	.57736	.60073	.62470	.64928	.67449
-.77	.43666	.48742	.51695	.53592	.54934	.55945	.56742	.57392	.57935	.60214	.62559	.64970	.67449
-.76	.44619	.49293	.52104	.53927	.55221	.56200	.56974	.57605	.58133	.60353	.62646	.65011	.67449
-.75	.45557	.49839	.52509	.54258	.55507	.56454	.57203	.57816	.58329	.60492	.62734	.65052	.67449
-.74	.46478	.50379	.52910	.54586	.55790	.56705	.57431	.58025	.58523	.60630	.62820	.65093	.67449
-.73	.47383	.50912	.53307	.54912	.56070	.56954	.57656	.58232	.58716	.60766	.62906	.65134	.67449
-.72	.48270	.51438	.53700	.55234	.56347	.57200	.57880	.58438	.58907	.60901	.62991	.65174	.67449
-.71	.49140	.51958	.54088	.55553	.56622	.57444	.58101	.58642	.59096	.61036	.63076	.65214	.67449
-.70	.49994	.52471	.54472	.55868	.56895	.57686	.58321	.58844	.59284	.61169	.63160	.65253	.67449
-.69	.50830	.52977	.54852	.56181	.57164	.57926	.58538	.59044	.59470	.61301	.63243	.65293	.67449
-.68	.51649	.53476	.55228	.56490	.57431	.58164	.58754	.59242	.59655	.61432	.63326	.65332	.67449
-.67	.52452	.53969	.55599	.56796	.57696	.58399	.58968	.59439	.59838	.61562	.63408	.65371	.67449
-.66	.53238	.54454	.55966	.57098	.57957	.58632	.59179	.59634	.60019	.61691	.63489	.65409	.67449
-.65	.54008	.54933	.56329	.57398	.58216	.58863	.59389	.59827	.60199	.61819	.63570	.65448	.67449
-.64	.54762	.55404	.56687	.57694	.58473	.59091	.59596	.60018	.60377	.61946	.63651	.65486	.67449
-.63	.55500	.55869	.57040	.57987	.58727	.59318	.59802	.60208	.60554	.62072	.63730	.65524	.67449
-.62	.56223	.56327	.57390	.58276	.58978	.59542	.60006	.60395	.60729	.62196	.63809	.65561	.67449
-.61	.56931	.56779	.57735	.58563	.59226	.59764	.60208	.60582	.60902	.62320	.63888	.65599	.67449

5.2 Factors for Computing Critical Values of the Noncentral t-Distribution

Values of λ are given for each $\eta(\delta)$ to give $\Pr\left\{T_f \le t_o \middle| \delta\right\} = .75$ (Continued)

	f												
η	1	2	3	4	5	6	7	8	9	16	36	144	∞
-.60	.57624	.57223	.58076	.58846	.59472	.59983	.60407	.60766	.61074	.62443	.63966	.65636	.67449
-.59	.58303	.57662	.58413	.59126	.59716	.60201	.60605	.60949	.61244	.62565	.64043	.65673	.67449
-.58	.58968	.58094	.58745	.59403	.59957	.60416	.60802	.61130	.61413	.62686	.64120	.65710	.67449
-.57	.59619	.58519	.59074	.59677	.60195	.60629	.60996	.61309	.61580	.62806	.64197	.65746	.67449
-.56	.60257	.58939	.59398	.59948	.60431	.60841	.61188	.61487	.61746	.62925	.64273	.65782	.67449
-.55	.60881	.59352	.59719	.60216	.60665	.61050	.61379	.61663	.61910	.63043	.64348	.65818	.67449
-.54	.61493	.59759	.60035	.60481	.60896	.61257	.61568	.61838	.62073	.63160	.64423	.65854	.67449
-.53	.62093	.60161	.60348	.60743	.61125	.61462	.61755	.62011	.62235	.63276	.64497	.65890	.67449
-.52	.62681	.60556	.60657	.61002	.61351	.61665	.61940	.62182	.62395	.63391	.64571	.65925	.67449
-.51	.63256	.60946	.60962	.61258	.61575	.61866	.62124	.62352	.62554	.63506	.64644	.65960	.67449
-.50	.63821	.61331	.61264	.61512	.61797	.62065	.62306	.62520	.62711	.63619	.64717	.65995	.67449
-.49	.64374	.61710	.61562	.61763	.62017	.62263	.62487	.62687	.62867	.63732	.64789	.66030	.67449
-.48	.64916	.62084	.61856	.62011	.62235	.62458	.62665	.62853	.63022	.63844	.64861	.66065	.67449
-.47	.65448	.62452	.62147	.62257	.62450	.62652	.62842	.63017	.63175	.63955	.64932	.66099	.67449
-.46	.65969	.62816	.62435	.62500	.62663	.62844	.63018	.63179	.63327	.64065	.65003	.66133	.67449
-.45	.66480	.63175	.62719	.62740	.62875	.63034	.63192	.63341	.63478	.64175	.65074	.66167	.67449
-.44	.66981	.63529	.63000	.62978	.63084	.63222	.63365	.63501	.63628	.64283	.65144	.66201	.67449
-.43	.67472	.63878	.63278	.63214	.63291	.63409	.63536	.63659	.63776	.64391	.65213	.66235	.67449
-.42	.67954	.64222	.63552	.63447	.63496	.63594	.63705	.63817	.63923	.64498	.65283	.66268	.67449
-.41	.68427	.64562	.63824	.63678	.63700	.63778	.53873	.63973	.64070	.64605	.65351	.66301	.67449
-.40	.68891	.64898	.64093	.63906	.63901	.63959	.64040	.64128	.64215	.64710	.65420	.66335	.67449
-.39	.69346	.65229	.64359	.64133	.64101	.64140	.64206	.64281	.64358	.64815	.65488	.66368	.67449
-.38	.69792	.65556	.64622	.64357	.64299	.64319	.64370	.64433	.64501	.64920	.65555	.66400	.67449
-.37	.70230	.65879	.64882	.64579	.64495	.64496	.64533	.64585	.64643	.65023	.65623	.66433	.67449
-.36	.70659	.66198	.65139	.64799	.64689	.64672	.64694	.64735	.64784	.65126	.65689	.66466	.67449
-.35	.71080	.66513	.65394	.65017	.64882	.64846	.64854	.64884	.64923	.65229	.65756	.66498	.67449
-.34	.71493	.66825	.65646	.65232	.65073	.65019	.65013	.65032	.65062	.65330	.65822	.66530	.67449
-.33	.71898	.67132	.65896	.65446	.65263	.65191	.65171	.65178	.65200	.65431	.65888	.66562	.67449
-.32	.72296	.67436	.66143	.65658	.65451	.65361	.65328	.65324	.65336	.65532	.65953	.66594	.67449
-.31	.72686	.67736	.66388	.65869	.65637	.65530	.65483	.65469	.65472	.65632	.66019	.66626	.67449
-.30	.73068	.68033	.66630	.66077	.65822	.65698	.65638	.65612	.65607	.65731	.66083	.66658	.67449
-.29	.73443	.68326	.66870	.66283	.66006	.65864	.65791	.65755	.65741	.65830	.66148	.66689	.67449
-.28	.73811	.68616	.67108	.66488	.66188	.66029	.65943	.65897	.65874	.65928	.66212	.66721	.67449
-.27	.74172	.68902	.67343	.66691	.66368	.66193	.66094	.66038	.66007	.66025	.66276	.66752	.67449
-.26	.74526	.69185	.67577	.66893	.66548	.66356	.66245	.66178	.66138	.66122	.66340	.66783	.67449
-.25	.74873	.69465	.67808	.67093	.66726	.66518	.66394	.66317	.66269	.66219	.66403	.66814	.67449
-.24	.75213	.69742	.68037	.67291	.66902	.66679	.66542	.66455	.66399	.66315	.66466	.66845	.67449
-.23	.75547	.70016	.68264	.67487	.67078	.66838	.66689	.66592	.66528	.66411	.66529	.66876	.67449
-.22	.75874	.70287	.68489	.67683	.67252	.66997	.66835	.66729	.66656	.66506	.66591	.66907	.67449
-.21	.76195	.70555	.68712	.67876	.67425	.67154	.66981	.66865	.66784	.66601	.66654	.66938	.67449

5.2 Factors for Computing Critical Values of the Noncentral t-Distribution
Values of λ are given for each $\eta(\delta)$ to give $Pr\left\{T_f \leq t_o \middle| \delta\right\} = .75$ (Continued)

η	f = 1	2	3	4	5	6	7	8	9	16	36	144	∞
-.20	.76509	.70820	.68933	.68069	.67597	.67311	.67125	.66999	.66911	.66695	.66716	.66968	.67449
-.19	.76818	.71083	.69153	.68259	.67767	.67466	.67269	.67134	.67037	.66789	.66777	.66999	.67449
-.18	.77120	.71342	.69370	.68449	.67937	.67621	.67412	.67267	.67163	.66882	.66839	.67029	.67449
-.17	.77416	.71599	.69586	.68637	.68105	.67775	.67554	.67400	.67288	.66975	.66900	.67060	.67449
-.16	.77707	.71853	.69800	.68824	.68272	.67927	.67695	.67532	.67412	.67068	.66962	.67090	.67449
-.15	.77992	.72105	.70012	.69009	.68439	.68079	.67836	.67663	.67536	.67160	.67023	.67120	.67449
-.14	.78271	.72354	.70223	.69193	.68604	.68230	.67976	.67794	.67659	.67252	.67083	.67150	.67449
-.13	.78545	.72600	.70432	.69376	.68768	.68380	.68115	.67924	.67781	.67343	.67144	.67180	.67449
-.12	.78813	.72844	.70639	.69558	.68931	.68529	.68253	.68053	.67903	.67434	.67204	.67210	.67449
-.11	.79076	.73086	.70845	.69738	.69094	.68678	.68391	.68182	.68024	.67525	.67265	.67240	.67449
-.10	.79334	.73325	.71049	.69918	.69255	.68826	.68527	.68310	.68145	.67616	.67325	.67270	.67449
-.09	.79586	.73562	.71252	.70096	.69416	.68973	.68664	.68438	.68266	.67706	.67385	.67300	.67449
-.08	.79834	.73796	.71453	.70273	.69575	.69119	.68799	.68565	.68385	.67796	.67444	.67330	.67449
-.07	.80077	.74028	.71653	.70449	.69734	.69264	.68934	.68691	.68505	.67885	.67504	.67359	.67449
-.06	.80315	.74258	.71851	.70624	.69892	.69409	.69069	.68817	.68624	.67975	.67564	.67389	.67449
-.05	.80549	.74486	.72048	.70798	.70049	.69553	.69203	.68942	.68742	.68064	.67623	.67419	.67449
-.04	.80777	.74712	.72243	.70971	.70205	.69697	.69336	.69067	.68860	.68153	.67682	.67448	.67449
-.03	.81002	.74935	.72438	.71143	.70361	.69840	.69469	.69192	.68978	.68241	.67741	.67478	.67449
-.02	.81222	.75156	.72630	.71314	.70516	.69982	.69601	.69316	.69095	.68329	.67800	.67507	.67449
-.01	.81438	.75376	.72822	.71484	.70669	.70123	.69732	.69439	.69211	.68417	.67859	.67537	.67449
.00	.81650	.75593	.73012	.71653	.70823	.70264	.69864	.69562	.69328	.68505	.67918	.67566	.67449
.01	.81857	.75808	.73201	.71822	.70975	.70405	.69994	.69685	.69444	.68593	.67977	.67596	.67449
.02	.82061	.76022	.73389	.71989	.71127	.70544	.70124	.69807	.69559	.68680	.68035	.67625	.67449
.03	.82261	.76233	.73576	.72156	.71278	.70684	.70254	.69929	.69674	.68768	.68094	.67654	.67449
.04	.82458	.76443	.73761	.72321	.71429	.70822	.70383	.70050	.69789	.68855	.68152	.67684	.67449
.05	.82650	.76650	.73945	.72486	.71579	.70961	.70512	.70172	.69904	.68942	.68211	.67713	.67449
.06	.82839	.76856	.74129	.72650	.71728	.71098	.70640	.70292	.70018	.69028	.68269	.67742	.67449
.07	.83025	.77060	.74311	.72813	.71877	.71236	.70768	.70413	.70132	.69115	.68327	.67772	.67449
.08	.83208	.77263	.74492	.72976	.72025	.71372	.70896	.70533	.70246	.69202	.68386	.67801	.67449
.09	.83387	.77463	.74671	.73137	.72172	.71509	.71023	.70652	.70359	.69288	.68444	.67831	.67449
.10	.83563	.77662	.74850	.73298	.72319	.71644	.71150	.70772	.70472	.69374	.68502	.67860	.67449
.11	.83737	.77860	.75028	.73459	.72466	.71780	.71277	.70891	.70585	.69460	.68560	.67889	.67449
.12	.83907	.78055	.75205	.73618	.72611	.71915	.71403	.71010	.70697	.69546	.68618	.67919	.67449
.13	.84075	.78250	.75381	.73777	.72757	.72049	.71529	.71128	.70810	.69632	.68676	.67948	.67449
.14	.84240	.78442	.75556	.73935	.72902	.72184	.71654	.71246	.70922	.69718	.68735	.67978	.67449
.15	.84402	.78633	.75730	.74093	.73046	.72317	.71779	.71364	.71034	.69803	.68793	.68007	.67449
.16	.84562	.78823	.75903	.74250	.73190	.72451	.71904	.71482	.71146	.69889	.68851	.68036	.67449
.17	.84719	.79011	.76075	.74406	.73333	.72584	.72029	.71600	.71257	.69975	.68909	.68066	.67449
.18	.84874	.79198	.76246	.74562	.73476	.72717	.72153	.71717	.71368	.70060	.68967	.68096	.67449
.19	.85027	.79383	.76416	.74717	.73619	.72849	.72277	.71834	.71480	.70146	.69025	.68125	.67449
.20	.85177	.79567	.76586	.74871	.73761	.72981	.72401	.71951	.71591	.70231	.69083	.68155	.67449

5.2 Factors for Computing Critical Values of the Noncentral t-Distribution

Values of λ are given for each $\eta(\delta)$ to give $\Pr\left\{T_f \le t_o \middle| \delta\right\} = .75$ (Continued)

	f												
η	1	2	3	4	5	6	7	8	9	16	36	144	∞
.21	.85326	.79750	.76755	.75025	.73903	.73113	.72524	.72068	.71701	.70316	.69141	.68184	.67449
.22	.85473	.79932	.76923	.75179	.74044	.73244	.72648	.72184	.71812	.70402	.69200	.68214	.67449
.23	.85618	.80112	.77090	.75332	.74185	.73376	.72771	.72300	.71923	.70487	.69258	.68244	.67449
.24	.85761	.80291	.77257	.75484	.74326	.73506	.72894	.72417	.72033	.70572	.69316	.68273	.67449
.25	.85902	.80469	.77422	.75636	.74466	.73637	.73017	.72533	.72143	.70658	.69374	.68303	.67449
.26	.86042	.80645	.77587	.75787	.74606	.73768	.73139	.72649	.72254	.70743	.69433	.68333	.67449
.27	.86180	.80821	.77752	.75938	.74745	.73898	.73261	.72764	.72364	.70828	.69491	.68363	.67449
.28	.86317	.80996	.77915	.76089	.74885	.74028	.73384	.72880	.72474	.70914	.69550	.68393	.67449
.29	.86453	.81169	.78078	.76239	.75024	.74157	.73506	.72996	.72584	.70999	.69608	.68423	.67449
.30	.86587	.81342	.78241	.76389	.75162	.74287	.73628	.73111	.72694	.71084	.69667	.68453	.67449
.31	.86720	.81513	.78403	.76538	.75301	.74416	.73749	.73226	.72804	.71170	.69726	.68483	.67449
.32	.86852	.81684	.78564	.76687	.75439	.74546	.73871	.73342	.72913	.71255	.69785	.68514	.67449
.33	.86983	.81854	.78725	.76836	.75577	.74675	.73993	.73457	.73023	.71341	.69844	.68544	.67449
.34	.87113	.82023	.78885	.76984	.75715	.74804	.74114	.73572	.73133	.71426	.69903	.68574	.67449
.35	.87243	.82191	.79044	.77132	.75852	.74932	.74236	.73687	.73243	.71512	.69962	.68605	.67449
.36	.87371	.82358	.79204	.77279	.75990	.75061	.74357	.73802	.73352	.71598	.70021	.68636	.67449
.37	.87499	.82524	.79362	.77427	.76127	.75189	.74478	.73917	.73462	.71684	.70080	.68666	.67449
.38	.87626	.82690	.79520	.77574	.76264	.75318	.74599	.74032	.73572	.71769	.70140	.68697	.67449
.39	.87752	.82855	.79678	.77720	.76400	.75446	.74720	.74147	.73681	.71855	.70199	.68728	.67449
.40	.87879	.83020	.79836	.77867	.76537	.75574	.74842	.74262	.73791	.71941	.70259	.68759	.67449
.41	.88004	.83184	.79993	.78013	.76674	.75703	.74963	.74377	.73901	.72028	.70319	.68790	.67449
.42	.88130	.83347	.80149	.78159	.76810	.75831	.75084	.74492	.74011	.72114	.70379	.68821	.67449
.43	.88255	.83510	.80306	.78305	.76946	.75959	.75205	.74607	.74121	.72200	.70439	.68852	.67449
.44	.88380	.83672	.80462	.78451	.77082	.76087	.75326	.74723	.74231	.72287	.70499	.68883	.67449
.45	.88505	.83834	.80617	.78596	.77219	.76215	.75447	.74838	.74341	.72374	.70560	.68915	.67449
.46	.88630	.83996	.80773	.78742	.77355	.76343	.75568	.74953	.74451	.72461	.70620	.68946	.67449
.47	.88755	.84157	.80928	.78887	.77491	.76471	.75689	.75068	.74561	.72548	.70681	.68978	.67449
.48	.88880	.84318	.81083	.79032	.77627	.76599	.75811	.75184	.74671	.72635	.70742	.69010	.67449
.49	.89005	.84478	.81238	.79177	.77762	.76727	.75932	.75299	.74782	.72722	.70803	.69042	.67449
.50	.89131	.84638	.81392	.79322	.77898	.76855	.76053	.75415	.74892	.72810	.70864	.69074	.67449
.51	.89256	.84798	.81547	.79467	.78034	.76983	.76175	.75530	.75003	.72897	.70925	.69106	.67449
.52	.89383	.84958	.81701	.79612	.78170	.77111	.76296	.75646	.75114	.72985	.70987	.69138	.67449
.53	.89509	.85118	.81855	.79757	.78306	.77240	.76418	.75762	.75225	.73073	.71049	.69171	.67449
.54	.89637	.85277	.82010	.79901	.78442	.77368	.76540	.75878	.75336	.73162	.71111	.69203	.67449
.55	.89765	.85437	.82164	.80046	.78578	.77497	.76662	.75995	.75447	.73250	.71173	.69236	.67449
.56	.89893	.85596	.82318	.80191	.78715	.77625	.76784	.76111	.75558	.73339	.71236	.69269	.67449
.57	.90023	.85756	.82472	.80336	.78851	.77754	.76906	.76228	.75670	.73428	.71298	.69302	.67449
.58	.90153	.85915	.82626	.80481	.78987	.77883	.77028	.76344	.75782	.73517	.71361	.69335	.67449
.59	.90284	.86075	.82780	.80626	.79124	.78012	.77151	.76461	.75894	.73607	.71424	.69368	.67449
.60	.90416	.86234	.82934	.80771	.79260	.78141	.77274	.76579	.76006	.73696	.71488	.69401	.67449

5.2 Factors for Computing Critical Values of the Noncentral t-Distribution

Values of λ are given for each $\eta(\delta)$ to give $\Pr\left\{T_f \le t_o \middle| \delta\right\} = .75$ (Continued)

η	f = 1	2	3	4	5	6	7	8	9	16	36	144	∞
.61	.90549	.86394	.83088	.80916	.79397	.78270	.77397	.76696	.76119	.73786	.71551	.69435	.67449
.62	.90683	.86554	.83242	.81062	.79534	.78400	.77520	.76814	.76232	.73876	.71615	.69469	.67449
.63	.90818	.86714	.83397	.81207	.79671	.78530	.77643	.76932	.76345	.73967	.71679	.69503	.67449
.64	.90955	.86874	.83551	.81353	.79808	.78660	.77767	.77050	.76458	.74058	.71743	.69537	.67449
.65	.91092	.87035	.83706	.81499	.79946	.78790	.77891	.77168	.76572	.74149	.71808	.69571	.67449
.66	.91231	.87196	.83861	.81645	.80084	.78920	.78015	.77287	.76685	.74240	.71873	.69605	.67449
.67	.91372	.87357	.84016	.81791	.80222	.79051	.78140	.77406	.76799	.74332	.71938	.69640	.67449
.68	.91513	.87518	.84171	.81937	.80360	.79182	.78264	.77525	.76914	.74424	.72003	.69674	.67449
.69	.91657	.87680	.84326	.82084	.80498	.79313	.78389	.77644	.77029	.74516	.72069	.69709	.67449
.70	.91801	.87842	.84482	.82231	.80637	.79445	.78514	.77764	.77144	.74609	.72135	.69744	.67449
.71	.91948	.88005	.84638	.82378	.80776	.79577	.78640	.77884	.77259	.74702	.72201	.69780	.67449
.72	.92096	.88168	.84794	.82525	.80915	.79709	.78766	.78005	.77375	.74795	.72268	.69815	.67449
.73	.92245	.88331	.84950	.82673	.81055	.79841	.78892	.78126	.77491	.74889	.72335	.69851	.67449
.74	.92396	.88495	.85107	.82821	.81194	.79974	.79019	.78247	.77607	.74983	.72402	.69887	.67449
.75	.92549	.88659	.85264	.82969	.81335	.80107	.79146	.78369	.77724	.75077	.72469	.69923	.67449
.76	.92703	.88823	.85421	.83117	.81475	.80240	.79273	.78491	.77841	.75172	.72537	.69959	.67449
.77	.92859	.88988	.85578	.83266	.81616	.80374	.79401	.78613	.77959	.75267	.72605	.69995	.67449
.78	.93016	.89153	.85736	.83415	.81757	.80508	.79529	.78736	.78077	.75363	.72674	.70032	.67449
.79	.93175	.89318	.85894	.83564	.81898	.80643	.79657	.78859	.78195	.75459	.72743	.70069	.67449
.80	.93335	.89484	.86052	.83714	.82040	.80778	.79786	.78982	.78314	.75555	.72812	.70106	.67449
.81	.93496	.89649	.86211	.83864	.82182	.80913	.79915	.79106	.78433	.75652	.72881	.70143	.67449
.82	.93658	.89815	.86369	.84014	.82325	.81049	.80045	.79230	.78553	.75749	.72951	.70181	.67449
.83	.93821	.89981	.86528	.84165	.82468	.81185	.80175	.79355	.78673	.75847	.73022	.70219	.67449
.84	.93985	.90147	.86687	.84315	.82611	.81321	.80306	.79480	.78794	.75945	.73092	.70257	.67449
.85	.94149	.90313	.86846	.84466	.82754	.81458	.80436	.79606	.78915	.76044	.73163	.70295	.67449
.86	.94313	.90479	.87005	.84618	.82898	.81595	.80568	.79732	.79036	.76143	.73235	.70333	.67449
.87	.94476	.90645	.87164	.84769	.83042	.81733	.80699	.79859	.79158	.76242	.73307	.70372	.67449
.88	.94639	.90810	.87323	.84921	.83187	.81871	.80832	.79986	.79280	.76342	.73379	.70411	.67449
.89	.94800	.90975	.87483	.85073	.83332	.82009	.80964	.80113	.79403	.76443	.73451	.70450	.67449
.90	.94959	.91139	.87642	.85225	.83477	.82148	.81097	.80241	.79526	.76544	.73524	.70489	.67449
.91	.95116	.91302	.87801	.85378	.83623	.82287	.81231	.80369	.79650	.76645	.73598	.70529	.67449
.92	.95270	.91465	.87960	.85530	.83768	.82427	.81365	.80498	.79775	.76747	.73672	.70569	.67449
.93	.95420	.91627	.88119	.85683	.83914	.82567	.81499	.80628	.79899	.76850	.73746	.70609	.67449
.94	.95566	.91787	.88278	.85835	.84061	.82707	.81634	.80757	.80025	.76953	.73821	.70650	.67449
.95	.95709	.91947	.88436	.85988	.84208	.82848	.81769	.80888	.80150	.77056	.73896	.70690	.67449
.96	.95847	.92106	.88594	.86141	.84354	.82989	.81905	.81019	.80277	.77161	.73972	.70731	.67449
.97	.95980	.92263	.88752	.86294	.84502	.83130	.82041	.81150	.80404	.77265	.74048	.70773	.67449
.98	.96110	.92419	.88909	.86447	.84649	.83272	.82177	.81281	.80531	.77370	.74125	.70814	.67449
.99	.96236	.92574	.89066	.86600	.84797	.83414	.82314	.81414	.80659	.77476	.74202	.70856	.67449
1.00	.96359	.92728	.89223	.86753	.84944	.83557	.82452	.81546	.80787	.77583	.74280	.70898	.67449

5.3 Factors for Computing Critical Values of the Noncentral t-Distribution

Values of λ are given for each $\eta(\delta)$ to give $Pr\{T_f \leq t_o | \delta\} = .90$

η	f = 1	2	3	4	5	6	7	8	9	10	11	12	13
-1.00	.91196	1.03485	1.08644	1.11605	1.13571	1.14993	1.16080	1.16944	1.17652	1.18245	1.18751	1.19189	1.19573
-.99	.91898	1.03848	1.08892	1.11795	1.13728	1.15126	1.16197	1.17049	1.17747	1.18332	1.18832	1.19264	1.19644
-.98	.92648	1.04230	1.09152	1.11996	1.13891	1.15266	1.16319	1.17158	1.17846	1.18423	1.18916	1.19343	1.19717
-.97	.93449	1.04632	1.09425	1.12205	1.14062	1.15412	1.16447	1.17272	1.17949	1.18518	1.19004	1.19425	1.19794
-.96	.94304	1.05053	1.09710	1.12422	1.14241	1.15563	1.16579	1.17390	1.18057	1.18616	1.19094	1.19509	1.19873
-.95	.95217	1.05494	1.10006	1.12649	1.14425	1.15721	1.16717	1.17513	1.18168	1.18718	1.19189	1.19597	1.19956
-.94	.96192	1.05953	1.10314	1.12883	1.14616	1.15883	1.16859	1.17640	1.18283	1.18823	1.19286	1.19688	1.20041
-.93	.97230	1.06431	1.10632	1.13125	1.14814	1.16051	1.17006	1.17771	1.18401	1.18932	1.19386	1.19781	1.20129
-.92	.98329	1.06927	1.10961	1.13375	1.15017	1.16223	1.17156	1.17905	1.18523	1.19043	1.19489	1.19877	1.20219
-.91	.99484	1.07440	1.11300	1.13632	1.15226	1.16401	1.17311	1.18043	1.18648	1.19158	1.19595	1.19976	1.20311
-.90	1.00689	1.07969	1.11648	1.13895	1.15440	1.16582	1.17470	1.18185	1.18776	1.19275	1.19704	1.20077	1.20406
-.89	1.01936	1.08513	1.12005	1.14165	1.15659	1.16768	1.17632	1.18330	1.18907	1.19395	1.19815	1.20181	1.20503
-.88	1.03217	1.09071	1.12370	1.14441	1.15883	1.16958	1.17798	1.18477	1.19041	1.19518	1.19928	1.20286	1.20602
-.87	1.04523	1.09641	1.12742	1.14722	1.16112	1.17152	1.17968	1.18628	1.19177	1.19643	1.20044	1.20394	1.20703
-.86	1.05848	1.10223	1.13122	1.15009	1.16344	1.17350	1.18140	1.18782	1.19316	1.19770	1.20162	1.20504	1.20806
-.85	1.07183	1.10813	1.13508	1.15300	1.16581	1.17550	1.18315	1.18938	1.19458	1.19900	1.20282	1.20616	1.20911
-.84	1.08522	1.11412	1.13899	1.15596	1.16821	1.17754	1.18493	1.19097	1.19601	1.20031	1.20403	1.20729	1.21018
-.83	1.09860	1.12017	1.14295	1.15895	1.17064	1.17960	1.18673	1.19258	1.19747	1.20165	1.20527	1.20844	1.21126
-.82	1.11192	1.12627	1.14696	1.16198	1.17310	1.18169	1.18856	1.19421	1.19895	1.20301	1.20652	1.20961	1.21235
-.81	1.12513	1.13241	1.15100	1.16504	1.17559	1.18381	1.19041	1.19586	1.20045	1.20438	1.20779	1.21080	1.21347
-.80	1.13820	1.13858	1.15507	1.16812	1.17811	1.18595	1.19228	1.19753	1.20196	1.20577	1.20908	1.21200	1.21459
-.79	1.15108	1.14476	1.15917	1.17123	1.18064	1.18810	1.19417	1.19921	1.20349	1.20717	1.21038	1.21321	1.21573
-.78	1.16376	1.15093	1.16328	1.17436	1.18319	1.19027	1.19607	1.20092	1.20503	1.20859	1.21169	1.21444	1.21688
-.77	1.17619	1.15710	1.16740	1.17751	1.18576	1.19246	1.19799	1.20263	1.20659	1.21002	1.21302	1.21567	1.21804
-.76	1.18837	1.16325	1.17154	1.18066	1.18834	1.19467	1.19992	1.20436	1.20816	1.21146	1.21435	1.21692	1.21922
-.75	1.20026	1.16937	1.17567	1.18383	1.19094	1.19688	1.20187	1.20610	1.20974	1.21291	1.21570	1.21818	1.22040
-.74	1.21184	1.17545	1.17980	1.18700	1.19354	1.19911	1.20382	1.20785	1.21133	1.21437	1.21706	1.21945	1.22159
-.73	1.22310	1.18149	1.18393	1.19018	1.19615	1.20134	1.20578	1.20961	1.21293	1.21584	1.21842	1.22072	1.22279
-.72	1.23402	1.18748	1.18804	1.19335	1.19877	1.20358	1.20775	1.21138	1.21454	1.21732	1.21980	1.22201	1.22400
-.71	1.24457	1.19341	1.19214	1.19653	1.20138	1.20582	1.20973	1.21315	1.21615	1.21881	1.22118	1.22330	1.22522
-.70	1.25475	1.19928	1.19623	1.19970	1.20400	1.20807	1.21171	1.21493	1.21778	1.22030	1.22257	1.22460	1.22644
-.69	1.26453	1.20508	1.20029	1.20286	1.20662	1.21032	1.21370	1.21671	1.21940	1.22180	1.22396	1.22590	1.22767
-.68	1.27391	1.21081	1.20432	1.20601	1.20923	1.21257	1.21569	1.21850	1.22103	1.22331	1.22536	1.22721	1.22890
-.67	1.28286	1.21646	1.20833	1.20916	1.21184	1.21482	1.21767	1.22029	1.22267	1.22481	1.22676	1.22853	1.23014
-.66	1.29139	1.22202	1.21231	1.21229	1.21445	1.21707	1.21966	1.22209	1.22430	1.22633	1.22817	1.22984	1.23138
-.65	1.29946	1.22751	1.21626	1.21540	1.21705	1.21932	1.22165	1.22388	1.22594	1.22784	1.22957	1.23117	1.23263
-.64	1.30709	1.23290	1.22017	1.21850	1.21963	1.22156	1.22364	1.22567	1.22758	1.22935	1.23099	1.23249	1.23388
-.63	1.31426	1.23820	1.22404	1.22157	1.22221	1.22379	1.22562	1.22746	1.22922	1.23087	1.23240	1.23382	1.23513
-.62	1.32096	1.24341	1.22787	1.22463	1.22478	1.22602	1.22760	1.22925	1.23086	1.23239	1.23381	1.23514	1.23638
-.61	1.32720	1.24852	1.23166	1.22767	1.22733	1.22824	1.22958	1.23104	1.23250	1.23390	1.23523	1.23647	1.23764

5.3 Factors for Computing Critical Values of the Noncentral t-Distribution

Values of λ are given for each $\eta(\delta)$ to give $\Pr\left\{T_f \le t_o \middle| \delta\right\} = .90$ (Continued)

η	f = 1	2	3	4	5	6	7	8	9	10	11	12	13
-.60	1.33297	1.25352	1.23541	1.23068	1.22988	1.23045	1.23155	1.23283	1.23414	1.23542	1.23664	1.23780	1.23889
-.59	1.33828	1.25843	1.23912	1.23367	1.23240	1.23266	1.23352	1.23461	1.23577	1.23693	1.23806	1.23913	1.24015
-.58	1.34313	1.26323	1.24278	1.23663	1.23491	1.23485	1.23548	1.23639	1.23740	1.23845	1.23947	1.24046	1.24141
-.57	1.34753	1.26792	1.24639	1.23957	1.23741	1.23703	1.23743	1.23816	1.23903	1.23996	1.24089	1.24179	1.24266
-.56	1.35148	1.27251	1.24995	1.24248	1.23988	1.23920	1.23937	1.23992	1.24066	1.24147	1.24230	1.24312	1.24392
-.55	1.35499	1.27698	1.25346	1.24536	1.24234	1.24136	1.24130	1.24168	1.24228	1.24297	1.24371	1.24445	1.24518
-.54	1.35808	1.28134	1.25692	1.24821	1.24478	1.24351	1.24323	1.24344	1.24389	1.24447	1.24511	1.24577	1.24643
-.53	1.36076	1.28559	1.26032	1.25102	1.24720	1.24564	1.24514	1.24518	1.24550	1.24597	1.24651	1.24709	1.24768
-.52	1.36304	1.28973	1.26368	1.25381	1.24959	1.24775	1.24705	1.24692	1.24710	1.24746	1.24791	1.24841	1.24893
-.51	1.36495	1.29375	1.26697	1.25657	1.25197	1.24986	1.24894	1.24865	1.24870	1.24895	1.24931	1.24973	1.25018
-.50	1.36649	1.29766	1.27022	1.25929	1.25433	1.25194	1.25082	1.25037	1.25029	1.25043	1.25070	1.25104	1.25143
-.49	1.36769	1.30146	1.27340	1.26198	1.25666	1.25401	1.25269	1.25208	1.25187	1.25191	1.25208	1.25235	1.25267
-.48	1.36856	1.30513	1.27653	1.26463	1.25896	1.25606	1.25454	1.25378	1.25345	1.25337	1.25346	1.25365	1.25391
-.47	1.36912	1.30869	1.27961	1.26725	1.26125	1.25810	1.25639	1.25547	1.25501	1.25484	1.25484	1.25495	1.25514
-.46	1.36940	1.31214	1.28262	1.26983	1.26351	1.26011	1.25822	1.25715	1.25657	1.25629	1.25621	1.25625	1.25637
-.45	1.36940	1.31547	1.28558	1.27238	1.26574	1.26211	1.26003	1.25882	1.25812	1.25774	1.25757	1.25754	1.25760
-.44	1.36916	1.31869	1.28848	1.27489	1.26795	1.26409	1.26183	1.26047	1.25966	1.25918	1.25893	1.25883	1.25882
-.43	1.36868	1.32179	1.29132	1.27736	1.27014	1.26605	1.26362	1.26212	1.26119	1.26062	1.26028	1.26011	1.26004
-.42	1.36798	1.32478	1.29410	1.27980	1.27229	1.26800	1.26539	1.26375	1.26271	1.26204	1.26162	1.26138	1.26125
-.41	1.36709	1.32766	1.29682	1.28220	1.27443	1.26992	1.26714	1.26537	1.26422	1.26346	1.26296	1.26265	1.26246
-.40	1.36601	1.33043	1.29948	1.28456	1.27653	1.27182	1.26888	1.26698	1.26572	1.26486	1.26429	1.26391	1.26366
-.39	1.36477	1.33308	1.30208	1.28688	1.27861	1.27370	1.27061	1.26857	1.26720	1.26626	1.26561	1.26516	1.26486
-.38	1.36338	1.33563	1.30463	1.28916	1.28066	1.27556	1.27231	1.27016	1.26868	1.26765	1.26692	1.26641	1.26605
-.37	1.36186	1.33807	1.30711	1.29141	1.28268	1.27740	1.27400	1.27172	1.27015	1.26903	1.26823	1.26765	1.26723
-.36	1.36021	1.34041	1.30953	1.29361	1.28467	1.27922	1.27568	1.27328	1.27160	1.27040	1.26952	1.26888	1.26841
-.35	1.35845	1.34264	1.31189	1.29578	1.28664	1.28101	1.27733	1.27482	1.27304	1.27176	1.27081	1.27011	1.26958
-.34	1.35660	1.34477	1.31420	1.29791	1.28857	1.28279	1.27897	1.27634	1.27447	1.27311	1.27209	1.27132	1.27074
-.33	1.35467	1.34680	1.31645	1.29999	1.29048	1.28454	1.28059	1.27786	1.27589	1.27445	1.27336	1.27253	1.27190
-.32	1.35266	1.34873	1.31863	1.30204	1.29236	1.28627	1.28220	1.27935	1.27730	1.27577	1.27462	1.27374	1.27305
-.31	1.35059	1.35057	1.32076	1.30405	1.29421	1.28797	1.28378	1.28083	1.27869	1.27709	1.27587	1.27493	1.27419
-.30	1.34846	1.35231	1.32283	1.30602	1.29604	1.28966	1.28535	1.28230	1.28007	1.27840	1.27711	1.27611	1.27532
-.29	1.34629	1.35396	1.32485	1.30795	1.29783	1.29132	1.28690	1.28375	1.28144	1.27969	1.27834	1.27729	1.27645
-.28	1.34409	1.35552	1.32681	1.30985	1.29959	1.29296	1.28843	1.28519	1.28279	1.28097	1.27957	1.27846	1.27757
-.27	1.34185	1.35699	1.32871	1.31170	1.30133	1.29458	1.28994	1.28660	1.28413	1.28225	1.28078	1.27961	1.27868
-.26	1.33959	1.35838	1.33055	1.31351	1.30303	1.29617	1.29143	1.28801	1.28546	1.28351	1.28198	1.28076	1.27978
-.25	1.33731	1.35968	1.33234	1.31529	1.30471	1.29774	1.29290	1.28940	1.28677	1.28475	1.28317	1.28190	1.28087
-.24	1.33502	1.36091	1.33408	1.31702	1.30635	1.29929	1.29436	1.29077	1.28807	1.28599	1.28435	1.28303	1.28196
-.23	1.33273	1.36205	1.33576	1.31872	1.30797	1.30081	1.29579	1.29212	1.28936	1.28721	1.28552	1.28415	1.28303
-.22	1.33043	1.36312	1.33739	1.32038	1.30956	1.30231	1.29721	1.29346	1.29063	1.28843	1.28668	1.28526	1.28410
-.21	1.32814	1.36412	1.33897	1.32200	1.31112	1.30379	1.29860	1.29479	1.29189	1.28963	1.28782	1.28636	1.28516

5.3 Factors for Computing Critical Values of the Noncentral t-Distribution

Values of λ are given for each $\eta(\delta)$ to give $\Pr\left\{T_f \le t_o \middle| \delta\right\} = .90$ (Continued)

η	f = 1	2	3	4	5	6	7	8	9	10	11	12	13
-.20	1.32585	1.36505	1.34049	1.32359	1.31265	1.30524	1.29998	1.29609	1.29313	1.29081	1.28896	1.28745	1.28621
-.19	1.32358	1.36590	1.34196	1.32513	1.31415	1.30667	1.30134	1.29738	1.29436	1.29199	1.29009	1.28854	1.28725
-.18	1.32132	1.36669	1.34339	1.32664	1.31562	1.30808	1.30268	1.29866	1.29557	1.29315	1.29120	1.28961	1.28828
-.17	1.31907	1.36742	1.34476	1.32811	1.31707	1.30946	1.30400	1.29992	1.29678	1.29430	1.29230	1.29067	1.28931
-.16	1.31685	1.36808	1.34609	1.32955	1.31848	1.31082	1.30530	1.30116	1.29796	1.29543	1.29339	1.29172	1.29032
-.15	1.31464	1.36869	1.34737	1.33095	1.31987	1.31216	1.30658	1.30238	1.29913	1.29656	1.29447	1.29276	1.29132
-.14	1.31246	1.36923	1.34860	1.33231	1.32123	1.31347	1.30784	1.30359	1.30029	1.29767	1.29554	1.29379	1.29232
-.13	1.31031	1.36972	1.34979	1.33364	1.32256	1.31477	1.30908	1.30478	1.30143	1.29876	1.29660	1.29480	1.29330
-.12	1.30818	1.37016	1.35093	1.33494	1.32386	1.31603	1.31030	1.30595	1.30256	1.29985	1.29764	1.29581	1.29428
-.11	1.30608	1.37055	1.35203	1.33620	1.32513	1.31728	1.31150	1.30711	1.30367	1.30092	1.29867	1.29681	1.29524
-.10	1.30400	1.37089	1.35308	1.33742	1.32638	1.31850	1.31268	1.30825	1.30477	1.30198	1.29969	1.29780	1.29620
-.09	1.30196	1.37118	1.35410	1.33861	1.32760	1.31970	1.31385	1.30937	1.30585	1.30302	1.30070	1.29877	1.29714
-.08	1.29995	1.37142	1.35507	1.33977	1.32879	1.32088	1.31499	1.31047	1.30692	1.30405	1.30170	1.29974	1.29808
-.07	1.29797	1.37162	1.35600	1.34090	1.32996	1.32203	1.31612	1.31156	1.30797	1.30507	1.30268	1.30069	1.29900
-.06	1.29602	1.37179	1.35689	1.34199	1.33110	1.32316	1.31722	1.31264	1.30901	1.30607	1.30366	1.30163	1.29992
-.05	1.29411	1.37191	1.35774	1.34306	1.33221	1.32427	1.31831	1.31369	1.31003	1.30707	1.30462	1.30256	1.30082
-.04	1.29223	1.37199	1.35856	1.34409	1.33330	1.32536	1.31937	1.31473	1.31104	1.30804	1.30557	1.30349	1.30172
-.03	1.29038	1.37204	1.35934	1.34509	1.33436	1.32643	1.32042	1.31575	1.31203	1.30901	1.30650	1.30439	1.30260
-.02	1.28857	1.37206	1.36008	1.34606	1.33540	1.32747	1.32145	1.31676	1.31301	1.30996	1.30743	1.30529	1.30347
-.01	1.28679	1.37204	1.36079	1.34700	1.33641	1.32850	1.32246	1.31775	1.31398	1.31090	1.30834	1.30618	1.30434
.00	1.28504	1.37199	1.36147	1.34791	1.33740	1.32950	1.32346	1.31872	1.31493	1.31182	1.30924	1.30706	1.30519
.01	1.28333	1.37191	1.36211	1.34879	1.33836	1.33048	1.32443	1.31968	1.31586	1.31273	1.31013	1.30792	1.30603
.02	1.28165	1.37181	1.36272	1.34964	1.33930	1.33144	1.32539	1.32062	1.31678	1.31363	1.31100	1.30878	1.30687
.03	1.28000	1.37167	1.36329	1.35047	1.34021	1.33238	1.32632	1.32154	1.31769	1.31452	1.31187	1.30962	1.30769
.04	1.27839	1.37152	1.36384	1.35127	1.34110	1.33330	1.32724	1.32245	1.31858	1.31539	1.31272	1.31045	1.30850
.05	1.27681	1.37134	1.36436	1.35204	1.34197	1.33419	1.32814	1.32334	1.31945	1.31625	1.31356	1.31127	1.30930
.06	1.27527	1.37113	1.36485	1.35279	1.34281	1.33507	1.32903	1.32422	1.32032	1.31709	1.31438	1.31208	1.31009
.07	1.27375	1.37091	1.36531	1.35351	1.34363	1.33593	1.32989	1.32508	1.32116	1.31792	1.31520	1.31288	1.31087
.08	1.27227	1.37067	1.36575	1.35420	1.34443	1.33677	1.33074	1.32592	1.32200	1.31874	1.31600	1.31366	1.31164
.09	1.27083	1.37041	1.36616	1.35487	1.34521	1.33759	1.33157	1.32675	1.32282	1.31955	1.31679	1.31444	1.31240
.10	1.26941	1.37013	1.36654	1.35552	1.34596	1.33839	1.33239	1.32757	1.32362	1.32034	1.31757	1.31520	1.31315
.11	1.26803	1.36984	1.36690	1.35614	1.34670	1.33917	1.33318	1.32836	1.32441	1.32112	1.31834	1.31596	1.31389
.12	1.26667	1.36953	1.36723	1.35674	1.34741	1.33993	1.33397	1.32915	1.32519	1.32189	1.31909	1.31670	1.31462
.13	1.26535	1.36920	1.36755	1.35732	1.34810	1.34067	1.33473	1.32991	1.32595	1.32264	1.31984	1.31743	1.31534
.14	1.26406	1.36887	1.36784	1.35788	1.34878	1.34140	1.33548	1.33067	1.32670	1.32339	1.32057	1.31815	1.31605
.15	1.26280	1.36852	1.36811	1.35841	1.34943	1.34211	1.33621	1.33140	1.32744	1.32411	1.32129	1.31886	1.31674
.16	1.26157	1.36816	1.36835	1.35892	1.35006	1.34280	1.33692	1.33213	1.32816	1.32483	1.32200	1.31956	1.31743
.17	1.26037	1.36780	1.36858	1.35942	1.35068	1.34347	1.33762	1.33284	1.32887	1.32554	1.32269	1.32024	1.31811
.18	1.25919	1.36742	1.36879	1.35989	1.35127	1.34412	1.33830	1.33353	1.32957	1.32623	1.32338	1.32092	1.31878
.19	1.25805	1.36703	1.36898	1.36034	1.35185	1.34476	1.33897	1.33421	1.33025	1.32691	1.32405	1.32159	1.31943
.20	1.25693	1.36664	1.36916	1.36078	1.35241	1.34538	1.33962	1.33487	1.33092	1.32757	1.32471	1.32224	1.32008

5.3 Factors for Computing Critical Values of the Noncentral t-Distribution

Values of λ are given for each $\eta(\delta)$ to give $\Pr\left\{T_f \le t_o \middle| \delta\right\} = .90$ (Continued)

η	f = 1	2	3	4	5	6	7	8	9	10	11	12	13
.21	1.25585	1.36624	1.36931	1.36119	1.35295	1.34599	1.34026	1.33553	1.33157	1.32823	1.32537	1.32289	1.32072
.22	1.25479	1.36584	1.36945	1.36159	1.35348	1.34658	1.34088	1.33616	1.33222	1.32887	1.32600	1.32352	1.32134
.23	1.25375	1.36543	1.36958	1.36197	1.35399	1.34715	1.34149	1.33679	1.33285	1.32950	1.32663	1.32414	1.32196
.24	1.25275	1.36501	1.36968	1.36234	1.35448	1.34771	1.34208	1.33740	1.33346	1.33012	1.32725	1.32476	1.32257
.25	1.25177	1.36460	1.36978	1.36268	1.35495	1.34825	1.34266	1.33799	1.33407	1.33073	1.32786	1.32536	1.32316
.26	1.25081	1.36417	1.36986	1.36301	1.35541	1.34878	1.34322	1.33858	1.33466	1.33133	1.32845	1.32595	1.32375
.27	1.24989	1.36375	1.36993	1.36333	1.35585	1.34929	1.34377	1.33915	1.33524	1.33191	1.32904	1.32653	1.32433
.28	1.24899	1.36333	1.36998	1.36363	1.35628	1.34979	1.34431	1.33971	1.33581	1.33248	1.32961	1.32710	1.32490
.29	1.24811	1.36290	1.37002	1.36392	1.35670	1.35027	1.34483	1.34025	1.33637	1.33305	1.33017	1.32766	1.32545
.30	1.24726	1.36247	1.37006	1.36419	1.35710	1.35074	1.34534	1.34078	1.33691	1.33360	1.33072	1.32821	1.32600
.31	1.24643	1.36205	1.37008	1.36445	1.35748	1.35120	1.34584	1.34130	1.33745	1.33414	1.33127	1.32876	1.32654
.32	1.24563	1.36162	1.37009	1.36469	1.35785	1.35164	1.34632	1.34181	1.33797	1.33466	1.33180	1.32929	1.32707
.33	1.24485	1.36120	1.37009	1.36492	1.35821	1.35207	1.34679	1.34231	1.33848	1.33518	1.33232	1.32981	1.32759
.34	1.24409	1.36077	1.37008	1.36514	1.35855	1.35249	1.34725	1.34279	1.33898	1.33569	1.33283	1.33032	1.32810
.35	1.24336	1.36035	1.37006	1.36535	1.35889	1.35289	1.34770	1.34326	1.33946	1.33619	1.33333	1.33082	1.32860
.36	1.24265	1.35993	1.37004	1.36554	1.35921	1.35328	1.34813	1.34373	1.33994	1.33667	1.33382	1.33131	1.32909
.37	1.24197	1.35952	1.37000	1.36573	1.35951	1.35366	1.34856	1.34418	1.34041	1.33715	1.33430	1.33180	1.32958
.38	1.24130	1.35911	1.36996	1.36590	1.35981	1.35403	1.34897	1.34461	1.34086	1.33761	1.33477	1.33227	1.33005
.39	1.24066	1.35870	1.36992	1.36607	1.36009	1.35439	1.34937	1.34504	1.34131	1.33807	1.33523	1.33274	1.33052
.40	1.24004	1.35829	1.36986	1.36622	1.36037	1.35473	1.34976	1.34546	1.34174	1.33851	1.33569	1.33319	1.33097
.41	1.23945	1.35789	1.36980	1.36637	1.36063	1.35506	1.35014	1.34587	1.34217	1.33895	1.33613	1.33364	1.33142
.42	1.23887	1.35750	1.36974	1.36650	1.36088	1.35539	1.35050	1.34626	1.34258	1.33937	1.33656	1.33407	1.33186
.43	1.23832	1.35711	1.36967	1.36663	1.36113	1.35570	1.35086	1.34665	1.34299	1.33979	1.33699	1.33450	1.33229
.44	1.23778	1.35673	1.36960	1.36675	1.36136	1.35600	1.35121	1.34702	1.34338	1.34020	1.33740	1.33492	1.33271
.45	1.23727	1.35635	1.36952	1.36686	1.36158	1.35630	1.35155	1.34739	1.34377	1.34060	1.33781	1.33533	1.33313
.46	1.23678	1.35598	1.36944	1.36696	1.36180	1.35658	1.35187	1.34775	1.34414	1.34099	1.33820	1.33574	1.33353
.47	1.23631	1.35561	1.36936	1.36706	1.36200	1.35685	1.35219	1.34809	1.34451	1.34136	1.33859	1.33613	1.33393
.48	1.23586	1.35526	1.36927	1.36715	1.36220	1.35712	1.35250	1.34843	1.34487	1.34174	1.33897	1.33651	1.33432
.49	1.23543	1.35491	1.36918	1.36723	1.36239	1.35738	1.35280	1.34876	1.34522	1.34210	1.33934	1.33689	1.33470
.50	1.23503	1.35457	1.36909	1.36731	1.36257	1.35762	1.35309	1.34908	1.34556	1.34245	1.33971	1.33726	1.33507
.51	1.23464	1.35423	1.36900	1.36738	1.36274	1.35786	1.35338	1.34939	1.34589	1.34280	1.34006	1.33762	1.33544
.52	1.23427	1.35391	1.36891	1.36744	1.36291	1.35809	1.35365	1.34970	1.34621	1.34313	1.34041	1.33798	1.33579
.53	1.23392	1.35359	1.36881	1.36751	1.36307	1.35832	1.35392	1.34999	1.34653	1.34346	1.34075	1.33832	1.33614
.54	1.23359	1.35328	1.36872	1.36756	1.36322	1.35853	1.35417	1.35028	1.34683	1.34378	1.34108	1.33866	1.33649
.55	1.23328	1.35299	1.36863	1.36761	1.36337	1.35874	1.35442	1.35056	1.34713	1.34410	1.34140	1.33899	1.33682
.56	1.23299	1.35270	1.36853	1.36766	1.36351	1.35894	1.35467	1.35083	1.34742	1.34440	1.34172	1.33931	1.33715
.57	1.23272	1.35242	1.36844	1.36771	1.36364	1.35914	1.35490	1.35109	1.34771	1.34470	1.34202	1.33963	1.33747
.58	1.23247	1.35215	1.36835	1.36775	1.36377	1.35933	1.35513	1.35135	1.34798	1.34499	1.34233	1.33994	1.33778
.59	1.23224	1.35189	1.36826	1.36779	1.36390	1.35951	1.35535	1.35160	1.34825	1.34528	1.34262	1.34024	1.33809
.60	1.23203	1.35164	1.36817	1.36782	1.36402	1.35968	1.35557	1.35184	1.34852	1.34555	1.34291	1.34053	1.33839

5.3 Factors for Computing Critical Values of the Noncentral t-Distribution

Values of λ are given for each $\eta(\delta)$ to give $\Pr\left\{T_f \le t_o \mid \delta\right\} = .90$ (Continued)

	f												
η	1	2	3	4	5	6	7	8	9	10	11	12	13
.61	1.23184	1.35140	1.36808	1.36785	1.36413	1.35986	1.35578	1.35208	1.34877	1.34582	1.34319	1.34082	1.33868
.62	1.23167	1.35118	1.36800	1.36789	1.36424	1.36002	1.35598	1.35231	1.34902	1.34609	1.34346	1.34110	1.33897
.63	1.23151	1.35096	1.36791	1.36791	1.36435	1.36018	1.35618	1.35253	1.34926	1.34634	1.34373	1.34138	1.33925
.64	1.23138	1.35076	1.36783	1.36794	1.36445	1.36034	1.35637	1.35275	1.34950	1.34659	1.34399	1.34164	1.33953
.65	1.23126	1.35056	1.36776	1.36797	1.36455	1.36049	1.35656	1.35296	1.34973	1.34684	1.34424	1.34191	1.33979
.66	1.23117	1.35038	1.36769	1.36800	1.36465	1.36063	1.35674	1.35317	1.34996	1.34708	1.34449	1.34216	1.34005
.67	1.23109	1.35021	1.36762	1.36802	1.36474	1.36077	1.35691	1.35337	1.35018	1.34731	1.34473	1.34241	1.34031
.68	1.23103	1.35005	1.36755	1.36805	1.36483	1.36091	1.35708	1.35356	1.35039	1.34754	1.34497	1.34266	1.34056
.69	1.23099	1.34991	1.36749	1.36807	1.36492	1.36104	1.35725	1.35375	1.35060	1.34776	1.34520	1.34290	1.34080
.70	1.23097	1.34977	1.36744	1.36810	1.36501	1.36118	1.35741	1.35394	1.35080	1.34797	1.34543	1.34313	1.34104
.71	1.23097	1.34965	1.36739	1.36812	1.36509	1.36130	1.35757	1.35412	1.35100	1.34818	1.34565	1.34336	1.34128
.72	1.23099	1.34954	1.36734	1.36815	1.36517	1.36143	1.35772	1.35430	1.35119	1.34839	1.34586	1.34358	1.34150
.73	1.23102	1.34945	1.36730	1.36818	1.36526	1.36155	1.35788	1.35447	1.35138	1.34859	1.34607	1.34380	1.34173
.74	1.23108	1.34936	1.36726	1.36820	1.36534	1.36167	1.35802	1.35464	1.35156	1.34879	1.34628	1.34401	1.34194
.75	1.23115	1.34929	1.36723	1.36823	1.36542	1.36178	1.35817	1.35480	1.35174	1.34898	1.34648	1.34421	1.34216
.76	1.23124	1.34923	1.36721	1.36827	1.36549	1.36190	1.35831	1.35496	1.35192	1.34916	1.34667	1.34442	1.34236
.77	1.23135	1.34919	1.36719	1.36830	1.36557	1.36201	1.35844	1.35512	1.35209	1.34935	1.34687	1.34462	1.34257
.78	1.23148	1.34915	1.36717	1.36834	1.36565	1.36212	1.35858	1.35527	1.35226	1.34953	1.34705	1.34481	1.34277
.79	1.23162	1.34913	1.36717	1.36837	1.36573	1.36223	1.35871	1.35542	1.35242	1.34970	1.34724	1.34500	1.34296
.80	1.23178	1.34912	1.36717	1.36841	1.36581	1.36234	1.35884	1.35557	1.35258	1.34987	1.34742	1.34518	1.34315
.81	1.23196	1.34912	1.36717	1.36846	1.36589	1.36244	1.35897	1.35572	1.35274	1.35004	1.34759	1.34537	1.34334
.82	1.23215	1.34913	1.36718	1.36850	1.36596	1.36255	1.35910	1.35586	1.35290	1.35020	1.34776	1.34554	1.34352
.83	1.23235	1.34916	1.36720	1.36855	1.36604	1.36266	1.35922	1.35600	1.35305	1.35037	1.34793	1.34572	1.34370
.84	1.23257	1.34919	1.36722	1.36860	1.36613	1.36276	1.35935	1.35614	1.35320	1.35052	1.34810	1.34589	1.34387
.85	1.23280	1.34923	1.36725	1.36866	1.36621	1.36286	1.35947	1.35627	1.35334	1.35068	1.34826	1.34605	1.34404
.86	1.23305	1.34929	1.36729	1.36872	1.36629	1.36297	1.35959	1.35641	1.35349	1.35083	1.34842	1.34622	1.34421
.87	1.23330	1.34935	1.36733	1.36878	1.36638	1.36307	1.35971	1.35654	1.35363	1.35098	1.34857	1.34638	1.34437
.88	1.23355	1.34943	1.36738	1.36884	1.36646	1.36318	1.35983	1.35667	1.35377	1.35113	1.34873	1.34654	1.34454
.89	1.23382	1.34951	1.36744	1.36891	1.36655	1.36328	1.35995	1.35680	1.35391	1.35128	1.34888	1.34669	1.34469
.90	1.23408	1.34960	1.36750	1.36898	1.36664	1.36339	1.36007	1.35693	1.35405	1.35142	1.34903	1.34684	1.34485
.91	1.23435	1.34970	1.36756	1.36906	1.36673	1.36350	1.36019	1.35706	1.35418	1.35156	1.34917	1.34699	1.34500
.92	1.23461	1.34980	1.36764	1.36914	1.36683	1.36360	1.36031	1.35719	1.35432	1.35170	1.34932	1.34714	1.34515
.93	1.23487	1.34991	1.36771	1.36923	1.36692	1.36371	1.36043	1.35732	1.35445	1.35184	1.34946	1.34729	1.34530
.94	1.23512	1.35003	1.36780	1.36931	1.36702	1.36382	1.36055	1.35744	1.35459	1.35198	1.34960	1.34743	1.34545
.95	1.23537	1.35015	1.36789	1.36940	1.36712	1.36393	1.36067	1.35757	1.35472	1.35211	1.34974	1.34757	1.34559
.96	1.23561	1.35027	1.36798	1.36950	1.36723	1.36405	1.36079	1.35770	1.35485	1.35225	1.34988	1.34771	1.34573
.97	1.23584	1.35040	1.36808	1.36960	1.36733	1.36416	1.36091	1.35782	1.35498	1.35238	1.35002	1.34785	1.34587
.98	1.23607	1.35054	1.36818	1.36970	1.36744	1.36428	1.36103	1.35795	1.35511	1.35252	1.35015	1.34799	1.34601
.99	1.23629	1.35067	1.36829	1.36981	1.36756	1.36440	1.36115	1.35808	1.35524	1.35265	1.35029	1.34813	1.34615
1.00	1.23650	1.35081	1.36840	1.36992	1.36767	1.36452	1.36128	1.35821	1.35537	1.35278	1.35042	1.34826	1.34629

5.3 Factors for Computing Critical Values of the Noncentral t-Distribution

Values of λ are given for each $\eta(\delta)$ to give $Pr\{T_f \leq t_o | \delta\} = .90$ (Continued)

η	f = 14	15	16	17	18	19	20	21	22	23	24	25	26
-1.00	1.19913	1.20217	1.20490	1.20738	1.20964	1.21171	1.21361	1.21537	1.21701	1.21853	1.21996	1.22129	1.22254
-.99	1.19979	1.20280	1.20550	1.20795	1.21019	1.21223	1.21412	1.21586	1.21748	1.21899	1.22040	1.22172	1.22296
-.98	1.20049	1.20346	1.20613	1.20855	1.21076	1.21278	1.21465	1.21637	1.21798	1.21947	1.22086	1.22217	1.22340
-.97	1.20121	1.20414	1.20678	1.20917	1.21135	1.21335	1.21520	1.21690	1.21849	1.21996	1.22134	1.22263	1.22385
-.96	1.20196	1.20485	1.20746	1.20982	1.21197	1.21395	1.21577	1.21745	1.21902	1.22048	1.22184	1.22312	1.22432
-.95	1.20274	1.20559	1.20816	1.21048	1.21261	1.21456	1.21636	1.21802	1.21957	1.22101	1.22236	1.22362	1.22480
-.94	1.20354	1.20635	1.20888	1.21117	1.21327	1.21519	1.21697	1.21861	1.22014	1.22156	1.22289	1.22413	1.22531
-.93	1.20437	1.20713	1.20962	1.21188	1.21395	1.21585	1.21760	1.21921	1.22072	1.22212	1.22343	1.22466	1.22582
-.92	1.20522	1.20794	1.21039	1.21261	1.21465	1.21652	1.21824	1.21984	1.22132	1.22270	1.22400	1.22521	1.22635
-.91	1.20609	1.20876	1.21117	1.21336	1.21537	1.21721	1.21890	1.22047	1.22194	1.22330	1.22457	1.22577	1.22690
-.90	1.20698	1.20961	1.21198	1.21413	1.21610	1.21791	1.21958	1.22113	1.22257	1.22391	1.22517	1.22635	1.22746
-.89	1.20790	1.21047	1.21280	1.21492	1.21685	1.21863	1.22028	1.22180	1.22321	1.22454	1.22577	1.22693	1.22803
-.88	1.20883	1.21136	1.21364	1.21572	1.21762	1.21937	1.22098	1.22248	1.22387	1.22517	1.22639	1.22753	1.22861
-.87	1.20979	1.21226	1.21450	1.21654	1.21841	1.22012	1.22171	1.22318	1.22455	1.22583	1.22702	1.22815	1.22921
-.86	1.21076	1.21318	1.21538	1.21738	1.21921	1.22089	1.22245	1.22389	1.22524	1.22649	1.22767	1.22877	1.22981
-.85	1.21175	1.21412	1.21627	1.21823	1.22002	1.22167	1.22320	1.22462	1.22594	1.22717	1.22832	1.22941	1.23043
-.84	1.21275	1.21507	1.21717	1.21909	1.22085	1.22247	1.22396	1.22535	1.22665	1.22786	1.22899	1.23006	1.23106
-.83	1.21377	1.21604	1.21809	1.21997	1.22169	1.22327	1.22474	1.22610	1.22737	1.22856	1.22967	1.23072	1.23170
-.82	1.21481	1.21702	1.21903	1.22086	1.22254	1.22409	1.22553	1.22686	1.22811	1.22927	1.23036	1.23139	1.23235
-.81	1.21586	1.21801	1.21997	1.22176	1.22341	1.22492	1.22633	1.22763	1.22885	1.22999	1.23106	1.23206	1.23301
-.80	1.21692	1.21902	1.22093	1.22268	1.22428	1.22577	1.22714	1.22841	1.22961	1.23072	1.23177	1.23275	1.23368
-.79	1.21799	1.22004	1.22190	1.22361	1.22517	1.22662	1.22796	1.22921	1.23037	1.23146	1.23249	1.23345	1.23436
-.78	1.21908	1.22107	1.22288	1.22454	1.22607	1.22748	1.22879	1.23001	1.23115	1.23221	1.23321	1.23416	1.23505
-.77	1.22018	1.22211	1.22387	1.22549	1.22698	1.22835	1.22963	1.23082	1.23193	1.23297	1.23395	1.23487	1.23574
-.76	1.22129	1.22316	1.22488	1.22645	1.22789	1.22923	1.23048	1.23164	1.23272	1.23374	1.23469	1.23559	1.23644
-.75	1.22240	1.22422	1.22589	1.22741	1.22882	1.23012	1.23133	1.23246	1.23352	1.23451	1.23544	1.23632	1.23715
-.74	1.22353	1.22529	1.22690	1.22839	1.22975	1.23102	1.23220	1.23330	1.23433	1.23529	1.23620	1.23706	1.23787
-.73	1.22467	1.22637	1.22793	1.22937	1.23069	1.23192	1.23307	1.23414	1.23514	1.23608	1.23697	1.23780	1.23859
-.72	1.22581	1.22746	1.22897	1.23036	1.23164	1.23284	1.23395	1.23499	1.23596	1.23688	1.23774	1.23855	1.23932
-.71	1.22696	1.22855	1.23001	1.23135	1.23260	1.23375	1.23483	1.23584	1.23679	1.23768	1.23851	1.23931	1.24006
-.70	1.22811	1.22965	1.23105	1.23235	1.23356	1.23468	1.23572	1.23670	1.23762	1.23848	1.23930	1.24007	1.24080
-.69	1.22928	1.23075	1.23211	1.23336	1.23453	1.23561	1.23662	1.23757	1.23846	1.23930	1.24009	1.24083	1.24154
-.68	1.23044	1.23186	1.23317	1.23438	1.23550	1.23655	1.23752	1.23844	1.23930	1.24011	1.24088	1.24161	1.24229
-.67	1.23162	1.23298	1.23423	1.23539	1.23648	1.23749	1.23843	1.23932	1.24015	1.24094	1.24168	1.24238	1.24305
-.66	1.23279	1.23409	1.23530	1.23642	1.23746	1.23843	1.23934	1.24020	1.24100	1.24176	1.24248	1.24316	1.24381
-.65	1.23397	1.23522	1.23637	1.23744	1.23844	1.23938	1.24026	1.24108	1.24186	1.24260	1.24329	1.24395	1.24457
-.64	1.23516	1.23634	1.23745	1.23847	1.23943	1.24033	1.24118	1.24197	1.24272	1.24343	1.24410	1.24474	1.24534
-.63	1.23634	1.23747	1.23853	1.23951	1.24043	1.24129	1.24210	1.24287	1.24359	1.24427	1.24492	1.24553	1.24611
-.62	1.23753	1.23861	1.23961	1.24055	1.24142	1.24225	1.24303	1.24376	1.24445	1.24511	1.24573	1.24633	1.24689
-.61	1.23872	1.23974	1.24069	1.24158	1.24242	1.24321	1.24396	1.24466	1.24533	1.24596	1.24655	1.24712	1.24767

5.3 Factors for Computing Critical Values of the Noncentral t-Distribution

Values of λ are given for each $\eta(\delta)$ to give $\Pr\{T_f \le t_o \mid \delta\} = .90$ (Continued)

	f												
η	14	15	16	17	18	19	20	21	22	23	24	25	26
-.60	1.23992	1.24088	1.24178	1.24263	1.24342	1.24418	1.24489	1.24556	1.24620	1.24680	1.24738	1.24793	1.24845
-.59	1.24111	1.24201	1.24287	1.24367	1.24443	1.24514	1.24582	1.24646	1.24707	1.24765	1.24820	1.24873	1.24923
-.58	1.24230	1.24315	1.24396	1.24471	1.24543	1.24611	1.24676	1.24737	1.24795	1.24851	1.24903	1.24954	1.25002
-.57	1.24350	1.24429	1.24504	1.24576	1.24644	1.24708	1.24770	1.24828	1.24883	1.24936	1.24986	1.25035	1.25081
-.56	1.24469	1.24543	1.24614	1.24681	1.24745	1.24805	1.24863	1.24919	1.24971	1.25022	1.25070	1.25116	1.25160
-.55	1.24589	1.24657	1.24723	1.24785	1.24845	1.24903	1.24957	1.25010	1.25060	1.25107	1.25153	1.25197	1.25239
-.54	1.24708	1.24771	1.24832	1.24890	1.24946	1.25000	1.25051	1.25101	1.25148	1.25193	1.25236	1.25278	1.25318
-.53	1.24827	1.24885	1.24941	1.24995	1.25047	1.25097	1.25146	1.25192	1.25236	1.25279	1.25320	1.25359	1.25397
-.52	1.24946	1.24998	1.25050	1.25100	1.25148	1.25195	1.25240	1.25283	1.25325	1.25365	1.25404	1.25441	1.25477
-.51	1.25065	1.25112	1.25158	1.25204	1.25249	1.25292	1.25334	1.25374	1.25413	1.25451	1.25487	1.25523	1.25556
-.50	1.25183	1.25225	1.25267	1.25309	1.25349	1.25389	1.25428	1.25466	1.25502	1.25537	1.25571	1.25604	1.25636
-.49	1.25302	1.25338	1.25376	1.25413	1.25450	1.25486	1.25522	1.25557	1.25590	1.25623	1.25655	1.25686	1.25716
-.48	1.25420	1.25451	1.25484	1.25517	1.25550	1.25583	1.25616	1.25648	1.25679	1.25709	1.25739	1.25768	1.25795
-.47	1.25538	1.25564	1.25592	1.25621	1.25651	1.25680	1.25710	1.25739	1.25767	1.25795	1.25823	1.25849	1.25875
-.46	1.25655	1.25676	1.25700	1.25725	1.25751	1.25777	1.25804	1.25830	1.25856	1.25881	1.25906	1.25931	1.25955
-.45	1.25772	1.25789	1.25808	1.25829	1.25851	1.25874	1.25897	1.25921	1.25944	1.25967	1.25990	1.26013	1.26035
-.44	1.25889	1.25900	1.25915	1.25932	1.25951	1.25971	1.25991	1.26011	1.26032	1.26053	1.26074	1.26094	1.26114
-.43	1.26005	1.26012	1.26022	1.26035	1.26050	1.26067	1.26084	1.26102	1.26120	1.26139	1.26157	1.26176	1.26194
-.42	1.26121	1.26123	1.26129	1.26138	1.26150	1.26163	1.26177	1.26192	1.26208	1.26224	1.26241	1.26257	1.26273
-.41	1.26236	1.26233	1.26235	1.26241	1.26249	1.26259	1.26270	1.26283	1.26296	1.26310	1.26324	1.26338	1.26353
-.40	1.26351	1.26344	1.26341	1.26343	1.26348	1.26354	1.26363	1.26373	1.26384	1.26395	1.26407	1.26419	1.26432
-.39	1.26466	1.26453	1.26447	1.26445	1.26446	1.26450	1.26455	1.26463	1.26471	1.26480	1.26490	1.26500	1.26511
-.38	1.26579	1.26563	1.26552	1.26546	1.26544	1.26545	1.26548	1.26552	1.26558	1.26565	1.26573	1.26581	1.26590
-.37	1.26693	1.26671	1.26657	1.26647	1.26642	1.26639	1.26639	1.26641	1.26645	1.26650	1.26655	1.26662	1.26669
-.36	1.26806	1.26780	1.26761	1.26748	1.26739	1.26734	1.26731	1.26730	1.26732	1.26734	1.26738	1.26742	1.26747
-.35	1.26918	1.26888	1.26865	1.26848	1.26836	1.26828	1.26822	1.26819	1.26818	1.26818	1.26820	1.26822	1.26826
-.34	1.27029	1.26995	1.26968	1.26948	1.26933	1.26921	1.26913	1.26908	1.26904	1.26902	1.26902	1.26902	1.26904
-.33	1.27140	1.27101	1.27071	1.27047	1.27029	1.27015	1.27004	1.26996	1.26990	1.26986	1.26983	1.26982	1.26982
-.32	1.27250	1.27207	1.27173	1.27146	1.27125	1.27108	1.27094	1.27083	1.27075	1.27069	1.27065	1.27062	1.27060
-.31	1.27360	1.27313	1.27275	1.27245	1.27220	1.27200	1.27184	1.27171	1.27161	1.27152	1.27146	1.27141	1.27137
-.30	1.27469	1.27418	1.27376	1.27343	1.27315	1.27292	1.27273	1.27258	1.27245	1.27235	1.27227	1.27220	1.27215
-.29	1.27577	1.27522	1.27477	1.27440	1.27409	1.27384	1.27362	1.27345	1.27330	1.27318	1.27307	1.27299	1.27292
-.28	1.27685	1.27626	1.27577	1.27537	1.27503	1.27475	1.27451	1.27431	1.27414	1.27400	1.27387	1.27377	1.27369
-.27	1.27791	1.27729	1.27677	1.27633	1.27596	1.27565	1.27539	1.27517	1.27498	1.27481	1.27467	1.27455	1.27445
-.26	1.27897	1.27831	1.27775	1.27729	1.27689	1.27656	1.27627	1.27602	1.27581	1.27563	1.27547	1.27533	1.27521
-.25	1.28003	1.27932	1.27874	1.27824	1.27782	1.27745	1.27714	1.27687	1.27664	1.27644	1.27626	1.27611	1.27597
-.24	1.28107	1.28033	1.27971	1.27918	1.27873	1.27835	1.27801	1.27772	1.27747	1.27724	1.27705	1.27688	1.27673
-.23	1.28211	1.28133	1.28068	1.28012	1.27964	1.27923	1.27887	1.27856	1.27829	1.27805	1.27783	1.27765	1.27748
-.22	1.28314	1.28233	1.28164	1.28106	1.28055	1.28011	1.27973	1.27940	1.27910	1.27884	1.27861	1.27841	1.27823
-.21	1.28416	1.28332	1.28260	1.28198	1.28145	1.28099	1.28058	1.28023	1.27992	1.27964	1.27939	1.27917	1.27897

5.3 Factors for Computing Critical Values of the Noncentral t-Distribution
Values of λ are given for each $\eta(\delta)$ to give $Pr\left\{T_f \leq t_o \middle| \delta\right\} = .90$ (Continued)

η	f = 14	15	16	17	18	19	20	21	22	23	24	25	26
-.20	1.28517	1.28430	1.28355	1.28290	1.28235	1.28186	1.28143	1.28106	1.28072	1.28043	1.28016	1.27993	1.27971
-.19	1.28618	1.28527	1.28449	1.28382	1.28323	1.28272	1.28228	1.28188	1.28153	1.28121	1.28093	1.28068	1.28045
-.18	1.28717	1.28623	1.28542	1.28472	1.28412	1.28358	1.28311	1.28270	1.28233	1.28199	1.28170	1.28143	1.28118
-.17	1.28816	1.28719	1.28635	1.28563	1.28499	1.28444	1.28394	1.28351	1.28312	1.28277	1.28246	1.28217	1.28191
-.16	1.28914	1.28814	1.28727	1.28652	1.28586	1.28528	1.28477	1.28432	1.28391	1.28354	1.28321	1.28291	1.28264
-.15	1.29011	1.28908	1.28818	1.28741	1.28673	1.28612	1.28559	1.28512	1.28469	1.28431	1.28396	1.28365	1.28336
-.14	1.29107	1.29001	1.28909	1.28829	1.28758	1.28696	1.28641	1.28591	1.28547	1.28507	1.28471	1.28438	1.28408
-.13	1.29203	1.29093	1.28999	1.28916	1.28843	1.28779	1.28722	1.28670	1.28624	1.28583	1.28545	1.28511	1.28479
-.12	1.29297	1.29185	1.29088	1.29002	1.28928	1.28861	1.28802	1.28749	1.28701	1.28658	1.28619	1.28583	1.28550
-.11	1.29391	1.29276	1.29176	1.29088	1.29011	1.28943	1.28882	1.28827	1.28777	1.28732	1.28692	1.28655	1.28621
-.10	1.29483	1.29366	1.29263	1.29173	1.29094	1.29024	1.28961	1.28904	1.28853	1.28807	1.28764	1.28726	1.28691
-.09	1.29575	1.29455	1.29350	1.29258	1.29176	1.29104	1.29039	1.28981	1.28928	1.28880	1.28837	1.28797	1.28760
-.08	1.29666	1.29543	1.29436	1.29341	1.29258	1.29184	1.29117	1.29057	1.29003	1.28953	1.28908	1.28867	1.28829
-.07	1.29755	1.29630	1.29521	1.29424	1.29339	1.29263	1.29194	1.29133	1.29077	1.29026	1.28979	1.28937	1.28898
-.06	1.29844	1.29717	1.29605	1.29506	1.29419	1.29341	1.29271	1.29208	1.29150	1.29098	1.29050	1.29006	1.28966
-.05	1.29932	1.29802	1.29688	1.29588	1.29498	1.29419	1.29347	1.29282	1.29223	1.29169	1.29120	1.29075	1.29033
-.04	1.30019	1.29887	1.29771	1.29668	1.29577	1.29495	1.29422	1.29356	1.29295	1.29240	1.29190	1.29143	1.29101
-.03	1.30105	1.29971	1.29853	1.29748	1.29655	1.29572	1.29497	1.29429	1.29367	1.29310	1.29259	1.29211	1.29167
-.02	1.30190	1.30054	1.29933	1.29827	1.29732	1.29647	1.29571	1.29501	1.29438	1.29380	1.29327	1.29278	1.29233
-.01	1.30275	1.30136	1.30014	1.29905	1.29809	1.29722	1.29644	1.29573	1.29508	1.29449	1.29395	1.29345	1.29299
.00	1.30358	1.30217	1.30093	1.29983	1.29885	1.29796	1.29717	1.29644	1.29578	1.29518	1.29462	1.29411	1.29364
.01	1.30440	1.30297	1.30171	1.30059	1.29959	1.29870	1.29788	1.29715	1.29647	1.29586	1.29529	1.29477	1.29428
.02	1.30521	1.30376	1.30249	1.30135	1.30034	1.29942	1.29860	1.29785	1.29716	1.29653	1.29595	1.29542	1.29492
.03	1.30601	1.30455	1.30325	1.30210	1.30107	1.30014	1.29930	1.29854	1.29784	1.29720	1.29661	1.29606	1.29556
.04	1.30681	1.30532	1.30401	1.30284	1.30180	1.30086	1.30000	1.29922	1.29851	1.29786	1.29726	1.29670	1.29619
.05	1.30759	1.30609	1.30476	1.30358	1.30252	1.30156	1.30069	1.29990	1.29918	1.29852	1.29790	1.29734	1.29681
.06	1.30836	1.30685	1.30550	1.30430	1.30323	1.30226	1.30138	1.30058	1.29984	1.29917	1.29854	1.29797	1.29743
.07	1.30913	1.30759	1.30624	1.30502	1.30393	1.30295	1.30206	1.30124	1.30049	1.29981	1.29918	1.29859	1.29804
.08	1.30988	1.30833	1.30696	1.30573	1.30463	1.30363	1.30273	1.30190	1.30114	1.30045	1.29980	1.29921	1.29865
.09	1.31063	1.30906	1.30767	1.30643	1.30532	1.30431	1.30339	1.30255	1.30178	1.30108	1.30042	1.29982	1.29925
.10	1.31136	1.30978	1.30838	1.30713	1.30600	1.30498	1.30405	1.30320	1.30242	1.30170	1.30104	1.30042	1.29985
.11	1.31209	1.31049	1.30908	1.30781	1.30667	1.30564	1.30470	1.30384	1.30305	1.30232	1.30165	1.30102	1.30044
.12	1.31280	1.31120	1.30977	1.30849	1.30734	1.30629	1.30534	1.30447	1.30367	1.30293	1.30225	1.30161	1.30103
.13	1.31351	1.31189	1.31045	1.30916	1.30799	1.30694	1.30597	1.30509	1.30428	1.30354	1.30284	1.30220	1.30160
.14	1.31420	1.31257	1.31112	1.30982	1.30864	1.30757	1.30660	1.30571	1.30489	1.30413	1.30343	1.30278	1.30218
.15	1.31489	1.31325	1.31178	1.31047	1.30928	1.30820	1.30722	1.30632	1.30549	1.30473	1.30402	1.30336	1.30275
.16	1.31557	1.31391	1.31244	1.31111	1.30991	1.30883	1.30783	1.30692	1.30609	1.30531	1.30460	1.30393	1.30331
.17	1.31623	1.31457	1.31308	1.31175	1.31054	1.30944	1.30844	1.30752	1.30667	1.30589	1.30517	1.30449	1.30386
.18	1.31689	1.31522	1.31372	1.31237	1.31116	1.31005	1.30904	1.30811	1.30726	1.30646	1.30573	1.30505	1.30441
.19	1.31754	1.31585	1.31435	1.31299	1.31177	1.31065	1.30963	1.30869	1.30783	1.30703	1.30629	1.30560	1.30496
.20	1.31818	1.31648	1.31497	1.31360	1.31237	1.31124	1.31021	1.30927	1.30840	1.30759	1.30684	1.30614	1.30549

5.3 Factors for Computing Critical Values of the Noncentral t-Distribution

Values of λ are given for each $\eta(\delta)$ to give $Pr\{T_f \leq t_o | \delta\} = .90$ (Continued)

	f												
η	14	15	16	17	18	19	20	21	22	23	24	25	26
.21	1.31880	1.31710	1.31558	1.31421	1.31296	1.31183	1.31079	1.30984	1.30896	1.30814	1.30739	1.30668	1.30603
.22	1.31942	1.31771	1.31618	1.31480	1.31355	1.31241	1.31136	1.31040	1.30951	1.30869	1.30793	1.30722	1.30655
.23	1.32003	1.31832	1.31678	1.31539	1.31413	1.31298	1.31192	1.31095	1.31006	1.30923	1.30846	1.30774	1.30707
.24	1.32063	1.31891	1.31736	1.31596	1.31469	1.31354	1.31248	1.31150	1.31060	1.30976	1.30899	1.30826	1.30759
.25	1.32122	1.31949	1.31794	1.31653	1.31526	1.31409	1.31302	1.31204	1.31113	1.31029	1.30951	1.30878	1.30809
.26	1.32180	1.32007	1.31850	1.31709	1.31581	1.31464	1.31357	1.31258	1.31166	1.31081	1.31002	1.30929	1.30860
.27	1.32238	1.32063	1.31906	1.31765	1.31636	1.31518	1.31410	1.31310	1.31218	1.31133	1.31053	1.30979	1.30909
.28	1.32294	1.32119	1.31962	1.31819	1.31690	1.31571	1.31462	1.31362	1.31269	1.31183	1.31103	1.31028	1.30958
.29	1.32349	1.32174	1.32016	1.31873	1.31743	1.31624	1.31514	1.31413	1.31320	1.31233	1.31153	1.31077	1.31007
.30	1.32404	1.32228	1.32069	1.31926	1.31795	1.31675	1.31565	1.31464	1.31370	1.31283	1.31201	1.31125	1.31054
.31	1.32457	1.32281	1.32122	1.31978	1.31846	1.31726	1.31616	1.31514	1.31419	1.31332	1.31250	1.31173	1.31101
.32	1.32510	1.32333	1.32174	1.32029	1.31897	1.31776	1.31665	1.31563	1.31468	1.31380	1.31297	1.31220	1.31148
.33	1.32561	1.32384	1.32225	1.32079	1.31947	1.31826	1.31714	1.31611	1.31516	1.31427	1.31344	1.31267	1.31194
.34	1.32612	1.32435	1.32275	1.32129	1.31996	1.31875	1.31763	1.31659	1.31563	1.31474	1.31390	1.31313	1.31239
.35	1.32662	1.32484	1.32324	1.32178	1.32045	1.31923	1.31810	1.31706	1.31610	1.31520	1.31436	1.31358	1.31284
.36	1.32711	1.32533	1.32372	1.32226	1.32092	1.31970	1.31857	1.31753	1.31656	1.31565	1.31481	1.31402	1.31328
.37	1.32760	1.32581	1.32420	1.32273	1.32139	1.32016	1.31903	1.31798	1.31701	1.31610	1.31526	1.31446	1.31372
.38	1.32807	1.32628	1.32467	1.32320	1.32186	1.32062	1.31948	1.31843	1.31745	1.31654	1.31569	1.31490	1.31415
.39	1.32853	1.32675	1.32513	1.32366	1.32231	1.32107	1.31993	1.31887	1.31789	1.31698	1.31612	1.31532	1.31457
.40	1.32899	1.32720	1.32558	1.32411	1.32276	1.32152	1.32037	1.31931	1.31833	1.31741	1.31655	1.31574	1.31499
.41	1.32944	1.32765	1.32603	1.32455	1.32320	1.32195	1.32080	1.31974	1.31875	1.31783	1.31697	1.31616	1.31540
.42	1.32988	1.32809	1.32646	1.32498	1.32363	1.32238	1.32123	1.32016	1.31917	1.31825	1.31738	1.31657	1.31581
.43	1.33031	1.32852	1.32689	1.32541	1.32405	1.32280	1.32165	1.32058	1.31958	1.31865	1.31779	1.31697	1.31620
.44	1.33073	1.32894	1.32731	1.32583	1.32447	1.32322	1.32206	1.32099	1.31999	1.31906	1.31819	1.31737	1.31660
.45	1.33114	1.32935	1.32773	1.32624	1.32488	1.32363	1.32247	1.32139	1.32039	1.31945	1.31858	1.31776	1.31699
.46	1.33155	1.32976	1.32813	1.32665	1.32528	1.32403	1.32287	1.32179	1.32078	1.31985	1.31897	1.31814	1.31737
.47	1.33195	1.33016	1.32853	1.32705	1.32568	1.32442	1.32326	1.32218	1.32117	1.32023	1.31935	1.31852	1.31774
.48	1.33234	1.33055	1.32892	1.32744	1.32607	1.32481	1.32364	1.32256	1.32155	1.32061	1.31972	1.31889	1.31811
.49	1.33272	1.33094	1.32931	1.32782	1.32645	1.32519	1.32402	1.32294	1.32192	1.32098	1.32009	1.31926	1.31848
.50	1.33310	1.33131	1.32968	1.32819	1.32683	1.32556	1.32439	1.32331	1.32229	1.32134	1.32046	1.31962	1.31883
.51	1.33347	1.33168	1.33005	1.32856	1.32719	1.32593	1.32476	1.32367	1.32265	1.32170	1.32081	1.31998	1.31919
.52	1.33383	1.33204	1.33042	1.32893	1.32756	1.32629	1.32512	1.32403	1.32301	1.32206	1.32116	1.32032	1.31953
.53	1.33418	1.33240	1.33077	1.32928	1.32791	1.32664	1.32547	1.32438	1.32336	1.32240	1.32151	1.32067	1.31987
.54	1.33453	1.33274	1.33112	1.32963	1.32826	1.32699	1.32581	1.32472	1.32370	1.32274	1.32185	1.32100	1.32021
.55	1.33486	1.33308	1.33146	1.32997	1.32860	1.32733	1.32615	1.32506	1.32404	1.32308	1.32218	1.32134	1.32054
.56	1.33520	1.33342	1.33179	1.33031	1.32893	1.32766	1.32649	1.32539	1.32437	1.32341	1.32251	1.32166	1.32086
.57	1.33552	1.33374	1.33212	1.33063	1.32926	1.32799	1.32681	1.32572	1.32469	1.32373	1.32283	1.32198	1.32118
.58	1.33584	1.33406	1.33244	1.33096	1.32958	1.32831	1.32714	1.32604	1.32501	1.32405	1.32315	1.32230	1.32149
.59	1.33615	1.33438	1.33276	1.33127	1.32990	1.32863	1.32745	1.32635	1.32532	1.32436	1.32346	1.32261	1.32180
.60	1.33645	1.33468	1.33307	1.33158	1.33021	1.32894	1.32776	1.32666	1.32563	1.32467	1.32376	1.32291	1.32210

5.3 Factors for Computing Critical Values of the Noncentral t-Distribution

Values of λ are given for each $\eta(\delta)$ to give $Pr\left\{T_f \leq t_o \middle| \delta\right\} = .90$ (Continued)

η	f = 14	15	16	17	18	19	20	21	22	23	24	25	26
.61	1.33675	1.33498	1.33337	1.33188	1.33051	1.32924	1.32806	1.32696	1.32593	1.32497	1.32406	1.32321	1.32240
.62	1.33704	1.33528	1.33366	1.33218	1.33081	1.32954	1.32836	1.32726	1.32623	1.32526	1.32435	1.32350	1.32269
.63	1.33732	1.33556	1.33395	1.33247	1.33110	1.32983	1.32865	1.32755	1.32652	1.32555	1.32464	1.32378	1.32298
.64	1.33760	1.33584	1.33423	1.33275	1.33138	1.33011	1.32893	1.32783	1.32680	1.32583	1.32492	1.32407	1.32326
.65	1.33787	1.33612	1.33451	1.33303	1.33166	1.33039	1.32921	1.32811	1.32708	1.32611	1.32520	1.32434	1.32353
.66	1.33814	1.33639	1.33478	1.33330	1.33194	1.33067	1.32949	1.32838	1.32735	1.32638	1.32547	1.32461	1.32380
.67	1.33840	1.33665	1.33505	1.33357	1.33220	1.33094	1.32976	1.32865	1.32762	1.32665	1.32574	1.32488	1.32406
.68	1.33865	1.33691	1.33531	1.33383	1.33247	1.33120	1.33002	1.32892	1.32788	1.32691	1.32600	1.32514	1.32432
.69	1.33890	1.33716	1.33556	1.33409	1.33272	1.33145	1.33028	1.32917	1.32814	1.32717	1.32626	1.32539	1.32458
.70	1.33914	1.33741	1.33581	1.33434	1.33297	1.33171	1.33053	1.32942	1.32839	1.32742	1.32651	1.32564	1.32483
.71	1.33938	1.33765	1.33605	1.33458	1.33322	1.33195	1.33077	1.32967	1.32864	1.32767	1.32675	1.32589	1.32507
.72	1.33961	1.33788	1.33629	1.33482	1.33346	1.33219	1.33102	1.32991	1.32888	1.32791	1.32699	1.32613	1.32531
.73	1.33984	1.33811	1.33652	1.33505	1.33369	1.33243	1.33125	1.33015	1.32912	1.32814	1.32723	1.32636	1.32555
.74	1.34006	1.33834	1.33675	1.33528	1.33392	1.33266	1.33148	1.33038	1.32935	1.32838	1.32746	1.32659	1.32578
.75	1.34028	1.33856	1.33697	1.33551	1.33415	1.33289	1.33171	1.33061	1.32957	1.32860	1.32769	1.32682	1.32600
.76	1.34049	1.33877	1.33719	1.33573	1.33437	1.33311	1.33193	1.33083	1.32980	1.32882	1.32791	1.32704	1.32622
.77	1.34070	1.33898	1.33740	1.33594	1.33459	1.33332	1.33215	1.33105	1.33001	1.32904	1.32812	1.32726	1.32644
.78	1.34090	1.33919	1.33761	1.33615	1.33480	1.33354	1.33236	1.33126	1.33023	1.32925	1.32834	1.32747	1.32665
.79	1.34110	1.33939	1.33781	1.33635	1.33500	1.33374	1.33257	1.33147	1.33043	1.32946	1.32854	1.32768	1.32686
.80	1.34129	1.33958	1.33801	1.33655	1.33520	1.33395	1.33277	1.33167	1.33064	1.32966	1.32875	1.32788	1.32706
.81	1.34148	1.33978	1.33820	1.33675	1.33540	1.33414	1.33297	1.33187	1.33084	1.32986	1.32895	1.32808	1.32726
.82	1.34167	1.33996	1.33840	1.33694	1.33559	1.33434	1.33316	1.33206	1.33103	1.33006	1.32914	1.32827	1.32745
.83	1.34185	1.34015	1.33858	1.33713	1.33578	1.33453	1.33335	1.33225	1.33122	1.33025	1.32933	1.32846	1.32764
.84	1.34203	1.34033	1.33876	1.33731	1.33597	1.33471	1.33354	1.33244	1.33141	1.33044	1.32952	1.32865	1.32783
.85	1.34220	1.34051	1.33894	1.33749	1.33615	1.33489	1.33372	1.33262	1.33159	1.33062	1.32970	1.32883	1.32801
.86	1.34237	1.34068	1.33912	1.33767	1.33633	1.33507	1.33390	1.33280	1.33177	1.33080	1.32988	1.32901	1.32819
.87	1.34254	1.34085	1.33929	1.33784	1.33650	1.33525	1.33407	1.33298	1.33194	1.33097	1.33005	1.32918	1.32836
.88	1.34270	1.34101	1.33946	1.33801	1.33667	1.33542	1.33425	1.33315	1.33211	1.33114	1.33022	1.32935	1.32853
.89	1.34286	1.34118	1.33962	1.33818	1.33684	1.33558	1.33441	1.33331	1.33228	1.33131	1.33039	1.32952	1.32870
.90	1.34302	1.34134	1.33978	1.33834	1.33700	1.33575	1.33458	1.33348	1.33245	1.33147	1.33055	1.32968	1.32886
.91	1.34318	1.34149	1.33994	1.33850	1.33716	1.33591	1.33474	1.33364	1.33261	1.33163	1.33071	1.32984	1.32902
.92	1.34333	1.34165	1.34009	1.33865	1.33731	1.33606	1.33489	1.33380	1.33276	1.33179	1.33087	1.33000	1.32917
.93	1.34348	1.34180	1.34025	1.33881	1.33747	1.33622	1.33505	1.33395	1.33292	1.33194	1.33102	1.33015	1.32933
.94	1.34363	1.34195	1.34040	1.33896	1.33762	1.33637	1.33520	1.33410	1.33307	1.33209	1.33117	1.33030	1.32947
.95	1.34377	1.34209	1.34054	1.33911	1.33777	1.33652	1.33535	1.33425	1.33321	1.33224	1.33132	1.33045	1.32962
.96	1.34391	1.34224	1.34069	1.33925	1.33791	1.33666	1.33549	1.33439	1.33336	1.33238	1.33146	1.33059	1.32976
.97	1.34406	1.34238	1.34083	1.33939	1.33805	1.33680	1.33563	1.33454	1.33350	1.33253	1.33160	1.33073	1.32990
.98	1.34420	1.34252	1.34097	1.33953	1.33819	1.33694	1.33577	1.33467	1.33364	1.33266	1.33174	1.33087	1.33004
.99	1.34433	1.34266	1.34111	1.33967	1.33833	1.33708	1.33591	1.33481	1.33378	1.33280	1.33188	1.33100	1.33017
1.00	1.34447	1.34280	1.34125	1.33981	1.33847	1.33722	1.33605	1.33495	1.33391	1.33293	1.33201	1.33114	1.33031

5.3 Factors for Computing Critical Values of the Noncentral t-Distribution

Values of λ are given for each $\eta(\delta)$ to give $Pr\{T_f \leq t_o | \delta\} = .90$ (Continued)

	f												
η	27	28	29	30	31	32	33	34	35	36	40	44	48
-1.00	1.22372	1.22483	1.22589	1.22688	1.22783	1.22873	1.22959	1.23041	1.23119	1.23194	1.23463	1.23694	1.23894
-.99	1.22413	1.22523	1.22627	1.22726	1.22820	1.22909	1.22994	1.23075	1.23153	1.23227	1.23494	1.23723	1.23922
-.98	1.22455	1.22564	1.22668	1.22766	1.22858	1.22947	1.23031	1.23111	1.23188	1.23262	1.23526	1.23753	1.23950
-.97	1.22499	1.22607	1.22710	1.22806	1.22898	1.22986	1.23069	1.23149	1.23225	1.23298	1.23560	1.23784	1.23979
-.96	1.22545	1.22652	1.22753	1.22849	1.22940	1.23026	1.23109	1.23188	1.23263	1.23335	1.23594	1.23817	1.24010
-.95	1.22592	1.22698	1.22798	1.22893	1.22983	1.23068	1.23150	1.23228	1.23302	1.23373	1.23630	1.23850	1.24042
-.94	1.22641	1.22745	1.22844	1.22938	1.23027	1.23111	1.23192	1.23269	1.23343	1.23413	1.23667	1.23885	1.24074
-.93	1.22691	1.22794	1.22892	1.22984	1.23072	1.23156	1.23235	1.23311	1.23384	1.23454	1.23705	1.23920	1.24108
-.92	1.22743	1.22845	1.22941	1.23032	1.23119	1.23201	1.23280	1.23355	1.23427	1.23496	1.23744	1.23957	1.24142
-.91	1.22796	1.22896	1.22991	1.23081	1.23167	1.23248	1.23326	1.23400	1.23471	1.23539	1.23784	1.23994	1.24177
-.90	1.22850	1.22949	1.23043	1.23132	1.23216	1.23296	1.23373	1.23446	1.23516	1.23583	1.23825	1.24033	1.24213
-.89	1.22906	1.23003	1.23095	1.23183	1.23266	1.23345	1.23421	1.23493	1.23562	1.23628	1.23867	1.24072	1.24251
-.88	1.22963	1.23058	1.23149	1.23236	1.23318	1.23396	1.23470	1.23541	1.23609	1.23675	1.23910	1.24112	1.24288
-.87	1.23021	1.23115	1.23204	1.23289	1.23370	1.23447	1.23520	1.23591	1.23658	1.23722	1.23954	1.24153	1.24327
-.86	1.23080	1.23173	1.23261	1.23344	1.23424	1.23499	1.23572	1.23641	1.23707	1.23770	1.23999	1.24195	1.24367
-.85	1.23140	1.23231	1.23318	1.23400	1.23478	1.23553	1.23624	1.23692	1.23757	1.23819	1.24044	1.24238	1.24407
-.84	1.23201	1.23291	1.23376	1.23457	1.23534	1.23607	1.23677	1.23744	1.23808	1.23869	1.24091	1.24281	1.24448
-.83	1.23263	1.23352	1.23435	1.23515	1.23590	1.23662	1.23731	1.23797	1.23860	1.23920	1.24138	1.24326	1.24490
-.82	1.23327	1.23413	1.23495	1.23573	1.23648	1.23718	1.23786	1.23850	1.23912	1.23971	1.24186	1.24371	1.24532
-.81	1.23391	1.23476	1.23556	1.23633	1.23706	1.23775	1.23841	1.23905	1.23966	1.24024	1.24235	1.24416	1.24575
-.80	1.23456	1.23539	1.23618	1.23693	1.23765	1.23833	1.23898	1.23960	1.24020	1.24077	1.24284	1.24463	1.24619
-.79	1.23522	1.23604	1.23681	1.23755	1.23825	1.23891	1.23955	1.24016	1.24075	1.24131	1.24334	1.24510	1.24663
-.78	1.23589	1.23669	1.23744	1.23817	1.23885	1.23951	1.24013	1.24073	1.24130	1.24186	1.24385	1.24557	1.24708
-.77	1.23656	1.23735	1.23809	1.23879	1.23946	1.24011	1.24072	1.24131	1.24187	1.24241	1.24436	1.24605	1.24753
-.76	1.23725	1.23801	1.23874	1.23943	1.24009	1.24071	1.24131	1.24189	1.24244	1.24297	1.24489	1.24654	1.24799
-.75	1.23794	1.23868	1.23939	1.24007	1.24071	1.24133	1.24191	1.24248	1.24302	1.24353	1.24541	1.24704	1.24846
-.74	1.23864	1.23936	1.24006	1.24072	1.24135	1.24195	1.24252	1.24307	1.24360	1.24410	1.24594	1.24754	1.24893
-.73	1.23934	1.24005	1.24073	1.24137	1.24198	1.24257	1.24313	1.24367	1.24419	1.24468	1.24648	1.24804	1.24941
-.72	1.24005	1.24074	1.24140	1.24203	1.24263	1.24320	1.24375	1.24428	1.24478	1.24526	1.24702	1.24855	1.24989
-.71	1.24077	1.24144	1.24208	1.24270	1.24328	1.24384	1.24438	1.24489	1.24538	1.24585	1.24757	1.24906	1.25037
-.70	1.24149	1.24215	1.24277	1.24337	1.24394	1.24448	1.24500	1.24550	1.24598	1.24645	1.24813	1.24958	1.25086
-.69	1.24221	1.24285	1.24346	1.24404	1.24460	1.24513	1.24564	1.24613	1.24659	1.24704	1.24868	1.25011	1.25136
-.68	1.24295	1.24357	1.24416	1.24472	1.24527	1.24578	1.24628	1.24675	1.24721	1.24765	1.24924	1.25063	1.25186
-.67	1.24368	1.24429	1.24486	1.24541	1.24594	1.24644	1.24692	1.24738	1.24783	1.24825	1.24981	1.25117	1.25236
-.66	1.24442	1.24501	1.24557	1.24610	1.24661	1.24710	1.24757	1.24802	1.24845	1.24886	1.25038	1.25170	1.25287
-.65	1.24517	1.24574	1.24628	1.24679	1.24729	1.24776	1.24822	1.24865	1.24907	1.24948	1.25095	1.25224	1.25338
-.64	1.24592	1.24647	1.24699	1.24749	1.24797	1.24843	1.24887	1.24930	1.24970	1.25010	1.25153	1.25278	1.25389
-.63	1.24667	1.24720	1.24771	1.24819	1.24866	1.24910	1.24953	1.24994	1.25034	1.25072	1.25211	1.25333	1.25440
-.62	1.24743	1.24794	1.24843	1.24890	1.24935	1.24978	1.25019	1.25059	1.25097	1.25134	1.25269	1.25388	1.25492
-.61	1.24818	1.24868	1.24915	1.24961	1.25004	1.25046	1.25086	1.25124	1.25161	1.25197	1.25328	1.25443	1.25545

5.3 Factors for Computing Critical Values of the Noncentral t-Distribution

Values of λ are given for each $\eta(\delta)$ to give $\Pr\left\{T_f \le t_o \mid \delta\right\} = .90$ (Continued)

	f												
η	27	28	29	30	31	32	33	34	35	36	40	44	48
-.60	1.24895	1.24942	1.24988	1.25032	1.25074	1.25114	1.25152	1.25190	1.25226	1.25260	1.25387	1.25498	1.25597
-.59	1.24971	1.25017	1.25061	1.25103	1.25143	1.25182	1.25220	1.25255	1.25290	1.25324	1.25446	1.25554	1.25650
-.58	1.25048	1.25092	1.25134	1.25174	1.25213	1.25251	1.25287	1.25321	1.25355	1.25387	1.25506	1.25610	1.25703
-.57	1.25125	1.25167	1.25207	1.25246	1.25284	1.25320	1.25354	1.25388	1.25420	1.25451	1.25566	1.25666	1.25756
-.56	1.25202	1.25242	1.25281	1.25318	1.25354	1.25389	1.25422	1.25454	1.25485	1.25515	1.25625	1.25723	1.25810
-.55	1.25279	1.25318	1.25355	1.25390	1.25425	1.25458	1.25490	1.25521	1.25551	1.25579	1.25686	1.25780	1.25863
-.54	1.25356	1.25393	1.25429	1.25463	1.25496	1.25527	1.25558	1.25588	1.25616	1.25644	1.25746	1.25836	1.25917
-.53	1.25434	1.25469	1.25503	1.25535	1.25567	1.25597	1.25626	1.25655	1.25682	1.25708	1.25806	1.25893	1.25971
-.52	1.25511	1.25545	1.25577	1.25608	1.25638	1.25667	1.25695	1.25722	1.25748	1.25773	1.25867	1.25951	1.26026
-.51	1.25589	1.25621	1.25651	1.25681	1.25709	1.25737	1.25763	1.25789	1.25814	1.25838	1.25928	1.26008	1.26080
-.50	1.25667	1.25697	1.25725	1.25753	1.25780	1.25806	1.25832	1.25856	1.25880	1.25903	1.25989	1.26065	1.26134
-.49	1.25745	1.25773	1.25800	1.25826	1.25852	1.25876	1.25900	1.25924	1.25946	1.25968	1.26050	1.26123	1.26189
-.48	1.25823	1.25849	1.25874	1.25899	1.25923	1.25947	1.25969	1.25991	1.26013	1.26033	1.26111	1.26181	1.26244
-.47	1.25900	1.25925	1.25949	1.25972	1.25995	1.26017	1.26038	1.26059	1.26079	1.26099	1.26172	1.26239	1.26299
-.46	1.25978	1.26001	1.26023	1.26045	1.26066	1.26087	1.26107	1.26126	1.26145	1.26164	1.26234	1.26297	1.26354
-.45	1.26056	1.26077	1.26098	1.26118	1.26138	1.26157	1.26176	1.26194	1.26212	1.26229	1.26295	1.26354	1.26409
-.44	1.26134	1.26153	1.26172	1.26191	1.26209	1.26227	1.26245	1.26262	1.26278	1.26295	1.26356	1.26413	1.26464
-.43	1.26212	1.26229	1.26247	1.26264	1.26281	1.26297	1.26314	1.26329	1.26345	1.26360	1.26418	1.26471	1.26519
-.42	1.26289	1.26305	1.26321	1.26337	1.26352	1.26368	1.26383	1.26397	1.26412	1.26426	1.26479	1.26529	1.26574
-.41	1.26367	1.26381	1.26396	1.26410	1.26424	1.26438	1.26451	1.26465	1.26478	1.26491	1.26541	1.26587	1.26630
-.40	1.26444	1.26457	1.26470	1.26483	1.26495	1.26508	1.26520	1.26532	1.26545	1.26556	1.26602	1.26645	1.26685
-.39	1.26522	1.26533	1.26544	1.26555	1.26567	1.26578	1.26589	1.26600	1.26611	1.26622	1.26664	1.26703	1.26740
-.38	1.26599	1.26609	1.26618	1.26628	1.26638	1.26648	1.26658	1.26668	1.26677	1.26687	1.26725	1.26761	1.26795
-.37	1.26676	1.26684	1.26692	1.26701	1.26709	1.26718	1.26726	1.26735	1.26744	1.26752	1.26787	1.26819	1.26851
-.36	1.26753	1.26759	1.26766	1.26773	1.26780	1.26787	1.26795	1.26802	1.26810	1.26818	1.26848	1.26878	1.26906
-.35	1.26830	1.26835	1.26840	1.26845	1.26851	1.26857	1.26863	1.26870	1.26876	1.26883	1.26909	1.26936	1.26961
-.34	1.26907	1.26910	1.26913	1.26917	1.26922	1.26927	1.26932	1.26937	1.26942	1.26948	1.26970	1.26994	1.27017
-.33	1.26983	1.26984	1.26987	1.26989	1.26992	1.26996	1.27000	1.27004	1.27008	1.27013	1.27032	1.27052	1.27072
-.32	1.27059	1.27059	1.27060	1.27061	1.27063	1.27065	1.27068	1.27071	1.27074	1.27077	1.27093	1.27109	1.27127
-.31	1.27135	1.27133	1.27133	1.27133	1.27133	1.27134	1.27136	1.27137	1.27140	1.27142	1.27154	1.27167	1.27182
-.30	1.27211	1.27208	1.27205	1.27204	1.27203	1.27203	1.27203	1.27204	1.27205	1.27206	1.27214	1.27225	1.27237
-.29	1.27286	1.27282	1.27278	1.27275	1.27273	1.27272	1.27271	1.27270	1.27270	1.27271	1.27275	1.27283	1.27292
-.28	1.27361	1.27355	1.27350	1.27346	1.27343	1.27340	1.27338	1.27337	1.27336	1.27335	1.27336	1.27340	1.27347
-.27	1.27436	1.27429	1.27422	1.27417	1.27412	1.27409	1.27405	1.27403	1.27401	1.27399	1.27396	1.27398	1.27402
-.26	1.27511	1.27502	1.27494	1.27487	1.27482	1.27477	1.27472	1.27469	1.27466	1.27463	1.27457	1.27455	1.27456
-.25	1.27585	1.27575	1.27566	1.27558	1.27551	1.27544	1.27539	1.27534	1.27530	1.27527	1.27517	1.27512	1.27511
-.24	1.27659	1.27647	1.27637	1.27628	1.27619	1.27612	1.27606	1.27600	1.27595	1.27590	1.27577	1.27569	1.27565
-.23	1.27733	1.27720	1.27708	1.27697	1.27688	1.27679	1.27672	1.27665	1.27659	1.27653	1.27637	1.27626	1.27619
-.22	1.27806	1.27792	1.27779	1.27767	1.27756	1.27747	1.27738	1.27730	1.27723	1.27716	1.27696	1.27683	1.27674
-.21	1.27879	1.27863	1.27849	1.27836	1.27824	1.27813	1.27804	1.27795	1.27787	1.27779	1.27756	1.27739	1.27728

5.3 Factors for Computing Critical Values of the Noncentral t-Distribution
Values of λ are given for each $\eta(\delta)$ to give $Pr\left\{T_f \le t_o \middle| \delta\right\} = .90$ (Continued)

η	f = 27	28	29	30	31	32	33	34	35	36	40	44	48
-.20	1.27952	1.27935	1.27919	1.27905	1.27892	1.27880	1.27869	1.27859	1.27850	1.27842	1.27815	1.27795	1.27781
-.19	1.28024	1.28006	1.27989	1.27973	1.27959	1.27946	1.27934	1.27923	1.27913	1.27904	1.27874	1.27852	1.27835
-.18	1.28096	1.28076	1.28058	1.28041	1.28026	1.28012	1.27999	1.27987	1.27976	1.27966	1.27933	1.27908	1.27889
-.17	1.28168	1.28147	1.28127	1.28109	1.28093	1.28078	1.28064	1.28051	1.28039	1.28028	1.27991	1.27963	1.27942
-.16	1.28239	1.28217	1.28196	1.28177	1.28159	1.28143	1.28128	1.28115	1.28102	1.28090	1.28050	1.28019	1.27995
-.15	1.28310	1.28286	1.28264	1.28244	1.28226	1.28208	1.28192	1.28178	1.28164	1.28151	1.28108	1.28074	1.28048
-.14	1.28381	1.28355	1.28332	1.28311	1.28291	1.28273	1.28256	1.28240	1.28226	1.28212	1.28166	1.28130	1.28101
-.13	1.28451	1.28424	1.28400	1.28377	1.28357	1.28337	1.28320	1.28303	1.28287	1.28273	1.28223	1.28185	1.28154
-.12	1.28520	1.28493	1.28467	1.28444	1.28422	1.28402	1.28383	1.28365	1.28349	1.28333	1.28281	1.28239	1.28206
-.11	1.28589	1.28561	1.28534	1.28509	1.28486	1.28465	1.28445	1.28427	1.28410	1.28393	1.28338	1.28294	1.28258
-.10	1.28658	1.28628	1.28600	1.28575	1.28551	1.28529	1.28508	1.28488	1.28470	1.28453	1.28395	1.28348	1.28310
-.09	1.28726	1.28695	1.28666	1.28640	1.28615	1.28592	1.28570	1.28550	1.28531	1.28513	1.28451	1.28402	1.28362
-.08	1.28794	1.28762	1.28732	1.28704	1.28678	1.28654	1.28632	1.28611	1.28591	1.28572	1.28507	1.28456	1.28413
-.07	1.28862	1.28828	1.28797	1.28768	1.28742	1.28716	1.28693	1.28671	1.28650	1.28631	1.28563	1.28509	1.28464
-.06	1.28929	1.28894	1.28862	1.28832	1.28804	1.28778	1.28754	1.28731	1.28710	1.28689	1.28619	1.28562	1.28515
-.05	1.28995	1.28959	1.28926	1.28895	1.28867	1.28840	1.28815	1.28791	1.28769	1.28748	1.28674	1.28615	1.28566
-.04	1.29061	1.29024	1.28990	1.28958	1.28929	1.28901	1.28875	1.28850	1.28827	1.28805	1.28730	1.28668	1.28617
-.03	1.29126	1.29089	1.29054	1.29021	1.28990	1.28962	1.28935	1.28909	1.28885	1.28863	1.28784	1.28720	1.28667
-.02	1.29191	1.29153	1.29117	1.29083	1.29051	1.29022	1.28994	1.28968	1.28943	1.28920	1.28839	1.28772	1.28717
-.01	1.29256	1.29216	1.29179	1.29144	1.29112	1.29082	1.29053	1.29026	1.29001	1.28977	1.28893	1.28824	1.28767
.00	1.29320	1.29279	1.29241	1.29206	1.29172	1.29141	1.29112	1.29084	1.29058	1.29033	1.28946	1.28875	1.28816
.01	1.29384	1.29342	1.29303	1.29266	1.29232	1.29200	1.29170	1.29141	1.29115	1.29089	1.29000	1.28926	1.28865
.02	1.29447	1.29404	1.29364	1.29327	1.29292	1.29259	1.29228	1.29198	1.29171	1.29145	1.29053	1.28977	1.28914
.03	1.29509	1.29465	1.29425	1.29386	1.29350	1.29317	1.29285	1.29255	1.29227	1.29200	1.29106	1.29028	1.28962
.04	1.29571	1.29526	1.29485	1.29446	1.29409	1.29374	1.29342	1.29311	1.29282	1.29255	1.29158	1.29078	1.29011
.05	1.29632	1.29587	1.29544	1.29504	1.29467	1.29432	1.29398	1.29367	1.29337	1.29309	1.29210	1.29128	1.29059
.06	1.29693	1.29647	1.29603	1.29563	1.29524	1.29488	1.29454	1.29422	1.29392	1.29363	1.29261	1.29177	1.29106
.07	1.29754	1.29706	1.29662	1.29621	1.29582	1.29545	1.29510	1.29477	1.29446	1.29417	1.29313	1.29226	1.29153
.08	1.29814	1.29765	1.29720	1.29678	1.29638	1.29601	1.29565	1.29532	1.29500	1.29470	1.29364	1.29275	1.29200
.09	1.29873	1.29824	1.29778	1.29735	1.29694	1.29656	1.29620	1.29586	1.29553	1.29523	1.29414	1.29324	1.29247
.10	1.29932	1.29882	1.29835	1.29791	1.29750	1.29711	1.29674	1.29639	1.29606	1.29575	1.29464	1.29372	1.29293
.11	1.29990	1.29939	1.29892	1.29847	1.29805	1.29765	1.29728	1.29693	1.29659	1.29627	1.29514	1.29419	1.29339
.12	1.30048	1.29996	1.29948	1.29902	1.29860	1.29819	1.29781	1.29745	1.29711	1.29678	1.29563	1.29467	1.29385
.13	1.30105	1.30052	1.30003	1.29957	1.29914	1.29873	1.29834	1.29797	1.29763	1.29729	1.29612	1.29514	1.29430
.14	1.30161	1.30108	1.30058	1.30012	1.29968	1.29926	1.29887	1.29849	1.29814	1.29780	1.29661	1.29560	1.29475
.15	1.30217	1.30163	1.30113	1.30065	1.30021	1.29978	1.29938	1.29900	1.29864	1.29830	1.29709	1.29607	1.29520
.16	1.30273	1.30218	1.30167	1.30119	1.30073	1.30030	1.29990	1.29951	1.29915	1.29880	1.29756	1.29653	1.29564
.17	1.30327	1.30272	1.30220	1.30172	1.30126	1.30082	1.30041	1.30002	1.29965	1.29929	1.29804	1.29698	1.29608
.18	1.30382	1.30326	1.30273	1.30224	1.30177	1.30133	1.30091	1.30052	1.30014	1.29978	1.29850	1.29743	1.29652
.19	1.30435	1.30379	1.30326	1.30276	1.30228	1.30184	1.30141	1.30101	1.30063	1.30026	1.29897	1.29788	1.29695
.20	1.30488	1.30431	1.30377	1.30327	1.30279	1.30234	1.30191	1.30150	1.30111	1.30074	1.29943	1.29832	1.29738

5.3 Factors for Computing Critical Values of the Noncentral t-Distribution

Values of λ are given for each $\eta(\delta)$ to give $\Pr\{T_f \le t_o \mid \delta\} = .90$ (Continued)

	f												
η	27	28	29	30	31	32	33	34	35	36	40	44	48
.21	1.30541	1.30483	1.30429	1.30377	1.30329	1.30283	1.30240	1.30198	1.30159	1.30122	1.29989	1.29876	1.29780
.22	1.30593	1.30534	1.30479	1.30428	1.30379	1.30332	1.30288	1.30246	1.30207	1.30169	1.30034	1.29920	1.29822
.23	1.30644	1.30585	1.30530	1.30477	1.30428	1.30381	1.30336	1.30294	1.30254	1.30215	1.30078	1.29963	1.29864
.24	1.30695	1.30635	1.30579	1.30526	1.30476	1.30429	1.30384	1.30341	1.30300	1.30261	1.30123	1.30006	1.29905
.25	1.30745	1.30685	1.30628	1.30575	1.30524	1.30476	1.30431	1.30387	1.30346	1.30307	1.30167	1.30048	1.29946
.26	1.30795	1.30734	1.30677	1.30623	1.30572	1.30523	1.30477	1.30433	1.30392	1.30352	1.30210	1.30090	1.29987
.27	1.30844	1.30783	1.30725	1.30670	1.30618	1.30569	1.30523	1.30479	1.30437	1.30397	1.30253	1.30132	1.30027
.28	1.30892	1.30830	1.30772	1.30717	1.30665	1.30615	1.30568	1.30524	1.30481	1.30441	1.30296	1.30173	1.30067
.29	1.30940	1.30878	1.30819	1.30763	1.30711	1.30661	1.30613	1.30568	1.30525	1.30484	1.30338	1.30213	1.30106
.30	1.30987	1.30925	1.30865	1.30809	1.30756	1.30706	1.30658	1.30612	1.30569	1.30528	1.30379	1.30254	1.30145
.31	1.31034	1.30971	1.30911	1.30854	1.30801	1.30750	1.30702	1.30656	1.30612	1.30570	1.30421	1.30293	1.30184
.32	1.31080	1.31016	1.30956	1.30899	1.30845	1.30794	1.30745	1.30699	1.30655	1.30612	1.30461	1.30333	1.30222
.33	1.31126	1.31061	1.31001	1.30943	1.30889	1.30837	1.30788	1.30741	1.30697	1.30654	1.30502	1.30372	1.30260
.34	1.31171	1.31106	1.31045	1.30987	1.30932	1.30880	1.30830	1.30783	1.30738	1.30695	1.30541	1.30410	1.30298
.35	1.31215	1.31150	1.31088	1.31030	1.30975	1.30922	1.30872	1.30825	1.30779	1.30736	1.30581	1.30449	1.30335
.36	1.31259	1.31193	1.31131	1.31072	1.31017	1.30964	1.30914	1.30866	1.30820	1.30776	1.30620	1.30486	1.30371
.37	1.31302	1.31236	1.31173	1.31114	1.31058	1.31005	1.30954	1.30906	1.30860	1.30816	1.30658	1.30524	1.30407
.38	1.31344	1.31278	1.31215	1.31156	1.31099	1.31046	1.30995	1.30946	1.30900	1.30855	1.30696	1.30560	1.30443
.39	1.31386	1.31319	1.31256	1.31196	1.31140	1.31086	1.31034	1.30986	1.30939	1.30894	1.30734	1.30597	1.30479
.40	1.31428	1.31360	1.31297	1.31237	1.31180	1.31125	1.31074	1.31024	1.30977	1.30933	1.30771	1.30633	1.30514
.41	1.31468	1.31401	1.31337	1.31277	1.31219	1.31164	1.31112	1.31063	1.31016	1.30970	1.30807	1.30668	1.30548
.42	1.31509	1.31441	1.31377	1.31316	1.31258	1.31203	1.31151	1.31101	1.31053	1.31008	1.30844	1.30704	1.30582
.43	1.31548	1.31480	1.31415	1.31354	1.31296	1.31241	1.31188	1.31138	1.31090	1.31044	1.30879	1.30738	1.30616
.44	1.31587	1.31519	1.31454	1.31392	1.31334	1.31278	1.31226	1.31175	1.31127	1.31081	1.30915	1.30772	1.30649
.45	1.31626	1.31557	1.31492	1.31430	1.31371	1.31315	1.31262	1.31211	1.31163	1.31117	1.30949	1.30806	1.30682
.46	1.31664	1.31594	1.31529	1.31467	1.31408	1.31352	1.31298	1.31247	1.31199	1.31152	1.30984	1.30840	1.30715
.47	1.31701	1.31631	1.31566	1.31503	1.31444	1.31388	1.31334	1.31283	1.31234	1.31187	1.31017	1.30873	1.30747
.48	1.31738	1.31668	1.31602	1.31539	1.31480	1.31423	1.31369	1.31318	1.31268	1.31221	1.31051	1.30905	1.30778
.49	1.31774	1.31704	1.31638	1.31575	1.31515	1.31458	1.31404	1.31352	1.31302	1.31255	1.31084	1.30937	1.30810
.50	1.31809	1.31739	1.31673	1.31609	1.31549	1.31492	1.31438	1.31386	1.31336	1.31288	1.31116	1.30969	1.30840
.51	1.31844	1.31774	1.31707	1.31644	1.31583	1.31526	1.31471	1.31419	1.31369	1.31321	1.31148	1.31000	1.30871
.52	1.31879	1.31808	1.31741	1.31677	1.31617	1.31559	1.31504	1.31452	1.31402	1.31354	1.31180	1.31031	1.30901
.53	1.31913	1.31842	1.31774	1.31711	1.31650	1.31592	1.31537	1.31484	1.31434	1.31385	1.31211	1.31061	1.30930
.54	1.31946	1.31875	1.31807	1.31743	1.31682	1.31624	1.31569	1.31516	1.31465	1.31417	1.31241	1.31091	1.30959
.55	1.31979	1.31907	1.31840	1.31775	1.31714	1.31656	1.31600	1.31547	1.31496	1.31448	1.31272	1.31120	1.30988
.56	1.32011	1.31939	1.31872	1.31807	1.31746	1.31687	1.31631	1.31578	1.31527	1.31478	1.31301	1.31149	1.31016
.57	1.32042	1.31971	1.31903	1.31838	1.31777	1.31718	1.31662	1.31608	1.31557	1.31508	1.31330	1.31178	1.31044
.58	1.32074	1.32002	1.31934	1.31869	1.31807	1.31748	1.31692	1.31638	1.31587	1.31538	1.31359	1.31206	1.31072
.59	1.32104	1.32032	1.31964	1.31899	1.31837	1.31778	1.31722	1.31668	1.31616	1.31567	1.31388	1.31233	1.31099
.60	1.32134	1.32062	1.31993	1.31928	1.31866	1.31807	1.31751	1.31697	1.31645	1.31595	1.31415	1.31261	1.31125

5.3 Factors for Computing Critical Values of the Noncentral t-Distribution

Values of λ are given for each $\eta(\delta)$ to give $\Pr\{T_f \le t_o \mid \delta\} = .90$ (Continued)

	f												
η	27	28	29	30	31	32	33	34	35	36	40	44	48
.61	1.32164	1.32091	1.32023	1.31957	1.31895	1.31836	1.31779	1.31725	1.31673	1.31623	1.31443	1.31287	1.31152
.62	1.32193	1.32120	1.32051	1.31986	1.31923	1.31864	1.31807	1.31753	1.31701	1.31651	1.31470	1.31314	1.31177
.63	1.32221	1.32148	1.32079	1.32014	1.31951	1.31892	1.31835	1.31780	1.31728	1.31678	1.31496	1.31340	1.31203
.64	1.32249	1.32176	1.32107	1.32041	1.31979	1.31919	1.31862	1.31807	1.31755	1.31704	1.31522	1.31365	1.31228
.65	1.32276	1.32203	1.32134	1.32068	1.32006	1.31946	1.31888	1.31833	1.31781	1.31731	1.31548	1.31390	1.31252
.66	1.32303	1.32230	1.32161	1.32095	1.32032	1.31972	1.31914	1.31859	1.31807	1.31756	1.31573	1.31415	1.31276
.67	1.32329	1.32256	1.32187	1.32121	1.32058	1.31998	1.31940	1.31885	1.31832	1.31782	1.31598	1.31439	1.31300
.68	1.32355	1.32282	1.32213	1.32146	1.32083	1.32023	1.31965	1.31910	1.31857	1.31806	1.31622	1.31463	1.31323
.69	1.32381	1.32307	1.32238	1.32171	1.32108	1.32048	1.31990	1.31935	1.31882	1.31831	1.31646	1.31486	1.31346
.70	1.32405	1.32332	1.32262	1.32196	1.32133	1.32072	1.32014	1.31959	1.31905	1.31854	1.31669	1.31509	1.31369
.71	1.32430	1.32356	1.32287	1.32220	1.32156	1.32096	1.32038	1.31982	1.31929	1.31878	1.31692	1.31531	1.31391
.72	1.32454	1.32380	1.32310	1.32244	1.32180	1.32119	1.32061	1.32005	1.31952	1.31901	1.31715	1.31554	1.31412
.73	1.32477	1.32403	1.32333	1.32267	1.32203	1.32142	1.32084	1.32028	1.31975	1.31923	1.31737	1.31575	1.31434
.74	1.32500	1.32426	1.32356	1.32289	1.32226	1.32165	1.32106	1.32051	1.31997	1.31946	1.31759	1.31597	1.31455
.75	1.32522	1.32449	1.32378	1.32312	1.32248	1.32187	1.32128	1.32072	1.32019	1.31967	1.31780	1.31617	1.31475
.76	1.32544	1.32471	1.32400	1.32333	1.32269	1.32208	1.32150	1.32094	1.32040	1.31988	1.31801	1.31638	1.31495
.77	1.32566	1.32492	1.32422	1.32355	1.32291	1.32229	1.32171	1.32115	1.32061	1.32009	1.31821	1.31658	1.31515
.78	1.32587	1.32513	1.32443	1.32376	1.32311	1.32250	1.32192	1.32135	1.32081	1.32030	1.31841	1.31678	1.31534
.79	1.32608	1.32534	1.32463	1.32396	1.32332	1.32270	1.32212	1.32155	1.32101	1.32050	1.31861	1.31697	1.31553
.80	1.32628	1.32554	1.32483	1.32416	1.32352	1.32290	1.32232	1.32175	1.32121	1.32069	1.31880	1.31716	1.31572
.81	1.32648	1.32574	1.32503	1.32436	1.32371	1.32310	1.32251	1.32194	1.32140	1.32088	1.31899	1.31734	1.31590
.82	1.32667	1.32593	1.32522	1.32455	1.32390	1.32329	1.32270	1.32213	1.32159	1.32107	1.31917	1.31752	1.31608
.83	1.32686	1.32612	1.32541	1.32474	1.32409	1.32347	1.32288	1.32232	1.32178	1.32125	1.31935	1.31770	1.31625
.84	1.32704	1.32630	1.32559	1.32492	1.32427	1.32366	1.32307	1.32250	1.32196	1.32143	1.31953	1.31787	1.31642
.85	1.32723	1.32648	1.32577	1.32510	1.32445	1.32384	1.32324	1.32268	1.32213	1.32161	1.31970	1.31804	1.31659
.86	1.32740	1.32666	1.32595	1.32527	1.32463	1.32401	1.32342	1.32285	1.32230	1.32178	1.31987	1.31821	1.31675
.87	1.32758	1.32683	1.32612	1.32545	1.32480	1.32418	1.32359	1.32302	1.32247	1.32195	1.32003	1.31837	1.31691
.88	1.32775	1.32700	1.32629	1.32561	1.32497	1.32435	1.32375	1.32318	1.32264	1.32211	1.32020	1.31853	1.31706
.89	1.32791	1.32717	1.32646	1.32578	1.32513	1.32451	1.32392	1.32335	1.32280	1.32227	1.32035	1.31869	1.31722
.90	1.32807	1.32733	1.32662	1.32594	1.32529	1.32467	1.32407	1.32350	1.32296	1.32243	1.32051	1.31884	1.31737
.91	1.32823	1.32749	1.32678	1.32610	1.32545	1.32483	1.32423	1.32366	1.32311	1.32258	1.32066	1.31899	1.31751
.92	1.32839	1.32764	1.32693	1.32625	1.32560	1.32498	1.32438	1.32381	1.32326	1.32273	1.32081	1.31913	1.31765
.93	1.32854	1.32779	1.32708	1.32640	1.32575	1.32513	1.32453	1.32396	1.32341	1.32288	1.32095	1.31927	1.31779
.94	1.32869	1.32794	1.32723	1.32655	1.32590	1.32527	1.32468	1.32410	1.32355	1.32302	1.32109	1.31941	1.31793
.95	1.32883	1.32809	1.32737	1.32669	1.32604	1.32542	1.32482	1.32424	1.32369	1.32316	1.32123	1.31954	1.31806
.96	1.32898	1.32823	1.32751	1.32683	1.32618	1.32555	1.32496	1.32438	1.32383	1.32330	1.32136	1.31968	1.31819
.97	1.32912	1.32837	1.32765	1.32697	1.32632	1.32569	1.32509	1.32452	1.32396	1.32343	1.32149	1.31980	1.31832
.98	1.32925	1.32850	1.32779	1.32710	1.32645	1.32582	1.32522	1.32465	1.32410	1.32356	1.32162	1.31993	1.31844
.99	1.32939	1.32863	1.32792	1.32723	1.32658	1.32595	1.32535	1.32478	1.32422	1.32369	1.32175	1.32005	1.31856
1.00	1.32952	1.32876	1.32805	1.32736	1.32671	1.32608	1.32548	1.32490	1.32435	1.32382	1.32187	1.32017	1.31867

5.3 Factors for Computing Critical Values of the Noncentral t-Distribution

Values of λ are given for each $\eta(\delta)$ to give $\Pr\left\{T_f \le t_o \middle| \delta\right\} = .90$ (Continued)

	f												
η	52	56	60	64	68	72	76	80	84	144	240	480	∞
-1.00	1.24070	1.24227	1.24366	1.24493	1.24607	1.24712	1.24808	1.24896	1.24978	1.25754	1.26310	1.26861	1.28155
-.99	1.24096	1.24251	1.24390	1.24515	1.24629	1.24733	1.24828	1.24916	1.24997	1.25767	1.26320	1.26867	1.28155
-.98	1.24123	1.24277	1.24414	1.24539	1.24651	1.24754	1.24849	1.24936	1.25017	1.25781	1.26330	1.26874	1.28155
-.97	1.24151	1.24303	1.24440	1.24563	1.24675	1.24777	1.24870	1.24957	1.25037	1.25796	1.26341	1.26881	1.28155
-.96	1.24180	1.24331	1.24466	1.24588	1.24699	1.24800	1.24893	1.24979	1.25058	1.25811	1.26352	1.26889	1.28155
-.95	1.24210	1.24359	1.24493	1.24614	1.24724	1.24824	1.24916	1.25001	1.25080	1.25826	1.26363	1.26897	1.28155
-.94	1.24241	1.24389	1.24521	1.24641	1.24750	1.24849	1.24940	1.25024	1.25102	1.25842	1.26375	1.26904	1.28155
-.93	1.24272	1.24419	1.24550	1.24668	1.24776	1.24874	1.24965	1.25048	1.25125	1.25859	1.26387	1.26912	1.28155
-.92	1.24305	1.24450	1.24580	1.24697	1.24803	1.24901	1.24990	1.25073	1.25149	1.25876	1.26399	1.26921	1.28155
-.91	1.24338	1.24482	1.24610	1.24726	1.24831	1.24928	1.25016	1.25098	1.25174	1.25893	1.26412	1.26929	1.28155
-.90	1.24373	1.24514	1.24641	1.24756	1.24860	1.24955	1.25043	1.25124	1.25199	1.25911	1.26425	1.26938	1.28155
-.89	1.24408	1.24548	1.24673	1.24786	1.24889	1.24984	1.25070	1.25150	1.25224	1.25929	1.26439	1.26947	1.28155
-.88	1.24444	1.24582	1.24706	1.24817	1.24919	1.25012	1.25098	1.25177	1.25250	1.25948	1.26452	1.26956	1.28155
-.87	1.24480	1.24617	1.24739	1.24849	1.24950	1.25042	1.25127	1.25205	1.25277	1.25967	1.26466	1.26966	1.28155
-.86	1.24518	1.24652	1.24773	1.24882	1.24981	1.25072	1.25156	1.25233	1.25304	1.25986	1.26481	1.26975	1.28155
-.85	1.24556	1.24688	1.24808	1.24915	1.25013	1.25103	1.25185	1.25261	1.25332	1.26006	1.26495	1.26985	1.28155
-.84	1.24595	1.24725	1.24843	1.24949	1.25046	1.25134	1.25216	1.25291	1.25360	1.26026	1.26510	1.26995	1.28155
-.83	1.24634	1.24763	1.24879	1.24983	1.25079	1.25166	1.25246	1.25321	1.25389	1.26047	1.26525	1.27005	1.28155
-.82	1.24674	1.24801	1.24915	1.25018	1.25112	1.25198	1.25278	1.25351	1.25419	1.26068	1.26541	1.27016	1.28155
-.81	1.24715	1.24840	1.24952	1.25054	1.25147	1.25231	1.25309	1.25382	1.25449	1.26089	1.26556	1.27026	1.28155
-.80	1.24757	1.24879	1.24990	1.25090	1.25181	1.25265	1.25342	1.25413	1.25479	1.26111	1.26572	1.27037	1.28155
-.79	1.24799	1.24919	1.25028	1.25127	1.25217	1.25299	1.25375	1.25445	1.25510	1.26133	1.26589	1.27048	1.28155
-.78	1.24841	1.24960	1.25067	1.25164	1.25252	1.25333	1.25408	1.25477	1.25541	1.26155	1.26605	1.27059	1.28155
-.77	1.24884	1.25001	1.25106	1.25202	1.25288	1.25368	1.25442	1.25509	1.25572	1.26178	1.26622	1.27070	1.28155
-.76	1.24928	1.25043	1.25146	1.25240	1.25325	1.25403	1.25476	1.25542	1.25604	1.26201	1.26639	1.27082	1.28155
-.75	1.24972	1.25085	1.25186	1.25278	1.25362	1.25439	1.25510	1.25576	1.25637	1.26224	1.26656	1.27093	1.28155
-.74	1.25017	1.25127	1.25227	1.25317	1.25400	1.25476	1.25545	1.25610	1.25670	1.26248	1.26674	1.27105	1.28155
-.73	1.25062	1.25170	1.25268	1.25357	1.25438	1.25512	1.25581	1.25644	1.25703	1.26272	1.26691	1.27117	1.28155
-.72	1.25108	1.25214	1.25310	1.25397	1.25476	1.25549	1.25616	1.25679	1.25737	1.26296	1.26709	1.27129	1.28155
-.71	1.25154	1.25258	1.25352	1.25437	1.25515	1.25587	1.25653	1.25714	1.25771	1.26320	1.26727	1.27141	1.28155
-.70	1.25200	1.25302	1.25394	1.25478	1.25554	1.25624	1.25689	1.25749	1.25805	1.26345	1.26745	1.27153	1.28155
-.69	1.25247	1.25347	1.25437	1.25519	1.25594	1.25662	1.25726	1.25785	1.25840	1.26370	1.26764	1.27166	1.28155
-.68	1.25295	1.25392	1.25480	1.25560	1.25634	1.25701	1.25763	1.25821	1.25874	1.26395	1.26783	1.27179	1.28155
-.67	1.25342	1.25438	1.25524	1.25602	1.25674	1.25740	1.25801	1.25857	1.25910	1.26421	1.26802	1.27191	1.28155
-.66	1.25390	1.25483	1.25568	1.25644	1.25714	1.25779	1.25839	1.25894	1.25945	1.26446	1.26821	1.27204	1.28155
-.65	1.25439	1.25530	1.25612	1.25687	1.25755	1.25818	1.25877	1.25931	1.25981	1.26472	1.26840	1.27217	1.28155
-.64	1.25487	1.25576	1.25656	1.25729	1.25796	1.25858	1.25915	1.25968	1.26017	1.26499	1.26859	1.27231	1.28155
-.63	1.25537	1.25623	1.25701	1.25773	1.25838	1.25898	1.25954	1.26006	1.26054	1.26525	1.26879	1.27244	1.28155
-.62	1.25586	1.25670	1.25746	1.25816	1.25880	1.25938	1.25993	1.26043	1.26090	1.26551	1.26899	1.27257	1.28155
-.61	1.25636	1.25717	1.25792	1.25860	1.25922	1.25979	1.26032	1.26081	1.26127	1.26578	1.26919	1.27271	1.28155

5.3 Factors for Computing Critical Values of the Noncentral t-Distribution

Values of λ are given for each $\eta(\delta)$ to give $\Pr\{T_f \le t_o | \delta\} = .90$ (Continued)

	f												
η	52	56	60	64	68	72	76	80	84	144	240	480	∞
-.60	1.25685	1.25765	1.25837	1.25903	1.25964	1.26020	1.26072	1.26120	1.26165	1.26605	1.26939	1.27285	1.28155
-.59	1.25736	1.25813	1.25883	1.25948	1.26007	1.26061	1.26111	1.26158	1.26202	1.26632	1.26959	1.27298	1.28155
-.58	1.25786	1.25861	1.25930	1.25992	1.26049	1.26102	1.26151	1.26197	1.26240	1.26660	1.26980	1.27312	1.28155
-.57	1.25837	1.25910	1.25976	1.26037	1.26092	1.26144	1.26191	1.26236	1.26277	1.26687	1.27000	1.27326	1.28155
-.56	1.25888	1.25958	1.26023	1.26081	1.26135	1.26185	1.26232	1.26275	1.26315	1.26715	1.27021	1.27340	1.28155
-.55	1.25939	1.26007	1.26069	1.26126	1.26179	1.26227	1.26272	1.26314	1.26354	1.26743	1.27042	1.27355	1.28155
-.54	1.25990	1.26056	1.26116	1.26172	1.26222	1.26270	1.26313	1.26354	1.26392	1.26771	1.27063	1.27369	1.28155
-.53	1.26042	1.26105	1.26164	1.26217	1.26266	1.26312	1.26354	1.26394	1.26431	1.26799	1.27084	1.27383	1.28155
-.52	1.26093	1.26155	1.26211	1.26263	1.26310	1.26354	1.26395	1.26434	1.26469	1.26828	1.27105	1.27398	1.28155
-.51	1.26145	1.26204	1.26258	1.26308	1.26354	1.26397	1.26437	1.26474	1.26508	1.26856	1.27126	1.27412	1.28155
-.50	1.26197	1.26254	1.26306	1.26354	1.26398	1.26440	1.26478	1.26514	1.26547	1.26885	1.27148	1.27427	1.28155
-.49	1.26249	1.26304	1.26354	1.26400	1.26443	1.26483	1.26520	1.26554	1.26587	1.26913	1.27170	1.27442	1.28155
-.48	1.26301	1.26354	1.26402	1.26446	1.26487	1.26526	1.26561	1.26595	1.26626	1.26942	1.27191	1.27457	1.28155
-.47	1.26354	1.26404	1.26450	1.26493	1.26532	1.26569	1.26603	1.26635	1.26665	1.26971	1.27213	1.27472	1.28155
-.46	1.26406	1.26454	1.26498	1.26539	1.26577	1.26612	1.26645	1.26676	1.26705	1.27000	1.27235	1.27487	1.28155
-.45	1.26458	1.26504	1.26546	1.26585	1.26622	1.26655	1.26687	1.26717	1.26745	1.27030	1.27257	1.27502	1.28155
-.44	1.26511	1.26554	1.26595	1.26632	1.26667	1.26699	1.26729	1.26758	1.26785	1.27059	1.27279	1.27517	1.28155
-.43	1.26564	1.26605	1.26643	1.26679	1.26712	1.26743	1.26772	1.26799	1.26824	1.27088	1.27301	1.27532	1.28155
-.42	1.26616	1.26655	1.26692	1.26725	1.26757	1.26786	1.26814	1.26840	1.26864	1.27118	1.27324	1.27548	1.28155
-.41	1.26669	1.26706	1.26740	1.26772	1.26802	1.26830	1.26856	1.26881	1.26904	1.27148	1.27346	1.27563	1.28155
-.40	1.26722	1.26757	1.26789	1.26819	1.26847	1.26874	1.26899	1.26922	1.26945	1.27177	1.27368	1.27578	1.28155
-.39	1.26775	1.26807	1.26837	1.26866	1.26893	1.26918	1.26941	1.26964	1.26985	1.27207	1.27391	1.27594	1.28155
-.38	1.26828	1.26858	1.26886	1.26913	1.26938	1.26962	1.26984	1.27005	1.27025	1.27237	1.27413	1.27610	1.28155
-.37	1.26880	1.26908	1.26935	1.26960	1.26983	1.27005	1.27027	1.27046	1.27065	1.27267	1.27436	1.27625	1.28155
-.36	1.26933	1.26959	1.26984	1.27007	1.27029	1.27049	1.27069	1.27088	1.27106	1.27297	1.27459	1.27641	1.28155
-.35	1.26986	1.27010	1.27032	1.27054	1.27074	1.27093	1.27112	1.27129	1.27146	1.27327	1.27482	1.27657	1.28155
-.34	1.27039	1.27060	1.27081	1.27101	1.27120	1.27137	1.27155	1.27171	1.27186	1.27357	1.27504	1.27672	1.28155
-.33	1.27092	1.27111	1.27130	1.27148	1.27165	1.27181	1.27197	1.27212	1.27227	1.27387	1.27527	1.27688	1.28155
-.32	1.27144	1.27162	1.27178	1.27195	1.27210	1.27226	1.27240	1.27254	1.27267	1.27417	1.27550	1.27704	1.28155
-.31	1.27197	1.27212	1.27227	1.27242	1.27256	1.27270	1.27283	1.27296	1.27308	1.27447	1.27573	1.27720	1.28155
-.30	1.27250	1.27263	1.27276	1.27289	1.27301	1.27314	1.27326	1.27337	1.27348	1.27477	1.27596	1.27736	1.28155
-.29	1.27302	1.27313	1.27324	1.27336	1.27347	1.27358	1.27368	1.27379	1.27389	1.27508	1.27619	1.27752	1.28155
-.28	1.27355	1.27364	1.27373	1.27382	1.27392	1.27402	1.27411	1.27420	1.27429	1.27538	1.27642	1.27768	1.28155
-.27	1.27407	1.27414	1.27421	1.27429	1.27437	1.27445	1.27454	1.27462	1.27470	1.27568	1.27665	1.27784	1.28155
-.26	1.27460	1.27464	1.27470	1.27476	1.27483	1.27489	1.27496	1.27503	1.27510	1.27598	1.27688	1.27800	1.28155
-.25	1.27512	1.27514	1.27518	1.27523	1.27528	1.27533	1.27539	1.27545	1.27550	1.27629	1.27712	1.27816	1.28155
-.24	1.27564	1.27565	1.27567	1.27569	1.27573	1.27577	1.27581	1.27586	1.27591	1.27659	1.27735	1.27832	1.28155
-.23	1.27616	1.27615	1.27615	1.27616	1.27618	1.27621	1.27624	1.27627	1.27631	1.27689	1.27758	1.27849	1.28155
-.22	1.27668	1.27664	1.27663	1.27663	1.27663	1.27664	1.27666	1.27669	1.27671	1.27720	1.27781	1.27865	1.28155
-.21	1.27720	1.27714	1.27711	1.27709	1.27708	1.27708	1.27709	1.27710	1.27712	1.27750	1.27804	1.27881	1.28155

5.3 Factors for Computing Critical Values of the Noncentral t-Distribution
Values of λ are given for each $\eta(\delta)$ to give $Pr\left\{T_f \leq t_o \middle| \delta\right\} = .90$ (Continued)

	f												
η	52	56	60	64	68	72	76	80	84	144	240	480	∞
-.20	1.27771	1.27764	1.27759	1.27755	1.27753	1.27752	1.27751	1.27751	1.27752	1.27780	1.27828	1.27897	1.28155
-.19	1.27823	1.27813	1.27807	1.27801	1.27798	1.27795	1.27793	1.27792	1.27792	1.27811	1.27851	1.27913	1.28155
-.18	1.27874	1.27863	1.27854	1.27848	1.27842	1.27838	1.27835	1.27833	1.27832	1.27841	1.27874	1.27930	1.28155
-.17	1.27925	1.27912	1.27902	1.27894	1.27887	1.27882	1.27878	1.27874	1.27872	1.27871	1.27897	1.27946	1.28155
-.16	1.27976	1.27961	1.27949	1.27939	1.27931	1.27925	1.27920	1.27915	1.27912	1.27901	1.27920	1.27962	1.28155
-.15	1.28027	1.28010	1.27996	1.27985	1.27976	1.27968	1.27961	1.27956	1.27951	1.27931	1.27944	1.27979	1.28155
-.14	1.28078	1.28059	1.28044	1.28031	1.28020	1.28011	1.28003	1.27997	1.27991	1.27961	1.27967	1.27995	1.28155
-.13	1.28128	1.28108	1.28091	1.28076	1.28064	1.28054	1.28045	1.28037	1.28031	1.27992	1.27990	1.28011	1.28155
-.12	1.28179	1.28156	1.28137	1.28122	1.28108	1.28096	1.28086	1.28078	1.28070	1.28022	1.28013	1.28027	1.28155
-.11	1.28229	1.28205	1.28184	1.28167	1.28152	1.28139	1.28128	1.28118	1.28110	1.28052	1.28036	1.28044	1.28155
-.10	1.28279	1.28253	1.28231	1.28212	1.28195	1.28181	1.28169	1.28158	1.28149	1.28082	1.28059	1.28060	1.28155
-.09	1.28328	1.28301	1.28277	1.28257	1.28239	1.28224	1.28210	1.28198	1.28188	1.28111	1.28082	1.28076	1.28155
-.08	1.28378	1.28348	1.28323	1.28301	1.28282	1.28266	1.28251	1.28238	1.28227	1.28141	1.28105	1.28092	1.28155
-.07	1.28427	1.28396	1.28369	1.28346	1.28326	1.28308	1.28292	1.28278	1.28266	1.28171	1.28128	1.28109	1.28155
-.06	1.28476	1.28443	1.28415	1.28390	1.28369	1.28350	1.28333	1.28318	1.28305	1.28201	1.28151	1.28125	1.28155
-.05	1.28525	1.28490	1.28460	1.28434	1.28411	1.28391	1.28374	1.28358	1.28343	1.28230	1.28174	1.28141	1.28155
-.04	1.28574	1.28537	1.28506	1.28478	1.28454	1.28433	1.28414	1.28397	1.28382	1.28260	1.28197	1.28157	1.28155
-.03	1.28622	1.28584	1.28551	1.28522	1.28497	1.28474	1.28454	1.28436	1.28420	1.28289	1.28220	1.28173	1.28155
-.02	1.28670	1.28630	1.28596	1.28566	1.28539	1.28515	1.28494	1.28476	1.28458	1.28318	1.28243	1.28190	1.28155
-.01	1.28718	1.28676	1.28640	1.28609	1.28581	1.28556	1.28534	1.28514	1.28497	1.28348	1.28266	1.28206	1.28155
.00	1.28766	1.28722	1.28685	1.28652	1.28623	1.28597	1.28574	1.28553	1.28534	1.28377	1.28288	1.28222	1.28155
.01	1.28813	1.28768	1.28729	1.28695	1.28665	1.28638	1.28614	1.28592	1.28572	1.28406	1.28311	1.28238	1.28155
.02	1.28860	1.28814	1.28773	1.28738	1.28706	1.28678	1.28653	1.28630	1.28610	1.28435	1.28334	1.28254	1.28155
.03	1.28907	1.28859	1.28817	1.28780	1.28748	1.28718	1.28692	1.28669	1.28647	1.28464	1.28356	1.28270	1.28155
.04	1.28953	1.28904	1.28861	1.28822	1.28789	1.28758	1.28731	1.28707	1.28684	1.28493	1.28379	1.28286	1.28155
.05	1.29000	1.28948	1.28904	1.28865	1.28830	1.28798	1.28770	1.28745	1.28721	1.28521	1.28401	1.28302	1.28155
.06	1.29045	1.28993	1.28947	1.28906	1.28870	1.28838	1.28809	1.28782	1.28758	1.28550	1.28423	1.28318	1.28155
.07	1.29091	1.29037	1.28990	1.28948	1.28911	1.28877	1.28847	1.28820	1.28795	1.28578	1.28445	1.28334	1.28155
.08	1.29136	1.29081	1.29032	1.28989	1.28951	1.28916	1.28885	1.28857	1.28831	1.28607	1.28468	1.28349	1.28155
.09	1.29181	1.29124	1.29074	1.29030	1.28991	1.28955	1.28923	1.28894	1.28868	1.28635	1.28490	1.28365	1.28155
.10	1.29226	1.29168	1.29116	1.29071	1.29030	1.28994	1.28961	1.28931	1.28904	1.28663	1.28512	1.28381	1.28155
.11	1.29271	1.29211	1.29158	1.29112	1.29070	1.29032	1.28999	1.28968	1.28940	1.28691	1.28534	1.28397	1.28155
.12	1.29315	1.29254	1.29200	1.29152	1.29109	1.29071	1.29036	1.29004	1.28975	1.28719	1.28555	1.28412	1.28155
.13	1.29359	1.29296	1.29241	1.29192	1.29148	1.29109	1.29073	1.29040	1.29011	1.28746	1.28577	1.28428	1.28155
.14	1.29402	1.29338	1.29282	1.29232	1.29187	1.29146	1.29110	1.29076	1.29046	1.28774	1.28599	1.28443	1.28155
.15	1.29445	1.29380	1.29322	1.29271	1.29225	1.29184	1.29146	1.29112	1.29081	1.28801	1.28620	1.28459	1.28155
.16	1.29488	1.29421	1.29363	1.29310	1.29263	1.29221	1.29183	1.29148	1.29116	1.28828	1.28642	1.28474	1.28155
.17	1.29531	1.29463	1.29403	1.29349	1.29301	1.29258	1.29219	1.29183	1.29150	1.28856	1.28663	1.28489	1.28155
.18	1.29573	1.29503	1.29442	1.29388	1.29339	1.29295	1.29255	1.29218	1.29185	1.28882	1.28684	1.28505	1.28155
.19	1.29614	1.29544	1.29482	1.29426	1.29376	1.29331	1.29290	1.29253	1.29219	1.28909	1.28706	1.28520	1.28155
.20	1.29656	1.29584	1.29521	1.29464	1.29414	1.29368	1.29326	1.29288	1.29253	1.28936	1.28727	1.28535	1.28155

5.3 Factors for Computing Critical Values of the Noncentral t-Distribution

Values of λ are given for each $\eta(\delta)$ to give $\Pr\{T_f \le t_o | \delta\} = .90$ (Continued)

η	f = 52	56	60	64	68	72	76	80	84	144	240	480	∞
.21	1.29697	1.29624	1.29560	1.29502	1.29450	1.29404	1.29361	1.29322	1.29286	1.28962	1.28748	1.28550	1.28155
.22	1.29738	1.29664	1.29598	1.29540	1.29487	1.29439	1.29396	1.29356	1.29320	1.28989	1.28768	1.28565	1.28155
.23	1.29778	1.29703	1.29636	1.29577	1.29523	1.29475	1.29430	1.29390	1.29353	1.29015	1.28789	1.28580	1.28155
.24	1.29818	1.29742	1.29674	1.29614	1.29559	1.29510	1.29465	1.29424	1.29386	1.29041	1.28810	1.28595	1.28155
.25	1.29858	1.29780	1.29712	1.29650	1.29595	1.29545	1.29499	1.29457	1.29418	1.29067	1.28830	1.28610	1.28155
.26	1.29897	1.29819	1.29749	1.29686	1.29630	1.29579	1.29533	1.29490	1.29451	1.29092	1.28851	1.28625	1.28155
.27	1.29936	1.29857	1.29786	1.29722	1.29665	1.29613	1.29566	1.29523	1.29483	1.29118	1.28871	1.28639	1.28155
.28	1.29975	1.29894	1.29822	1.29758	1.29700	1.29647	1.29599	1.29555	1.29515	1.29143	1.28891	1.28654	1.28155
.29	1.30013	1.29931	1.29858	1.29793	1.29734	1.29681	1.29632	1.29588	1.29546	1.29168	1.28911	1.28668	1.28155
.30	1.30051	1.29968	1.29894	1.29828	1.29768	1.29714	1.29665	1.29620	1.29578	1.29193	1.28931	1.28683	1.28155
.31	1.30089	1.30005	1.29930	1.29863	1.29802	1.29747	1.29697	1.29651	1.29609	1.29218	1.28950	1.28697	1.28155
.32	1.30126	1.30041	1.29965	1.29897	1.29836	1.29780	1.29729	1.29683	1.29640	1.29242	1.28970	1.28711	1.28155
.33	1.30162	1.30076	1.30000	1.29931	1.29869	1.29813	1.29761	1.29714	1.29670	1.29267	1.28989	1.28725	1.28155
.34	1.30199	1.30112	1.30034	1.29965	1.29902	1.29845	1.29793	1.29745	1.29700	1.29291	1.29009	1.28739	1.28155
.35	1.30235	1.30147	1.30068	1.29998	1.29934	1.29877	1.29824	1.29775	1.29730	1.29315	1.29028	1.28753	1.28155
.36	1.30270	1.30182	1.30102	1.30031	1.29967	1.29908	1.29855	1.29805	1.29760	1.29339	1.29047	1.28767	1.28155
.37	1.30306	1.30216	1.30136	1.30064	1.29999	1.29939	1.29885	1.29835	1.29790	1.29362	1.29066	1.28781	1.28155
.38	1.30340	1.30250	1.30169	1.30096	1.30030	1.29970	1.29916	1.29865	1.29819	1.29386	1.29084	1.28795	1.28155
.39	1.30375	1.30283	1.30202	1.30128	1.30061	1.30001	1.29946	1.29895	1.29848	1.29409	1.29103	1.28808	1.28155
.40	1.30409	1.30316	1.30234	1.30160	1.30092	1.30031	1.29975	1.29924	1.29876	1.29432	1.29121	1.28822	1.28155
.41	1.30443	1.30349	1.30266	1.30191	1.30123	1.30061	1.30005	1.29952	1.29904	1.29455	1.29140	1.28835	1.28155
.42	1.30476	1.30382	1.30298	1.30222	1.30153	1.30091	1.30034	1.29981	1.29932	1.29477	1.29158	1.28848	1.28155
.43	1.30509	1.30414	1.30329	1.30252	1.30183	1.30120	1.30062	1.30009	1.29960	1.29499	1.29176	1.28862	1.28155
.44	1.30541	1.30445	1.30360	1.30283	1.30213	1.30149	1.30091	1.30037	1.29987	1.29522	1.29194	1.28875	1.28155
.45	1.30573	1.30477	1.30390	1.30313	1.30242	1.30178	1.30119	1.30065	1.30014	1.29543	1.29211	1.28888	1.28155
.46	1.30605	1.30508	1.30421	1.30342	1.30271	1.30206	1.30147	1.30092	1.30041	1.29565	1.29229	1.28900	1.28155
.47	1.30636	1.30538	1.30450	1.30371	1.30300	1.30234	1.30174	1.30119	1.30068	1.29587	1.29246	1.28913	1.28155
.48	1.30667	1.30568	1.30480	1.30400	1.30328	1.30262	1.30201	1.30145	1.30094	1.29608	1.29263	1.28926	1.28155
.49	1.30697	1.30598	1.30509	1.30429	1.30356	1.30289	1.30228	1.30172	1.30120	1.29629	1.29280	1.28938	1.28155
.50	1.30728	1.30627	1.30538	1.30457	1.30383	1.30316	1.30255	1.30198	1.30145	1.29650	1.29297	1.28951	1.28155
.51	1.30757	1.30656	1.30566	1.30484	1.30410	1.30343	1.30281	1.30224	1.30171	1.29670	1.29314	1.28963	1.28155
.52	1.30786	1.30685	1.30594	1.30512	1.30437	1.30369	1.30307	1.30249	1.30196	1.29691	1.29330	1.28975	1.28155
.53	1.30815	1.30713	1.30622	1.30539	1.30464	1.30395	1.30332	1.30274	1.30220	1.29711	1.29346	1.28987	1.28155
.54	1.30844	1.30741	1.30649	1.30566	1.30490	1.30421	1.30357	1.30299	1.30244	1.29730	1.29363	1.28999	1.28155
.55	1.30872	1.30768	1.30676	1.30592	1.30516	1.30446	1.30382	1.30323	1.30268	1.29750	1.29378	1.29011	1.28155
.56	1.30899	1.30795	1.30702	1.30618	1.30541	1.30471	1.30407	1.30347	1.30292	1.29770	1.29394	1.29022	1.28155
.57	1.30927	1.30822	1.30728	1.30643	1.30566	1.30496	1.30431	1.30371	1.30316	1.29789	1.29410	1.29034	1.28155
.58	1.30954	1.30848	1.30754	1.30669	1.30591	1.30520	1.30455	1.30394	1.30339	1.29808	1.29425	1.29045	1.28155
.59	1.30980	1.30874	1.30779	1.30693	1.30615	1.30544	1.30478	1.30418	1.30361	1.29826	1.29440	1.29057	1.28155
.60	1.31006	1.30900	1.30804	1.30718	1.30639	1.30568	1.30501	1.30440	1.30384	1.29845	1.29455	1.29068	1.28155

5.3 Factors for Computing Critical Values of the Noncentral t-Distribution

Values of λ are given for each $\eta(\delta)$ to give $\Pr\left\{T_f \le t_o \middle| \delta\right\} = .90$ (Continued)

	f												
η	52	56	60	64	68	72	76	80	84	144	240	480	∞
.61	1.31032	1.30925	1.30829	1.30742	1.30663	1.30591	1.30524	1.30463	1.30406	1.29863	1.29470	1.29079	1.28155
.62	1.31057	1.30950	1.30853	1.30766	1.30686	1.30614	1.30547	1.30485	1.30428	1.29881	1.29485	1.29090	1.28155
.63	1.31082	1.30974	1.30877	1.30789	1.30709	1.30636	1.30569	1.30507	1.30449	1.29899	1.29499	1.29101	1.28155
.64	1.31106	1.30998	1.30900	1.30812	1.30732	1.30659	1.30591	1.30528	1.30470	1.29916	1.29514	1.29111	1.28155
.65	1.31130	1.31021	1.30924	1.30835	1.30754	1.30680	1.30612	1.30550	1.30491	1.29933	1.29528	1.29122	1.28155
.66	1.31154	1.31045	1.30946	1.30857	1.30776	1.30702	1.30634	1.30570	1.30512	1.29950	1.29542	1.29132	1.28155
.67	1.31177	1.31067	1.30969	1.30879	1.30798	1.30723	1.30654	1.30591	1.30532	1.29967	1.29555	1.29142	1.28155
.68	1.31200	1.31090	1.30991	1.30901	1.30819	1.30744	1.30675	1.30611	1.30552	1.29983	1.29569	1.29152	1.28155
.69	1.31222	1.31112	1.31012	1.30922	1.30840	1.30764	1.30695	1.30631	1.30571	1.30000	1.29582	1.29162	1.28155
.70	1.31244	1.31133	1.31033	1.30943	1.30860	1.30785	1.30715	1.30650	1.30591	1.30016	1.29595	1.29172	1.28155
.71	1.31266	1.31155	1.31054	1.30963	1.30880	1.30804	1.30734	1.30670	1.30609	1.30031	1.29608	1.29182	1.28155
.72	1.31287	1.31176	1.31075	1.30984	1.30900	1.30824	1.30754	1.30688	1.30628	1.30047	1.29621	1.29191	1.28155
.73	1.31308	1.31196	1.31095	1.31003	1.30920	1.30843	1.30772	1.30707	1.30646	1.30062	1.29633	1.29201	1.28155
.74	1.31329	1.31216	1.31115	1.31023	1.30939	1.30862	1.30791	1.30725	1.30664	1.30077	1.29646	1.29210	1.28155
.75	1.31349	1.31236	1.31134	1.31042	1.30958	1.30880	1.30809	1.30743	1.30682	1.30092	1.29658	1.29219	1.28155
.76	1.31369	1.31255	1.31153	1.31061	1.30976	1.30898	1.30827	1.30761	1.30699	1.30106	1.29670	1.29228	1.28155
.77	1.31388	1.31274	1.31172	1.31079	1.30994	1.30916	1.30844	1.30778	1.30716	1.30120	1.29681	1.29237	1.28155
.78	1.31407	1.31293	1.31190	1.31097	1.31012	1.30934	1.30862	1.30795	1.30733	1.30134	1.29693	1.29245	1.28155
.79	1.31425	1.31311	1.31208	1.31115	1.31029	1.30951	1.30878	1.30811	1.30749	1.30148	1.29704	1.29254	1.28155
.80	1.31444	1.31329	1.31226	1.31132	1.31046	1.30967	1.30895	1.30828	1.30765	1.30161	1.29715	1.29262	1.28155
.81	1.31461	1.31347	1.31243	1.31149	1.31063	1.30984	1.30911	1.30844	1.30781	1.30174	1.29726	1.29270	1.28155
.82	1.31479	1.31364	1.31260	1.31165	1.31079	1.31000	1.30927	1.30859	1.30796	1.30187	1.29737	1.29278	1.28155
.83	1.31496	1.31381	1.31276	1.31182	1.31095	1.31016	1.30942	1.30874	1.30811	1.30200	1.29747	1.29286	1.28155
.84	1.31513	1.31397	1.31293	1.31198	1.31111	1.31031	1.30958	1.30889	1.30826	1.30212	1.29758	1.29294	1.28155
.85	1.31529	1.31413	1.31308	1.31213	1.31126	1.31046	1.30972	1.30904	1.30841	1.30225	1.29768	1.29302	1.28155
.86	1.31545	1.31429	1.31324	1.31228	1.31141	1.31061	1.30987	1.30918	1.30855	1.30236	1.29777	1.29309	1.28155
.87	1.31561	1.31444	1.31339	1.31243	1.31156	1.31075	1.31001	1.30932	1.30868	1.30248	1.29787	1.29316	1.28155
.88	1.31576	1.31459	1.31354	1.31258	1.31170	1.31090	1.31015	1.30946	1.30882	1.30259	1.29796	1.29323	1.28155
.89	1.31591	1.31474	1.31368	1.31272	1.31184	1.31103	1.31029	1.30960	1.30895	1.30270	1.29806	1.29330	1.28155
.90	1.31606	1.31489	1.31383	1.31286	1.31198	1.31117	1.31042	1.30973	1.30908	1.30281	1.29814	1.29337	1.28155
.91	1.31620	1.31503	1.31396	1.31300	1.31211	1.31130	1.31055	1.30985	1.30921	1.30292	1.29823	1.29344	1.28155
.92	1.31634	1.31516	1.31410	1.31313	1.31224	1.31143	1.31068	1.30998	1.30933	1.30302	1.29832	1.29350	1.28155
.93	1.31648	1.31530	1.31423	1.31326	1.31237	1.31155	1.31080	1.31010	1.30945	1.30312	1.29840	1.29356	1.28155
.94	1.31661	1.31543	1.31436	1.31339	1.31250	1.31168	1.31092	1.31022	1.30957	1.30322	1.29848	1.29362	1.28155
.95	1.31674	1.31556	1.31448	1.31351	1.31262	1.31180	1.31104	1.31034	1.30968	1.30332	1.29856	1.29368	1.28155
.96	1.31687	1.31568	1.31461	1.31363	1.31274	1.31191	1.31115	1.31045	1.30979	1.30341	1.29864	1.29374	1.28155
.97	1.31699	1.31580	1.31473	1.31375	1.31285	1.31203	1.31126	1.31056	1.30990	1.30350	1.29871	1.29380	1.28155
.98	1.31711	1.31592	1.31484	1.31386	1.31296	1.31214	1.31137	1.31067	1.31001	1.30359	1.29879	1.29385	1.28155
.99	1.31723	1.31603	1.31495	1.31397	1.31307	1.31224	1.31148	1.31077	1.31011	1.30367	1.29886	1.29390	1.28155
1.00	1.31734	1.31615	1.31506	1.31408	1.31318	1.31235	1.31158	1.31087	1.31021	1.30376	1.29892	1.29396	1.28155

5.4 Factors for Computing Critical Values of the Noncentral t-Distribution

Values of λ are given for each $\eta(\delta)$ to give $Pr\{T_f \leq t_o | \delta\} = .95$

η	f = 1	2	3	4	5	6	7	8	9	16	36	144	∞
-1.00	1.35759	1.46164	1.50392	1.52766	1.54314	1.55418	1.56252	1.56908	1.57440	1.59521	1.61407	1.63073	1.64485
-.99	1.35919	1.46130	1.50323	1.52687	1.54235	1.55340	1.56176	1.56834	1.57368	1.59463	1.61367	1.63052	1.64485
-.98	1.36185	1.46145	1.50286	1.52634	1.54175	1.55278	1.56114	1.56773	1.57309	1.59412	1.61330	1.63033	1.64485
-.97	1.36561	1.46210	1.50281	1.52604	1.54135	1.55233	1.56067	1.56725	1.57260	1.59368	1.61296	1.63015	1.64485
-.96	1.37055	1.46324	1.50308	1.52599	1.54114	1.55204	1.56033	1.56689	1.57223	1.59330	1.61267	1.62999	1.64485
-.95	1.37672	1.46485	1.50366	1.52616	1.54111	1.55190	1.56013	1.56664	1.57196	1.59299	1.61240	1.62984	1.64485
-.94	1.38421	1.46694	1.50453	1.52655	1.54126	1.55192	1.56006	1.56652	1.57179	1.59275	1.61218	1.62970	1.64485
-.93	1.39305	1.46950	1.50570	1.52716	1.54159	1.55208	1.56011	1.56650	1.57173	1.59256	1.61198	1.62957	1.64485
-.92	1.40321	1.47251	1.50715	1.52797	1.54208	1.55237	1.56029	1.56659	1.57176	1.59244	1.61182	1.62946	1.64485
-.91	1.41461	1.47595	1.50887	1.52899	1.54273	1.55281	1.56058	1.56679	1.57189	1.59238	1.61169	1.62936	1.64485
-.90	1.42716	1.47983	1.51085	1.53020	1.54353	1.55337	1.56099	1.56709	1.57211	1.59237	1.61159	1.62927	1.64485
-.89	1.44072	1.48410	1.51308	1.53159	1.54449	1.55407	1.56151	1.56749	1.57242	1.59242	1.61151	1.62920	1.64485
-.88	1.45513	1.48875	1.51554	1.53316	1.54559	1.55488	1.56213	1.56798	1.57281	1.59252	1.61147	1.62913	1.64485
-.87	1.47026	1.49376	1.51823	1.53490	1.54682	1.55581	1.56286	1.56856	1.57329	1.59267	1.61146	1.62908	1.64485
-.86	1.48594	1.49909	1.52114	1.53680	1.54819	1.55685	1.56368	1.56923	1.57384	1.59287	1.61148	1.62904	1.64485
-.85	1.50204	1.50471	1.52424	1.53885	1.54968	1.55799	1.56459	1.56998	1.57447	1.59313	1.61152	1.62901	1.64485
-.84	1.51842	1.51060	1.52753	1.54105	1.55129	1.55924	1.56560	1.57081	1.57518	1.59342	1.61159	1.62899	1.64485
-.83	1.53493	1.51673	1.53099	1.54338	1.55300	1.56058	1.56668	1.57172	1.57595	1.59377	1.61168	1.62898	1.64485
-.82	1.55143	1.52305	1.53460	1.54583	1.55483	1.56201	1.56785	1.57270	1.57679	1.59416	1.61180	1.62898	1.64485
-.81	1.56779	1.52956	1.53836	1.54840	1.55675	1.56353	1.56910	1.57375	1.57769	1.59459	1.61195	1.62899	1.64485
-.80	1.58387	1.53621	1.54225	1.55107	1.55876	1.56513	1.57042	1.57486	1.57865	1.59506	1.61211	1.62901	1.64485
-.79	1.59954	1.54298	1.54625	1.55385	1.56086	1.56680	1.57180	1.57604	1.57968	1.59557	1.61231	1.62904	1.64485
-.78	1.61464	1.54983	1.55035	1.55671	1.56304	1.56855	1.57325	1.57728	1.58075	1.59612	1.61252	1.62908	1.64485
-.77	1.62904	1.55675	1.55454	1.55966	1.56529	1.57036	1.57476	1.57857	1.58188	1.59670	1.61275	1.62913	1.64485
-.76	1.64260	1.56371	1.55880	1.56268	1.56761	1.57224	1.57633	1.57992	1.58306	1.59732	1.61301	1.62919	1.64485
-.75	1.65519	1.57068	1.56313	1.56576	1.56999	1.57417	1.57795	1.58131	1.58428	1.59797	1.61329	1.62926	1.64485
-.74	1.66669	1.57764	1.56751	1.56891	1.57242	1.57615	1.57962	1.58275	1.58555	1.59865	1.61358	1.62934	1.64485
-.73	1.67700	1.58456	1.57193	1.57210	1.57491	1.57818	1.58134	1.58424	1.58685	1.59936	1.61390	1.62942	1.64485
-.72	1.68601	1.59144	1.57638	1.57534	1.57744	1.58026	1.58310	1.58576	1.58820	1.60011	1.61423	1.62952	1.64485
-.71	1.69367	1.59823	1.58084	1.57861	1.58002	1.58238	1.58490	1.58733	1.58958	1.60088	1.61458	1.62962	1.64485
-.70	1.69992	1.60493	1.58532	1.58191	1.58262	1.58453	1.58673	1.58892	1.59100	1.60167	1.61495	1.62973	1.64485
-.69	1.70475	1.61152	1.58979	1.58523	1.58526	1.58671	1.58860	1.59055	1.59244	1.60249	1.61533	1.62985	1.64485
-.68	1.70815	1.61797	1.59424	1.58857	1.58792	1.58893	1.59049	1.59221	1.59392	1.60334	1.61574	1.62997	1.64485
-.67	1.71016	1.62428	1.59868	1.59192	1.59061	1.59117	1.59241	1.59389	1.59542	1.60421	1.61615	1.63011	1.64485
-.66	1.71083	1.63042	1.60309	1.59528	1.59331	1.59342	1.59436	1.59560	1.59695	1.60510	1.61658	1.63025	1.64485
-.65	1.71021	1.63638	1.60746	1.59863	1.59602	1.59570	1.59632	1.59733	1.59849	1.60600	1.61703	1.63040	1.64485
-.64	1.70840	1.64215	1.61178	1.60198	1.59874	1.59799	1.59830	1.59908	1.60006	1.60693	1.61749	1.63055	1.64485
-.63	1.70548	1.64772	1.61605	1.60531	1.60146	1.60029	1.60030	1.60085	1.60165	1.60788	1.61796	1.63071	1.64485
-.62	1.70158	1.65308	1.62026	1.60863	1.60418	1.60260	1.60231	1.60263	1.60325	1.60884	1.61845	1.63088	1.64485
-.61	1.69678	1.65821	1.62441	1.61192	1.60690	1.60492	1.60433	1.60442	1.60486	1.60981	1.61894	1.63106	1.64485

5.4 Factors for Computing Critical Values of the Noncentral t-Distribution

Values of λ are given for each $\eta(\delta)$ to give $Pr\left\{T_f \leq t_o \middle| \delta\right\} = .95$ (Continued)

η	f = 1	2	3	4	5	6	7	8	9	16	36	144	∞
-.60	1.69120	1.66311	1.62848	1.61519	1.60961	1.60723	1.60635	1.60622	1.60649	1.61080	1.61945	1.63124	1.64485
-.59	1.68496	1.66776	1.63247	1.61843	1.61231	1.60955	1.60838	1.60803	1.60813	1.61181	1.61997	1.63142	1.64485
-.58	1.67814	1.67218	1.63638	1.62163	1.61500	1.61186	1.61042	1.60985	1.60977	1.61283	1.62050	1.63162	1.64485
-.57	1.67086	1.67634	1.64020	1.62480	1.61767	1.61417	1.61245	1.61167	1.61142	1.61385	1.62104	1.63181	1.64485
-.56	1.66319	1.68026	1.64393	1.62792	1.62032	1.61647	1.61448	1.61349	1.61308	1.61489	1.62159	1.63202	1.64485
-.55	1.65524	1.68392	1.64756	1.63100	1.62295	1.61876	1.61651	1.61532	1.61474	1.61594	1.62215	1.63223	1.64485
-.54	1.64707	1.68732	1.65109	1.63403	1.62555	1.62103	1.61853	1.61714	1.61640	1.61699	1.62272	1.63244	1.64485
-.53	1.63874	1.69047	1.65452	1.63701	1.62812	1.62329	1.62054	1.61896	1.61806	1.61806	1.62330	1.63266	1.64485
-.52	1.63033	1.69337	1.65784	1.63993	1.63067	1.62553	1.62255	1.62077	1.61972	1.61912	1.62388	1.63289	1.64485
-.51	1.62188	1.69602	1.66105	1.64280	1.63318	1.62775	1.62454	1.62258	1.62137	1.62020	1.62447	1.63312	1.64485
-.50	1.61344	1.69842	1.66415	1.64561	1.63566	1.62996	1.62652	1.62438	1.62302	1.62128	1.62507	1.63335	1.64485
-.49	1.60505	1.70058	1.66714	1.64836	1.63810	1.63213	1.62848	1.62617	1.62467	1.62236	1.62567	1.63359	1.64485
-.48	1.59674	1.70250	1.67001	1.65104	1.64050	1.63429	1.63043	1.62795	1.62631	1.62345	1.62628	1.63383	1.64485
-.47	1.58854	1.70418	1.67277	1.65366	1.64287	1.63642	1.63236	1.62972	1.62794	1.62454	1.62690	1.63408	1.64485
-.46	1.58047	1.70565	1.67541	1.65622	1.64519	1.63852	1.63427	1.63147	1.62957	1.62563	1.62752	1.63433	1.64485
-.45	1.57255	1.70689	1.67793	1.65871	1.64747	1.64059	1.63617	1.63321	1.63118	1.62672	1.62815	1.63458	1.64485
-.44	1.56479	1.70792	1.68034	1.66112	1.64970	1.64263	1.63804	1.63494	1.63278	1.62781	1.62878	1.63484	1.64485
-.43	1.55721	1.70874	1.68263	1.66347	1.65189	1.64464	1.63989	1.63664	1.63437	1.62890	1.62941	1.63510	1.64485
-.42	1.54981	1.70937	1.68481	1.66575	1.65403	1.64662	1.64171	1.63834	1.63594	1.62999	1.63005	1.63536	1.64485
-.41	1.54261	1.70980	1.68687	1.66795	1.65613	1.64856	1.64351	1.64001	1.63751	1.63108	1.63069	1.63563	1.64485
-.40	1.53559	1.71006	1.68881	1.67009	1.65817	1.65047	1.64528	1.64166	1.63905	1.63216	1.63133	1.63590	1.64485
-.39	1.52878	1.71014	1.69064	1.67215	1.66017	1.65234	1.64703	1.64329	1.64058	1.63325	1.63197	1.63617	1.64485
-.38	1.52216	1.71006	1.69236	1.67414	1.66212	1.65418	1.64875	1.64490	1.64210	1.63432	1.63262	1.63645	1.64485
-.37	1.51573	1.70982	1.69397	1.67605	1.66401	1.65598	1.65044	1.64649	1.64359	1.63540	1.63327	1.63673	1.64485
-.36	1.50950	1.70944	1.69547	1.67790	1.66586	1.65774	1.65211	1.64806	1.64507	1.63647	1.63392	1.63701	1.64485
-.35	1.50347	1.70891	1.69687	1.67967	1.66765	1.65947	1.65374	1.64960	1.64653	1.63753	1.63457	1.63729	1.64485
-.34	1.49762	1.70826	1.69816	1.68137	1.66939	1.66115	1.65534	1.65112	1.64797	1.63859	1.63522	1.63758	1.64485
-.33	1.49196	1.70748	1.69934	1.68299	1.67108	1.66279	1.65691	1.65261	1.64939	1.63964	1.63587	1.63787	1.64485
-.32	1.48648	1.70658	1.70043	1.68455	1.67272	1.66440	1.65845	1.65408	1.65079	1.64068	1.63653	1.63816	1.64485
-.31	1.48117	1.70557	1.70141	1.68603	1.67430	1.66596	1.65996	1.65553	1.65216	1.64172	1.63718	1.63845	1.64485
-.30	1.47604	1.70446	1.70231	1.68745	1.67583	1.66749	1.66144	1.65694	1.65352	1.64274	1.63783	1.63874	1.64485
-.29	1.47108	1.70326	1.70310	1.68879	1.67731	1.66897	1.66288	1.65833	1.65485	1.64376	1.63848	1.63903	1.64485
-.28	1.46628	1.70197	1.70381	1.69006	1.67874	1.67042	1.66429	1.65970	1.65616	1.64477	1.63913	1.63933	1.64485
-.27	1.46164	1.70060	1.70443	1.69127	1.68011	1.67182	1.66567	1.66103	1.65745	1.64578	1.63978	1.63963	1.64485
-.26	1.45715	1.69916	1.70496	1.69241	1.68143	1.67318	1.66702	1.66234	1.65871	1.64677	1.64042	1.63993	1.64485
-.25	1.45281	1.69764	1.70541	1.69349	1.68270	1.67450	1.66833	1.66362	1.65995	1.64775	1.64107	1.64022	1.64485
-.24	1.44861	1.69607	1.70578	1.69449	1.68392	1.67577	1.66960	1.66487	1.66117	1.64872	1.64171	1.64052	1.64485
-.23	1.44455	1.69443	1.70607	1.69544	1.68509	1.67701	1.67085	1.66609	1.66236	1.64968	1.64235	1.64083	1.64485
-.22	1.44063	1.69274	1.70629	1.69632	1.68621	1.67821	1.67205	1.66729	1.66353	1.65063	1.64298	1.64113	1.64485
-.21	1.43683	1.69101	1.70643	1.69714	1.68728	1.67936	1.67323	1.66845	1.66467	1.65157	1.64362	1.64143	1.64485

5.4 Factors for Computing Critical Values of the Noncentral t-Distribution
Values of λ are given for each $\eta(\delta)$ to give $\Pr\{T_f \le t_o | \delta\} = .95$ (Continued)

η	f = 1	2	3	4	5	6	7	8	9	16	36	144	∞
-.20	1.43316	1.68923	1.70651	1.69790	1.68830	1.68048	1.67437	1.66959	1.66579	1.65250	1.64425	1.64173	1.64485
-.19	1.42961	1.68741	1.70651	1.69860	1.68927	1.68155	1.67548	1.67069	1.66688	1.65341	1.64487	1.64203	1.64485
-.18	1.42617	1.68557	1.70646	1.69925	1.69019	1.68258	1.67655	1.67177	1.66794	1.65431	1.64550	1.64234	1.64485
-.17	1.42285	1.68369	1.70634	1.69983	1.69106	1.68358	1.67759	1.67282	1.66898	1.65520	1.64611	1.64264	1.64485
-.16	1.41963	1.68178	1.70616	1.70036	1.69189	1.68453	1.67859	1.67384	1.67000	1.65608	1.64673	1.64294	1.64485
-.15	1.41652	1.67985	1.70592	1.70084	1.69267	1.68545	1.67956	1.67483	1.67099	1.65695	1.64734	1.64324	1.64485
-.14	1.41350	1.67790	1.70563	1.70127	1.69341	1.68632	1.68050	1.67579	1.67195	1.65780	1.64795	1.64355	1.64485
-.13	1.41059	1.67594	1.70529	1.70164	1.69410	1.68716	1.68141	1.67672	1.67289	1.65864	1.64855	1.64385	1.64485
-.12	1.40776	1.67396	1.70489	1.70196	1.69475	1.68796	1.68228	1.67762	1.67380	1.65946	1.64914	1.64415	1.64485
-.11	1.40503	1.67198	1.70445	1.70224	1.69535	1.68872	1.68312	1.67850	1.67469	1.66027	1.64973	1.64445	1.64485
-.10	1.40238	1.66998	1.70397	1.70247	1.69591	1.68945	1.68392	1.67934	1.67555	1.66107	1.65032	1.64475	1.64485
-.09	1.39982	1.66798	1.70344	1.70265	1.69643	1.69013	1.68470	1.68016	1.67638	1.66185	1.65090	1.64505	1.64485
-.08	1.39733	1.66598	1.70286	1.70279	1.69691	1.69078	1.68544	1.68095	1.67719	1.66262	1.65147	1.64534	1.64485
-.07	1.39492	1.66397	1.70225	1.70288	1.69735	1.69140	1.68615	1.68170	1.67798	1.66337	1.65204	1.64564	1.64485
-.06	1.39259	1.66197	1.70161	1.70293	1.69775	1.69198	1.68682	1.68244	1.67874	1.66411	1.65260	1.64594	1.64485
-.05	1.39033	1.65997	1.70092	1.70294	1.69811	1.69253	1.68747	1.68314	1.67947	1.66484	1.65316	1.64623	1.64485
-.04	1.38814	1.65797	1.70021	1.70291	1.69843	1.69304	1.68809	1.68381	1.68018	1.66555	1.65371	1.64653	1.64485
-.03	1.38601	1.65598	1.69946	1.70285	1.69872	1.69351	1.68867	1.68446	1.68086	1.66624	1.65425	1.64682	1.64485
-.02	1.38395	1.65400	1.69868	1.70274	1.69897	1.69396	1.68923	1.68508	1.68152	1.66692	1.65479	1.64711	1.64485
-.01	1.38196	1.65202	1.69788	1.70260	1.69918	1.69437	1.68975	1.68567	1.68215	1.66759	1.65532	1.64740	1.64485
.00	1.38002	1.65006	1.69704	1.70243	1.69936	1.69475	1.69025	1.68624	1.68276	1.66824	1.65584	1.64768	1.64485
.01	1.37814	1.64810	1.69619	1.70222	1.69951	1.69510	1.69072	1.68678	1.68334	1.66887	1.65636	1.64797	1.64485
.02	1.37632	1.64616	1.69531	1.70199	1.69963	1.69542	1.69116	1.68729	1.68390	1.66949	1.65686	1.64825	1.64485
.03	1.37455	1.64423	1.69441	1.70172	1.69971	1.69571	1.69157	1.68778	1.68444	1.67010	1.65736	1.64853	1.64485
.04	1.37283	1.64232	1.69349	1.70142	1.69976	1.69596	1.69195	1.68824	1.68495	1.67069	1.65786	1.64881	1.64485
.05	1.37117	1.64042	1.69254	1.70109	1.69978	1.69619	1.69230	1.68868	1.68544	1.67126	1.65834	1.64909	1.64485
.06	1.36955	1.63854	1.69159	1.70073	1.69978	1.69639	1.69263	1.68909	1.68590	1.67182	1.65882	1.64936	1.64485
.07	1.36798	1.63667	1.69061	1.70035	1.69974	1.69656	1.69294	1.68947	1.68634	1.67236	1.65929	1.64963	1.64485
.08	1.36646	1.63482	1.68962	1.69994	1.69968	1.69671	1.69321	1.68984	1.68676	1.67289	1.65976	1.64990	1.64485
.09	1.36498	1.63298	1.68862	1.69951	1.69959	1.69683	1.69346	1.69017	1.68716	1.67340	1.66021	1.65017	1.64485
.10	1.36354	1.63117	1.68760	1.69906	1.69947	1.69692	1.69369	1.69049	1.68753	1.67390	1.66066	1.65044	1.64485
.11	1.36215	1.62937	1.68657	1.69858	1.69933	1.69699	1.69389	1.69078	1.68788	1.67438	1.66109	1.65070	1.64485
.12	1.36080	1.62759	1.68553	1.69808	1.69916	1.69703	1.69407	1.69105	1.68821	1.67485	1.66152	1.65096	1.64485
.13	1.35948	1.62583	1.68448	1.69756	1.69897	1.69705	1.69422	1.69129	1.68852	1.67530	1.66195	1.65121	1.64485
.14	1.35821	1.62409	1.68343	1.69702	1.69876	1.69704	1.69435	1.69151	1.68881	1.67573	1.66236	1.65147	1.64485
.15	1.35697	1.62237	1.68236	1.69646	1.69852	1.69701	1.69446	1.69171	1.68907	1.67616	1.66276	1.65172	1.64485
.16	1.35576	1.62067	1.68129	1.69588	1.69826	1.69696	1.69454	1.69189	1.68932	1.67656	1.66316	1.65197	1.64485
.17	1.35459	1.61899	1.68021	1.69529	1.69798	1.69688	1.69460	1.69205	1.68954	1.67695	1.66355	1.65221	1.64485
.18	1.35346	1.61733	1.67913	1.69468	1.69769	1.69679	1.69464	1.69218	1.68975	1.67733	1.66392	1.65245	1.64485
.19	1.35235	1.61569	1.67804	1.69405	1.69737	1.69667	1.69466	1.69230	1.68993	1.67769	1.66429	1.65269	1.64485
.20	1.35128	1.61408	1.67695	1.69341	1.69703	1.69653	1.69466	1.69239	1.69009	1.67803	1.66466	1.65292	1.64485

5.4 Factors for Computing Critical Values of the Noncentral t-Distribution

Values of λ are given for each $\eta(\delta)$ to give $\Pr\left\{T_f \leq t_o \middle| \delta\right\} = .95$ (Continued)

η	f = 1	2	3	4	5	6	7	8	9	16	36	144	∞
.21	1.35024	1.61248	1.67586	1.69276	1.69667	1.69637	1.69464	1.69247	1.69024	1.67836	1.66501	1.65315	1.64485
.22	1.34923	1.61090	1.67476	1.69209	1.69630	1.69620	1.69460	1.69252	1.69036	1.67868	1.66535	1.65338	1.64485
.23	1.34825	1.60935	1.67367	1.69141	1.69590	1.69600	1.69454	1.69256	1.69047	1.67898	1.66568	1.65361	1.64485
.24	1.34730	1.60781	1.67257	1.69072	1.69550	1.69578	1.69446	1.69258	1.69056	1.67926	1.66601	1.65383	1.64485
.25	1.34637	1.60630	1.67147	1.69002	1.69507	1.69555	1.69436	1.69258	1.69063	1.67953	1.66632	1.65404	1.64485
.26	1.34547	1.60480	1.67037	1.68931	1.69463	1.69530	1.69424	1.69256	1.69068	1.67979	1.66663	1.65426	1.64485
.27	1.34460	1.60333	1.66927	1.68858	1.69418	1.69504	1.69411	1.69252	1.69072	1.68003	1.66693	1.65446	1.64485
.28	1.34375	1.60188	1.66818	1.68785	1.69371	1.69475	1.69396	1.69246	1.69073	1.68026	1.66721	1.65467	1.64485
.29	1.34293	1.60045	1.66708	1.68711	1.69323	1.69445	1.69379	1.69239	1.69073	1.68047	1.66749	1.65487	1.64485
.30	1.34213	1.59904	1.66599	1.68636	1.69273	1.69414	1.69361	1.69230	1.69072	1.68067	1.66776	1.65507	1.64485
.31	1.34136	1.59765	1.66490	1.68561	1.69223	1.69381	1.69341	1.69220	1.69068	1.68085	1.66802	1.65526	1.64485
.32	1.34060	1.59628	1.66382	1.68484	1.69171	1.69347	1.69319	1.69208	1.69063	1.68102	1.66827	1.65545	1.64485
.33	1.33987	1.59494	1.66274	1.68408	1.69118	1.69311	1.69296	1.69194	1.69057	1.68118	1.66851	1.65563	1.64485
.34	1.33917	1.59361	1.66166	1.68330	1.69064	1.69274	1.69271	1.69179	1.69049	1.68132	1.66874	1.65581	1.64485
.35	1.33848	1.59231	1.66059	1.68252	1.69008	1.69235	1.69245	1.69162	1.69039	1.68145	1.66897	1.65599	1.64485
.36	1.33781	1.59102	1.65952	1.68173	1.68952	1.69195	1.69218	1.69144	1.69028	1.68157	1.66918	1.65616	1.64485
.37	1.33717	1.58976	1.65845	1.68094	1.68895	1.69155	1.69189	1.69124	1.69015	1.68167	1.66938	1.65633	1.64485
.38	1.33654	1.58851	1.65740	1.68015	1.68837	1.69112	1.69159	1.69103	1.69001	1.68176	1.66958	1.65649	1.64485
.39	1.33594	1.58729	1.65634	1.67935	1.68778	1.69069	1.69127	1.69080	1.68986	1.68183	1.66976	1.65665	1.64485
.40	1.33535	1.58609	1.65530	1.67855	1.68718	1.69025	1.69094	1.69057	1.68969	1.68189	1.66993	1.65680	1.64485
.41	1.33479	1.58490	1.65426	1.67775	1.68658	1.68979	1.69060	1.69031	1.68951	1.68194	1.67010	1.65695	1.64485
.42	1.33424	1.58374	1.65323	1.67695	1.68596	1.68933	1.69025	1.69005	1.68931	1.68198	1.67025	1.65709	1.64485
.43	1.33371	1.58260	1.65220	1.67614	1.68534	1.68885	1.68989	1.68977	1.68911	1.68200	1.67040	1.65723	1.64485
.44	1.33319	1.58147	1.65119	1.67533	1.68472	1.68837	1.68952	1.68949	1.68888	1.68201	1.67054	1.65737	1.64485
.45	1.33270	1.58037	1.65018	1.67452	1.68409	1.68788	1.68913	1.68918	1.68865	1.68201	1.67066	1.65750	1.64485
.46	1.33222	1.57929	1.64917	1.67372	1.68345	1.68737	1.68874	1.68887	1.68840	1.68199	1.67078	1.65762	1.64485
.47	1.33175	1.57822	1.64818	1.67291	1.68280	1.68686	1.68833	1.68855	1.68815	1.68196	1.67089	1.65774	1.64485
.48	1.33131	1.57718	1.64719	1.67210	1.68216	1.68635	1.68791	1.68821	1.68788	1.68193	1.67098	1.65786	1.64485
.49	1.33088	1.57615	1.64622	1.67129	1.68150	1.68582	1.68749	1.68787	1.68760	1.68187	1.67107	1.65797	1.64485
.50	1.33047	1.57515	1.64525	1.67048	1.68085	1.68529	1.68705	1.68751	1.68730	1.68181	1.67115	1.65807	1.64485
.51	1.33007	1.57416	1.64429	1.66967	1.68019	1.68475	1.68661	1.68715	1.68700	1.68173	1.67122	1.65817	1.64485
.52	1.32969	1.57319	1.64334	1.66887	1.67952	1.68420	1.68616	1.68677	1.68669	1.68165	1.67128	1.65826	1.64485
.53	1.32932	1.57225	1.64240	1.66806	1.67885	1.68365	1.68570	1.68639	1.68636	1.68155	1.67133	1.65835	1.64485
.54	1.32897	1.57132	1.64147	1.66726	1.67818	1.68309	1.68523	1.68599	1.68603	1.68144	1.67137	1.65844	1.64485
.55	1.32863	1.57041	1.64055	1.66646	1.67751	1.68252	1.68476	1.68559	1.68569	1.68132	1.67140	1.65852	1.64485
.56	1.32831	1.56951	1.63963	1.66566	1.67684	1.68196	1.68427	1.68518	1.68533	1.68119	1.67142	1.65859	1.64485
.57	1.32800	1.56864	1.63873	1.66487	1.67616	1.68138	1.68378	1.68476	1.68497	1.68104	1.67143	1.65866	1.64485
.58	1.32770	1.56779	1.63784	1.66408	1.67548	1.68080	1.68329	1.68433	1.68460	1.68089	1.67144	1.65872	1.64485
.59	1.32742	1.56695	1.63696	1.66329	1.67480	1.68022	1.68278	1.68389	1.68422	1.68072	1.67143	1.65877	1.64485
.60	1.32716	1.56614	1.63609	1.66250	1.67412	1.67963	1.68227	1.68345	1.68383	1.68055	1.67141	1.65883	1.64485

5.4 Factors for Computing Critical Values of the Noncentral t-Distribution

Values of λ are given for each $\eta(\delta)$ to give $\Pr\left\{T_f \le t_o \middle| \delta\right\} = .95$ (Continued)

η	f = 1	2	3	4	5	6	7	8	9	16	36	144	∞
.61	1.32690	1.56534	1.63523	1.66172	1.67344	1.67904	1.68176	1.68300	1.68343	1.68036	1.67139	1.65887	1.64485
.62	1.32667	1.56456	1.63438	1.66094	1.67275	1.67844	1.68124	1.68254	1.68303	1.68017	1.67135	1.65891	1.64485
.63	1.32644	1.56380	1.63354	1.66017	1.67207	1.67784	1.68071	1.68208	1.68261	1.67996	1.67131	1.65895	1.64485
.64	1.32623	1.56305	1.63271	1.65940	1.67139	1.67724	1.68018	1.68160	1.68219	1.67974	1.67125	1.65897	1.64485
.65	1.32603	1.56233	1.63190	1.65864	1.67071	1.67664	1.67964	1.68113	1.68176	1.67952	1.67119	1.65900	1.64485
.66	1.32585	1.56162	1.63109	1.65788	1.67002	1.67603	1.67910	1.68064	1.68133	1.67928	1.67112	1.65901	1.64485
.67	1.32568	1.56093	1.63030	1.65713	1.66934	1.67542	1.67856	1.68015	1.68089	1.67903	1.67104	1.65903	1.64485
.68	1.32552	1.56026	1.62951	1.65638	1.66866	1.67481	1.67801	1.67966	1.68044	1.67878	1.67095	1.65903	1.64485
.69	1.32537	1.55961	1.62874	1.65564	1.66799	1.67420	1.67745	1.67916	1.67998	1.67851	1.67085	1.65903	1.64485
.70	1.32524	1.55897	1.62798	1.65491	1.66731	1.67358	1.67690	1.67865	1.67952	1.67824	1.67074	1.65902	1.64485
.71	1.32512	1.55835	1.62723	1.65418	1.66663	1.67297	1.67634	1.67814	1.67905	1.67796	1.67062	1.65901	1.64485
.72	1.32501	1.55775	1.62650	1.65345	1.66596	1.67235	1.67578	1.67762	1.67858	1.67766	1.67049	1.65899	1.64485
.73	1.32491	1.55717	1.62577	1.65273	1.66529	1.67173	1.67521	1.67710	1.67810	1.67736	1.67036	1.65897	1.64485
.74	1.32483	1.55660	1.62506	1.65202	1.66462	1.67112	1.67464	1.67658	1.67761	1.67705	1.67021	1.65894	1.64485
.75	1.32476	1.55606	1.62436	1.65132	1.66396	1.67050	1.67407	1.67605	1.67712	1.67673	1.67006	1.65890	1.64485
.76	1.32470	1.55552	1.62367	1.65062	1.66329	1.66988	1.67350	1.67552	1.67663	1.67641	1.66990	1.65886	1.64485
.77	1.32465	1.55501	1.62300	1.64993	1.66263	1.66926	1.67292	1.67499	1.67613	1.67607	1.66972	1.65881	1.64485
.78	1.32461	1.55451	1.62233	1.64925	1.66198	1.66865	1.67235	1.67445	1.67563	1.67573	1.66954	1.65876	1.64485
.79	1.32459	1.55403	1.62168	1.64857	1.66132	1.66803	1.67177	1.67391	1.67512	1.67538	1.66936	1.65870	1.64485
.80	1.32457	1.55356	1.62104	1.64790	1.66067	1.66742	1.67119	1.67336	1.67461	1.67502	1.66916	1.65863	1.64485
.81	1.32457	1.55311	1.62041	1.64724	1.66003	1.66680	1.67061	1.67282	1.67409	1.67466	1.66895	1.65856	1.64485
.82	1.32458	1.55268	1.61979	1.64659	1.65939	1.66619	1.67003	1.67227	1.67357	1.67428	1.66874	1.65848	1.64485
.83	1.32459	1.55226	1.61919	1.64594	1.65875	1.66558	1.66945	1.67172	1.67305	1.67390	1.66851	1.65840	1.64485
.84	1.32462	1.55185	1.61859	1.64530	1.65812	1.66497	1.66887	1.67116	1.67252	1.67351	1.66828	1.65831	1.64485
.85	1.32465	1.55146	1.61801	1.64467	1.65749	1.66436	1.66828	1.67061	1.67200	1.67312	1.66804	1.65821	1.64485
.86	1.32469	1.55109	1.61744	1.64405	1.65686	1.66375	1.66770	1.67005	1.67146	1.67272	1.66779	1.65810	1.64485
.87	1.32474	1.55072	1.61689	1.64343	1.65625	1.66315	1.66712	1.66949	1.67093	1.67231	1.66753	1.65799	1.64485
.88	1.32480	1.55037	1.61634	1.64283	1.65563	1.66255	1.66654	1.66893	1.67039	1.67189	1.66727	1.65788	1.64485
.89	1.32485	1.55004	1.61580	1.64223	1.65502	1.66195	1.66596	1.66837	1.66985	1.67147	1.66700	1.65775	1.64485
.90	1.32492	1.54971	1.61528	1.64164	1.65442	1.66135	1.66538	1.66781	1.66931	1.67104	1.66671	1.65762	1.64485
.91	1.32498	1.54940	1.61477	1.64105	1.65382	1.66076	1.66480	1.66725	1.66877	1.67061	1.66642	1.65749	1.64485
.92	1.32505	1.54910	1.61427	1.64048	1.65323	1.66017	1.66422	1.66669	1.66823	1.67017	1.66613	1.65735	1.64485
.93	1.32511	1.54881	1.61377	1.63991	1.65264	1.65958	1.66365	1.66613	1.66768	1.66972	1.66582	1.65720	1.64485
.94	1.32518	1.54853	1.61329	1.63936	1.65206	1.65900	1.66307	1.66557	1.66713	1.66927	1.66551	1.65704	1.64485
.95	1.32524	1.54826	1.61282	1.63881	1.65148	1.65842	1.66250	1.66501	1.66659	1.66882	1.66518	1.65688	1.64485
.96	1.32530	1.54800	1.61236	1.63827	1.65091	1.65784	1.66193	1.66444	1.66604	1.66835	1.66486	1.65671	1.64485
.97	1.32536	1.54774	1.61192	1.63773	1.65035	1.65727	1.66136	1.66388	1.66549	1.66789	1.66452	1.65654	1.64485
.98	1.32542	1.54750	1.61148	1.63721	1.64979	1.65670	1.66079	1.66332	1.66494	1.66741	1.66417	1.65636	1.64485
.99	1.32548	1.54727	1.61105	1.63669	1.64923	1.65614	1.66023	1.66277	1.66439	1.66694	1.66382	1.65617	1.64485
1.00	1.32553	1.54704	1.61063	1.63618	1.64869	1.65558	1.65966	1.66221	1.66384	1.66645	1.66346	1.65598	1.64485

5.5 Factors for Computing Critical Values of the Noncentral t-Distribution

Values of λ are given for each $\eta(\delta)$ to give $\Pr\{T_f \le t_o | \delta\} = .975$

η	f = 1	2	3	4	5	6	7	8	9	16	36	144	∞
-1.00	1.75561	1.84129	1.87449	1.89244	1.90379	1.91165	1.91745	1.92192	1.92547	1.93859	1.94902	1.95633	1.95996
-.99	1.74812	1.83513	1.86937	1.88802	1.89987	1.90811	1.91421	1.91891	1.92265	1.93657	1.94775	1.95574	1.95996
-.98	1.74282	1.82999	1.86492	1.88410	1.89635	1.90490	1.91124	1.91615	1.92006	1.93468	1.94654	1.95518	1.95996
-.97	1.73974	1.82584	1.86110	1.88065	1.89320	1.90201	1.90855	1.91362	1.91768	1.93291	1.94541	1.95464	1.95996
-.96	1.73897	1.82266	1.85791	1.87766	1.89043	1.89942	1.90612	1.91134	1.91552	1.93128	1.94433	1.95412	1.95996
-.95	1.74062	1.82044	1.85533	1.87512	1.88801	1.89713	1.90396	1.90928	1.91355	1.92976	1.94332	1.95363	1.95996
-.94	1.74480	1.81916	1.85333	1.87302	1.88594	1.89513	1.90204	1.90744	1.91178	1.92837	1.94237	1.95316	1.95996
-.93	1.75157	1.81879	1.85191	1.87134	1.88420	1.89341	1.90036	1.90581	1.91021	1.92709	1.94148	1.95271	1.95996
-.92	1.76091	1.81931	1.85104	1.87006	1.88279	1.89196	1.89892	1.90439	1.90882	1.92592	1.94065	1.95228	1.95996
-.91	1.77271	1.82070	1.85070	1.86918	1.88170	1.89078	1.89770	1.90317	1.90761	1.92486	1.93987	1.95188	1.95996
-.90	1.78676	1.82293	1.85088	1.86867	1.88090	1.88985	1.89670	1.90214	1.90657	1.92390	1.93916	1.95150	1.95996
-.89	1.80283	1.82595	1.85154	1.86853	1.88040	1.88916	1.89592	1.90130	1.90571	1.92305	1.93849	1.95113	1.95996
-.88	1.82064	1.82972	1.85268	1.86873	1.88017	1.88871	1.89534	1.90064	1.90500	1.92230	1.93788	1.95079	1.95996
-.87	1.83985	1.83420	1.85427	1.86926	1.88021	1.88848	1.89495	1.90016	1.90445	1.92165	1.93732	1.95047	1.95996
-.86	1.86012	1.83933	1.85627	1.87011	1.88050	1.88846	1.89475	1.89984	1.90406	1.92109	1.93681	1.95017	1.95996
-.85	1.88104	1.84505	1.85867	1.87126	1.88104	1.88866	1.89473	1.89968	1.90381	1.92062	1.93636	1.94988	1.95996
-.84	1.90217	1.85131	1.86144	1.87269	1.88181	1.88905	1.89488	1.89968	1.90370	1.92024	1.93594	1.94962	1.95996
-.83	1.92302	1.85804	1.86456	1.87439	1.88279	1.88962	1.89520	1.89983	1.90372	1.91994	1.93558	1.94937	1.95996
-.82	1.94303	1.86518	1.86798	1.87634	1.88399	1.89038	1.89568	1.90011	1.90387	1.91973	1.93526	1.94915	1.95996
-.81	1.96163	1.87267	1.87170	1.87851	1.88538	1.89130	1.89630	1.90053	1.90414	1.91960	1.93499	1.94894	1.95996
-.80	1.97822	1.88044	1.87567	1.88091	1.88695	1.89238	1.89707	1.90108	1.90453	1.91954	1.93476	1.94875	1.95996
-.79	1.99223	1.88842	1.87988	1.88350	1.88869	1.89362	1.89797	1.90175	1.90503	1.91956	1.93457	1.94857	1.95996
-.78	2.00313	1.89656	1.88428	1.88627	1.89059	1.89499	1.89899	1.90253	1.90564	1.91965	1.93443	1.94842	1.95996
-.77	2.01052	1.90479	1.88887	1.88920	1.89263	1.89649	1.90014	1.90343	1.90635	1.91980	1.93432	1.94827	1.95996
-.76	2.01412	1.91305	1.89360	1.89228	1.89481	1.89812	1.90140	1.90442	1.90715	1.92003	1.93425	1.94815	1.95996
-.75	2.01382	1.92128	1.89846	1.89550	1.89712	1.89986	1.90276	1.90552	1.90805	1.92031	1.93422	1.94804	1.95996
-.74	2.00968	1.92941	1.90341	1.89883	1.89953	1.90171	1.90422	1.90670	1.90903	1.92065	1.93422	1.94795	1.95996
-.73	2.00193	1.93739	1.90843	1.90226	1.90205	1.90365	1.90577	1.90797	1.91009	1.92106	1.93426	1.94787	1.95996
-.72	1.99089	1.94517	1.91350	1.90577	1.90466	1.90568	1.90740	1.90932	1.91123	1.92151	1.93433	1.94781	1.95996
-.71	1.97702	1.95269	1.91860	1.90936	1.90735	1.90779	1.90911	1.91074	1.91243	1.92202	1.93444	1.94776	1.95996
-.70	1.96079	1.95991	1.92369	1.91300	1.91010	1.90997	1.91089	1.91223	1.91370	1.92258	1.93458	1.94772	1.95996
-.69	1.94272	1.96678	1.92876	1.91668	1.91292	1.91221	1.91274	1.91379	1.91503	1.92319	1.93474	1.94770	1.95996
-.68	1.92328	1.97326	1.93379	1.92039	1.91578	1.91451	1.91464	1.91540	1.91642	1.92384	1.93494	1.94770	1.95996
-.67	1.90292	1.97932	1.93876	1.92412	1.91869	1.91686	1.91660	1.91706	1.91786	1.92454	1.93517	1.94770	1.95996
-.66	1.88204	1.98492	1.94364	1.92785	1.92163	1.91925	1.91860	1.91877	1.91935	1.92528	1.93542	1.94772	1.95996
-.65	1.86096	1.99005	1.94843	1.93158	1.92459	1.92168	1.92064	1.92052	1.92088	1.92605	1.93570	1.94775	1.95996
-.64	1.83997	1.99468	1.95310	1.93528	1.92756	1.92413	1.92272	1.92232	1.92245	1.92686	1.93600	1.94780	1.95996
-.63	1.81928	1.99879	1.95764	1.93895	1.93054	1.92661	1.92482	1.92414	1.92405	1.92770	1.93633	1.94785	1.95996
-.62	1.79907	2.00239	1.96204	1.94258	1.93351	1.92910	1.92695	1.92599	1.92569	1.92858	1.93669	1.94792	1.95996
-.61	1.77945	2.00546	1.96628	1.94616	1.93648	1.93160	1.92910	1.92787	1.92735	1.92948	1.93706	1.94800	1.95996

5.5 Factors for Computing Critical Values of the Noncentral t-Distribution

Values of λ are given for each $\eta(\delta)$ to give $\Pr\left\{T_f \le t_o \mid \delta\right\} = .975$ (Continued)

	f												
η	1	2	3	4	5	6	7	8	9	16	36	144	∞
-.60	1.76052	2.00801	1.97036	1.94969	1.93943	1.93411	1.93126	1.92976	1.92903	1.93041	1.93746	1.94808	1.95996
-.59	1.74234	2.01003	1.97425	1.95314	1.94236	1.93661	1.93343	1.93168	1.93074	1.93137	1.93787	1.94818	1.95996
-.58	1.72494	2.01155	1.97796	1.95652	1.94526	1.93910	1.93561	1.93360	1.93246	1.93235	1.93831	1.94829	1.95996
-.57	1.70832	2.01257	1.98147	1.95982	1.94813	1.94159	1.93779	1.93553	1.93420	1.93335	1.93876	1.94841	1.95996
-.56	1.69251	2.01310	1.98479	1.96303	1.95095	1.94405	1.93996	1.93747	1.93594	1.93437	1.93923	1.94854	1.95996
-.55	1.67747	2.01317	1.98790	1.96615	1.95373	1.94650	1.94213	1.93941	1.93769	1.93541	1.93972	1.94868	1.95996
-.54	1.66319	2.01279	1.99080	1.96917	1.95645	1.94892	1.94429	1.94135	1.93945	1.93647	1.94023	1.94883	1.95996
-.53	1.64966	2.01200	1.99350	1.97208	1.95913	1.95131	1.94643	1.94328	1.94120	1.93754	1.94074	1.94899	1.95996
-.52	1.63683	2.01080	1.99597	1.97488	1.96174	1.95367	1.94855	1.94520	1.94296	1.93862	1.94128	1.94915	1.95996
-.51	1.62468	2.00923	1.99824	1.97757	1.96429	1.95599	1.95065	1.94711	1.94471	1.93971	1.94182	1.94933	1.95996
-.50	1.61318	2.00731	2.00030	1.98015	1.96677	1.95827	1.95273	1.94901	1.94645	1.94082	1.94238	1.94951	1.95996
-.49	1.60228	2.00506	2.00214	1.98261	1.96918	1.96050	1.95478	1.95089	1.94818	1.94193	1.94296	1.94970	1.95996
-.48	1.59197	2.00252	2.00377	1.98494	1.97152	1.96270	1.95680	1.95275	1.94990	1.94304	1.94354	1.94990	1.95996
-.47	1.58221	1.99970	2.00520	1.98716	1.97378	1.96484	1.95879	1.95459	1.95161	1.94416	1.94413	1.95010	1.95996
-.46	1.57296	1.99663	2.00643	1.98925	1.97597	1.96693	1.96074	1.95641	1.95330	1.94529	1.94473	1.95031	1.95996
-.45	1.56419	1.99334	2.00745	1.99122	1.97807	1.96897	1.96266	1.95820	1.95497	1.94642	1.94534	1.95053	1.95996
-.44	1.55589	1.98984	2.00829	1.99307	1.98010	1.97095	1.96454	1.95997	1.95663	1.94755	1.94596	1.95075	1.95996
-.43	1.54802	1.98616	2.00893	1.99479	1.98204	1.97287	1.96638	1.96170	1.95826	1.94867	1.94658	1.95098	1.95996
-.42	1.54055	1.98231	2.00940	1.99638	1.98390	1.97474	1.96817	1.96340	1.95987	1.94980	1.94722	1.95122	1.95996
-.41	1.53346	1.97833	2.00968	1.99786	1.98567	1.97655	1.96992	1.96507	1.96145	1.95093	1.94785	1.95146	1.95996
-.40	1.52673	1.97423	2.00979	1.99921	1.98736	1.97829	1.97163	1.96671	1.96300	1.95205	1.94850	1.95171	1.95996
-.39	1.52033	1.97001	2.00974	2.00044	1.98897	1.97997	1.97329	1.96831	1.96453	1.95316	1.94914	1.95196	1.95996
-.38	1.51425	1.96571	2.00954	2.00156	1.99048	1.98159	1.97490	1.96987	1.96603	1.95427	1.94980	1.95222	1.95996
-.37	1.50847	1.96134	2.00917	2.00255	1.99192	1.98315	1.97646	1.97139	1.96750	1.95537	1.95045	1.95248	1.95996
-.36	1.50297	1.95691	2.00867	2.00343	1.99326	1.98464	1.97798	1.97288	1.96894	1.95646	1.95111	1.95274	1.95996
-.35	1.49773	1.95243	2.00802	2.00420	1.99452	1.98606	1.97944	1.97432	1.97035	1.95755	1.95177	1.95301	1.95996
-.34	1.49274	1.94791	2.00725	2.00486	1.99570	1.98742	1.98085	1.97573	1.97172	1.95862	1.95243	1.95328	1.95996
-.33	1.48799	1.94337	2.00635	2.00540	1.99679	1.98872	1.98221	1.97709	1.97306	1.95969	1.95309	1.95356	1.95996
-.32	1.48345	1.93882	2.00533	2.00585	1.99780	1.98995	1.98352	1.97841	1.97436	1.96074	1.95375	1.95384	1.95996
-.31	1.47912	1.93426	2.00420	2.00619	1.99873	1.99111	1.98477	1.97969	1.97563	1.96178	1.95441	1.95412	1.95996
-.30	1.47498	1.92971	2.00296	2.00643	1.99957	1.99221	1.98597	1.98092	1.97686	1.96281	1.95508	1.95441	1.95996
-.29	1.47103	1.92517	2.00162	2.00657	2.00033	1.99325	1.98712	1.98211	1.97805	1.96382	1.95574	1.95470	1.95996
-.28	1.46726	1.92064	2.00019	2.00662	2.00102	1.99422	1.98822	1.98326	1.97921	1.96482	1.95639	1.95499	1.95996
-.27	1.46365	1.91614	1.99867	2.00657	2.00163	1.99512	1.98926	1.98436	1.98033	1.96580	1.95705	1.95528	1.95996
-.26	1.46019	1.91167	1.99707	2.00644	2.00216	1.99596	1.99025	1.98541	1.98141	1.96677	1.95771	1.95558	1.95996
-.25	1.45688	1.90723	1.99540	2.00623	2.00262	1.99674	1.99118	1.98643	1.98246	1.96772	1.95836	1.95587	1.95996
-.24	1.45372	1.90284	1.99365	2.00593	2.00300	1.99746	1.99207	1.98739	1.98346	1.96866	1.95900	1.95617	1.95996
-.23	1.45068	1.89848	1.99184	2.00555	2.00331	1.99812	1.99290	1.98831	1.98443	1.96957	1.95965	1.95647	1.95996
-.22	1.44777	1.89417	1.98997	2.00509	2.00356	1.99871	1.99368	1.98919	1.98535	1.97047	1.96029	1.95677	1.95996
-.21	1.44497	1.88990	1.98804	2.00457	2.00373	1.99925	1.99441	1.99002	1.98624	1.97135	1.96092	1.95708	1.95996

5.5 Factors for Computing Critical Values of the Noncentral t-Distribution
Values of λ are given for each $\eta(\delta)$ to give $Pr\left\{T_f \leq t_o \middle| \delta\right\} = .975$ (Continued)

η	f = 1	2	3	4	5	6	7	8	9	16	36	144	∞
-.20	1.44229	1.88569	1.98606	2.00397	2.00384	1.99972	1.99508	1.99081	1.98709	1.97222	1.96155	1.95738	1.95996
-.19	1.43972	1.88153	1.98403	2.00330	2.00388	2.00014	1.99571	1.99156	1.98790	1.97306	1.96217	1.95768	1.95996
-.18	1.43725	1.87743	1.98196	2.00257	2.00386	2.00050	1.99629	1.99226	1.98867	1.97388	1.96279	1.95799	1.95996
-.17	1.43487	1.87338	1.97985	2.00178	2.00378	2.00081	1.99681	1.99291	1.98940	1.97469	1.96340	1.95829	1.95996
-.16	1.43258	1.86939	1.97771	2.00093	2.00364	2.00106	1.99729	1.99352	1.99009	1.97547	1.96401	1.95859	1.95996
-.15	1.43039	1.86546	1.97554	2.00003	2.00344	2.00126	1.99772	1.99409	1.99075	1.97623	1.96461	1.95890	1.95996
-.14	1.42827	1.86159	1.97333	1.99907	2.00318	2.00141	1.99811	1.99462	1.99137	1.97698	1.96520	1.95920	1.95996
-.13	1.42624	1.85777	1.97111	1.99806	2.00288	2.00150	1.99844	1.99510	1.99194	1.97770	1.96578	1.95950	1.95996
-.12	1.42428	1.85402	1.96886	1.99700	2.00251	2.00155	1.99873	1.99555	1.99248	1.97840	1.96635	1.95981	1.95996
-.11	1.42239	1.85033	1.96659	1.99589	2.00210	2.00154	1.99897	1.99595	1.99299	1.97908	1.96692	1.96011	1.95996
-.10	1.42057	1.84670	1.96431	1.99474	2.00164	2.00149	1.99917	1.99631	1.99345	1.97973	1.96748	1.96041	1.95996
-.09	1.41881	1.84312	1.96201	1.99356	2.00113	2.00139	1.99933	1.99663	1.99388	1.98037	1.96803	1.96070	1.95996
-.08	1.41712	1.83961	1.95970	1.99233	2.00057	2.00125	1.99944	1.99691	1.99427	1.98098	1.96857	1.96100	1.95996
-.07	1.41549	1.83616	1.95738	1.99107	1.99998	2.00106	1.99952	1.99715	1.99463	1.98157	1.96910	1.96130	1.95996
-.06	1.41392	1.83277	1.95506	1.98977	1.99933	2.00083	1.99955	1.99735	1.99495	1.98214	1.96962	1.96159	1.95996
-.05	1.41239	1.82944	1.95273	1.98844	1.99865	2.00055	1.99954	1.99752	1.99523	1.98269	1.97013	1.96188	1.95996
-.04	1.41093	1.82616	1.95041	1.98708	1.99793	2.00024	1.99949	1.99764	1.99548	1.98322	1.97063	1.96217	1.95996
-.03	1.40951	1.82295	1.94807	1.98569	1.99717	1.99988	1.99940	1.99773	1.99569	1.98372	1.97112	1.96246	1.95996
-.02	1.40814	1.81979	1.94575	1.98427	1.99638	1.99949	1.99927	1.99779	1.99587	1.98420	1.97160	1.96274	1.95996
-.01	1.40681	1.81669	1.94342	1.98283	1.99555	1.99906	1.99911	1.99781	1.99602	1.98466	1.97207	1.96302	1.95996
.00	1.40553	1.81364	1.94110	1.98137	1.99468	1.99860	1.99891	1.99779	1.99614	1.98509	1.97253	1.96330	1.95996
.01	1.40430	1.81065	1.93878	1.97988	1.99379	1.99810	1.99867	1.99774	1.99622	1.98551	1.97298	1.96358	1.95996
.02	1.40310	1.80772	1.93647	1.97838	1.99286	1.99756	1.99840	1.99766	1.99627	1.98590	1.97342	1.96385	1.95996
.03	1.40194	1.80483	1.93416	1.97685	1.99191	1.99699	1.99810	1.99754	1.99628	1.98626	1.97384	1.96412	1.95996
.04	1.40082	1.80201	1.93187	1.97531	1.99093	1.99639	1.99777	1.99739	1.99627	1.98661	1.97426	1.96439	1.95996
.05	1.39974	1.79923	1.92959	1.97376	1.98992	1.99576	1.99740	1.99721	1.99623	1.98693	1.97466	1.96465	1.95996
.06	1.39869	1.79651	1.92731	1.97219	1.98889	1.99510	1.99700	1.99700	1.99615	1.98723	1.97505	1.96491	1.95996
.07	1.39767	1.79383	1.92505	1.97061	1.98783	1.99441	1.99657	1.99676	1.99605	1.98751	1.97543	1.96517	1.95996
.08	1.39668	1.79121	1.92280	1.96901	1.98675	1.99370	1.99612	1.99649	1.99591	1.98777	1.97579	1.96542	1.95996
.09	1.39573	1.78863	1.92057	1.96741	1.98564	1.99296	1.99563	1.99619	1.99575	1.98801	1.97615	1.96567	1.95996
.10	1.39481	1.78611	1.91835	1.96580	1.98452	1.99219	1.99512	1.99586	1.99556	1.98822	1.97649	1.96591	1.95996
.11	1.39391	1.78363	1.91614	1.96418	1.98338	1.99139	1.99458	1.99551	1.99535	1.98841	1.97682	1.96615	1.95996
.12	1.39304	1.78119	1.91395	1.96255	1.98222	1.99058	1.99401	1.99513	1.99511	1.98858	1.97713	1.96639	1.95996
.13	1.39220	1.77880	1.91178	1.96091	1.98104	1.98974	1.99342	1.99472	1.99484	1.98873	1.97744	1.96662	1.95996
.14	1.39139	1.77646	1.90962	1.95927	1.97984	1.98887	1.99280	1.99429	1.99454	1.98885	1.97773	1.96684	1.95996
.15	1.39059	1.77416	1.90747	1.95763	1.97863	1.98799	1.99216	1.99383	1.99422	1.98896	1.97800	1.96706	1.95996
.16	1.38983	1.77191	1.90535	1.95598	1.97741	1.98709	1.99150	1.99334	1.99387	1.98904	1.97827	1.96728	1.95996
.17	1.38908	1.76969	1.90324	1.95434	1.97617	1.98616	1.99081	1.99284	1.99350	1.98911	1.97852	1.96749	1.95996
.18	1.38836	1.76752	1.90115	1.95268	1.97492	1.98522	1.99010	1.99231	1.99311	1.98915	1.97876	1.96770	1.95996
.19	1.38766	1.76539	1.89908	1.95103	1.97366	1.98426	1.98937	1.99175	1.99270	1.98917	1.97898	1.96790	1.95996
.20	1.38698	1.76330	1.89703	1.94938	1.97238	1.98329	1.98862	1.99118	1.99226	1.98917	1.97919	1.96809	1.95996

5.5 Factors for Computing Critical Values of the Noncentral t-Distribution

Values of λ are given for each $\eta(\delta)$ to give $\Pr\{T_f \le t_o | \delta\} = .975$ (Continued)

	f												
η	1	2	3	4	5	6	7	8	9	16	36	144	∞
.21	1.38633	1.76125	1.89499	1.94773	1.97110	1.98229	1.98785	1.99058	1.99179	1.98915	1.97939	1.96828	1.95996
.22	1.38569	1.75924	1.89298	1.94608	1.96980	1.98128	1.98707	1.98996	1.99131	1.98912	1.97958	1.96847	1.95996
.23	1.38507	1.75726	1.89098	1.94443	1.96850	1.98026	1.98626	1.98933	1.99081	1.98906	1.97975	1.96865	1.95996
.24	1.38447	1.75532	1.88900	1.94278	1.96719	1.97922	1.98544	1.98867	1.99028	1.98898	1.97991	1.96882	1.95996
.25	1.38388	1.75342	1.88704	1.94114	1.96587	1.97817	1.98459	1.98799	1.98974	1.98888	1.98005	1.96899	1.95996
.26	1.38332	1.75156	1.88511	1.93950	1.96454	1.97710	1.98374	1.98730	1.98917	1.98876	1.98018	1.96915	1.95996
.27	1.38277	1.74973	1.88319	1.93786	1.96321	1.97603	1.98286	1.98659	1.98859	1.98862	1.98030	1.96930	1.95996
.28	1.38223	1.74793	1.88129	1.93623	1.96187	1.97494	1.98197	1.98586	1.98799	1.98847	1.98040	1.96945	1.95996
.29	1.38172	1.74617	1.87941	1.93460	1.96053	1.97384	1.98107	1.98511	1.98737	1.98829	1.98049	1.96959	1.95996
.30	1.38122	1.74444	1.87755	1.93298	1.95918	1.97273	1.98015	1.98435	1.98673	1.98810	1.98057	1.96973	1.95996
.31	1.38073	1.74274	1.87570	1.93137	1.95783	1.97161	1.97922	1.98357	1.98607	1.98789	1.98063	1.96986	1.95996
.32	1.38026	1.74108	1.87388	1.92976	1.95647	1.97048	1.97828	1.98277	1.98540	1.98766	1.98068	1.96998	1.95996
.33	1.37980	1.73945	1.87208	1.92815	1.95511	1.96934	1.97732	1.98196	1.98471	1.98741	1.98071	1.97010	1.95996
.34	1.37935	1.73785	1.87030	1.92655	1.95375	1.96819	1.97635	1.98114	1.98401	1.98714	1.98073	1.97021	1.95996
.35	1.37892	1.73627	1.86854	1.92496	1.95239	1.96704	1.97537	1.98030	1.98329	1.98686	1.98074	1.97031	1.95996
.36	1.37851	1.73473	1.86680	1.92338	1.95103	1.96587	1.97438	1.97945	1.98255	1.98656	1.98073	1.97041	1.95996
.37	1.37810	1.73322	1.86507	1.92181	1.94966	1.96471	1.97337	1.97859	1.98180	1.98624	1.98071	1.97049	1.95996
.38	1.37771	1.73174	1.86337	1.92024	1.94830	1.96353	1.97236	1.97771	1.98104	1.98590	1.98068	1.97058	1.95996
.39	1.37733	1.73028	1.86169	1.91868	1.94693	1.96235	1.97134	1.97682	1.98026	1.98555	1.98063	1.97065	1.95996
.40	1.37696	1.72886	1.86002	1.91713	1.94557	1.96116	1.97031	1.97592	1.97946	1.98518	1.98057	1.97072	1.95996
.41	1.37660	1.72746	1.85838	1.91559	1.94420	1.95997	1.96926	1.97500	1.97866	1.98479	1.98049	1.97078	1.95996
.42	1.37626	1.72609	1.85675	1.91405	1.94284	1.95877	1.96822	1.97408	1.97784	1.98439	1.98040	1.97083	1.95996
.43	1.37592	1.72474	1.85515	1.91253	1.94147	1.95757	1.96716	1.97315	1.97701	1.98398	1.98030	1.97088	1.95996
.44	1.37560	1.72342	1.85356	1.91101	1.94011	1.95637	1.96609	1.97220	1.97617	1.98354	1.98018	1.97091	1.95996
.45	1.37529	1.72213	1.85199	1.90951	1.93875	1.95516	1.96502	1.97125	1.97531	1.98309	1.98005	1.97095	1.95996
.46	1.37498	1.72086	1.85044	1.90801	1.93740	1.95395	1.96394	1.97028	1.97445	1.98263	1.97990	1.97097	1.95996
.47	1.37469	1.71961	1.84891	1.90653	1.93604	1.95273	1.96286	1.96931	1.97357	1.98215	1.97975	1.97098	1.95996
.48	1.37441	1.71839	1.84740	1.90505	1.93469	1.95152	1.96176	1.96833	1.97268	1.98165	1.97957	1.97099	1.95996
.49	1.37413	1.71720	1.84591	1.90359	1.93334	1.95030	1.96067	1.96734	1.97179	1.98114	1.97939	1.97099	1.95996
.50	1.37387	1.71603	1.84444	1.90213	1.93200	1.94908	1.95956	1.96634	1.97088	1.98062	1.97919	1.97098	1.95996
.51	1.37362	1.71488	1.84298	1.90069	1.93065	1.94786	1.95846	1.96533	1.96996	1.98008	1.97898	1.97096	1.95996
.52	1.37337	1.71376	1.84155	1.89925	1.92932	1.94663	1.95734	1.96432	1.96903	1.97953	1.97875	1.97094	1.95996
.53	1.37314	1.71265	1.84013	1.89783	1.92798	1.94541	1.95623	1.96330	1.96810	1.97896	1.97851	1.97090	1.95996
.54	1.37291	1.71157	1.83873	1.89642	1.92665	1.94419	1.95511	1.96227	1.96715	1.97838	1.97826	1.97086	1.95996
.55	1.37269	1.71052	1.83735	1.89501	1.92533	1.94296	1.95398	1.96124	1.96620	1.97779	1.97799	1.97081	1.95996
.56	1.37248	1.70948	1.83599	1.89362	1.92401	1.94174	1.95285	1.96020	1.96524	1.97718	1.97771	1.97075	1.95996
.57	1.37228	1.70847	1.83464	1.89224	1.92269	1.94051	1.95172	1.95915	1.96427	1.97656	1.97742	1.97069	1.95996
.58	1.37209	1.70748	1.83332	1.89087	1.92138	1.93929	1.95059	1.95810	1.96330	1.97593	1.97711	1.97061	1.95996
.59	1.37191	1.70650	1.83201	1.88952	1.92008	1.93806	1.94945	1.95704	1.96231	1.97528	1.97680	1.97053	1.95996
.60	1.37173	1.70555	1.83072	1.88817	1.91878	1.93684	1.94831	1.95598	1.96132	1.97462	1.97646	1.97044	1.95996

5.5 Factors for Computing Critical Values of the Noncentral t-Distribution

Values of λ are given for each $\eta(\delta)$ to give $Pr\{T_f \leq t_o | \delta\} = .975$ (Continued)

η	f = 1	2	3	4	5	6	7	8	9	16	36	144	∞
.61	1.37156	1.70462	1.82944	1.88684	1.91748	1.93562	1.94717	1.95491	1.96033	1.97395	1.97612	1.97034	1.95996
.62	1.37140	1.70371	1.82819	1.88551	1.91620	1.93440	1.94602	1.95384	1.95932	1.97327	1.97576	1.97023	1.95996
.63	1.37125	1.70282	1.82695	1.88420	1.91491	1.93319	1.94488	1.95277	1.95831	1.97257	1.97539	1.97011	1.95996
.64	1.37111	1.70195	1.82573	1.88290	1.91364	1.93197	1.94373	1.95169	1.95730	1.97186	1.97500	1.96998	1.95996
.65	1.37097	1.70110	1.82453	1.88161	1.91237	1.93076	1.94258	1.95061	1.95628	1.97115	1.97460	1.96985	1.95996
.66	1.37084	1.70027	1.82334	1.88034	1.91111	1.92955	1.94143	1.94952	1.95525	1.97041	1.97419	1.96970	1.95996
.67	1.37072	1.69946	1.82217	1.87907	1.90985	1.92834	1.94028	1.94843	1.95422	1.96967	1.97377	1.96955	1 95996
.68	1.37060	1.69867	1.82102	1.87782	1.90860	1.92713	1.93913	1.94734	1.95318	1.96892	1.97333	1.96939	1.95996
.69	1.37050	1.69790	1.81989	1.87658	1.90736	1.92593	1.93798	1.94624	1.95214	1.96816	1.97288	1.96921	1.95996
.70	1.37040	1.69714	1.81877	1.87535	1.90613	1.92473	1.93683	1.94515	1.95110	1.96738	1.97242	1.96903	1.95996
.71	1.37031	1.69640	1.81767	1.87414	1.90490	1.92353	1.93568	1.94405	1.95005	1.96660	1.97195	1.96884	1.95996
.72	1.37022	1.69568	1.81658	1.87293	1.90368	1.92234	1.93453	1.94295	1.94899	1.96580	1.97146	1.96865	1.95996
.73	1.37014	1.69498	1.81552	1.87174	1.90247	1.92115	1.93339	1.94184	1.94793	1.96499	1.97096	1.96844	1.95996
.74	1.37007	1.69430	1.81447	1.87056	1.90126	1.91997	1.93224	1.94074	1.94687	1.96418	1.97045	1.96822	1.95996
.75	1.37001	1.69363	1.81343	1.86939	1.90007	1.91879	1.93109	1.93963	1.94581	1.96335	1.96992	1.96799	1.95996
.76	1.36995	1.69299	1.81242	1.86823	1.89888	1.91761	1.92994	1.93852	1.94474	1.96252	1.96938	1.96776	1.95996
.77	1.36990	1.69235	1.81141	1.86709	1.89770	1.91644	1.92880	1.93742	1.94367	1.96167	1.96883	1.96751	1.95996
.78	1.36985	1.69174	1.81043	1.86596	1.89652	1.91527	1.92766	1.93631	1.94260	1.96082	1.96827	1.96725	1.95996
.79	1.36982	1.69114	1.80946	1.86484	1.89536	1.91411	1.92652	1.93520	1.94152	1.95995	1.96770	1.96699	1.95996
.80	1.36978	1.69056	1.80851	1.86373	1.89420	1.91295	1.92538	1.93409	1.94044	1.95908	1.96711	1.96672	1.95996
.81	1.36976	1.68999	1.80757	1.86264	1.89306	1.91179	1.92424	1.93297	1.93936	1.95820	1.96651	1.96643	1.95996
.82	1.36974	1.68944	1.80665	1.86155	1.89192	1.91065	1.92311	1.93186	1.93828	1.95731	1.96590	1.96614	1.95996
.83	1.36972	1.68890	1.80574	1.86048	1.89079	1.90950	1.92197	1.93075	1.93720	1.95641	1.96528	1.96583	1.95996
.84	1.36971	1.68838	1.80485	1.85942	1.88966	1.90836	1.92084	1.92964	1.93611	1.95550	1.96465	1.96552	1.95996
.85	1.36971	1.68788	1.80397	1.85838	1.88855	1.90723	1.91972	1.92853	1.93503	1.95458	1.96400	1.96520	1.95996
.86	1.36971	1.68739	1.80311	1.85734	1.88744	1.90611	1.91859	1.92743	1.93394	1.95366	1.96334	1.96487	1.95996
.87	1.36971	1.68691	1.80227	1.85632	1.88635	1.90498	1.91747	1.92632	1.93285	1.95273	1.96267	1.96452	1.95996
.88	1.36972	1.68644	1.80143	1.85531	1.88526	1.90387	1.91636	1.92521	1.93176	1.95179	1.96199	1.96417	1.95996
.89	1.36973	1.68599	1.80062	1.85432	1.88418	1.90276	1.91524	1.92410	1.93067	1.95084	1.96130	1.96381	1.95996
.90	1.36974	1.68555	1.79981	1.85333	1.88311	1.90166	1.91413	1.92300	1.92958	1.94988	1.96059	1.96344	1.95996
.91	1.36976	1.68512	1.79903	1.85236	1.88205	1.90056	1.91302	1.92190	1.92849	1.94892	1.95988	1.96305	1.95996
.92	1.36977	1.68471	1.79825	1.85140	1.88100	1.89947	1.91192	1.92080	1.92740	1.94795	1.95915	1.96266	1.95996
.93	1.36979	1.68431	1.79749	1.85045	1.87996	1.89839	1.91082	1.91970	1.92630	1.94698	1.95841	1.96226	1.95996
.94	1.36981	1.68391	1.79674	1.84951	1.87893	1.89731	1.90973	1.91860	1.92521	1.94599	1.95766	1.96185	1.95996
.95	1.36982	1.68353	1.79601	1.84858	1.87790	1.89624	1.90864	1.91751	1.92412	1.94500	1.95690	1.96142	1.95996
.96	1.36984	1.68316	1.79529	1.84767	1.87689	1.89517	1.90755	1.91641	1.92303	1.94401	1.95612	1.96099	1.95996
.97	1.36985	1.68280	1.79458	1.84677	1.87589	1.89412	1.90647	1.91532	1.92194	1.94300	1.95534	1.96055	1.95996
.98	1.36987	1.68245	1.79389	1.84588	1.87489	1.89307	1.90539	1.91423	1.92086	1.94199	1.95454	1.96010	1.95996
.99	1.36988	1.68210	1.79320	1.84500	1.87390	1.89202	1.90432	1.91315	1.91977	1.94098	1.95374	1.95963	1.95996
1.00	1.36989	1.68177	1.79253	1.84413	1.87293	1.89099	1.90325	1.91207	1.91868	1.93996	1.95292	1.95916	1.95996

5.6 Factors for Computing Critical Values of the Noncentral t-Distribution

Values of λ are given for each $\eta(\delta)$ to give $\Pr\{T_f \le t_o | \delta\} = .99$

	f												
η	1	2	3	4	5	6	7	8	9	16	36	144	∞
-1.00	2.22856	2.29193	2.31388	2.32457	2.33068	2.33450	2.33704	2.33881	2.34006	2.34314	2.34239	2.33710	2.32635
-.99	2.20400	2.27557	2.30125	2.31411	2.32164	2.32648	2.32980	2.33217	2.33392	2.33889	2.33982	2.33596	2.32635
-.98	2.18424	2.26132	2.28995	2.30460	2.31335	2.31909	2.32308	2.32599	2.32818	2.33488	2.33738	2.33486	2.32635
-.97	2.16918	2.24909	2.27992	2.29602	2.30580	2.31230	2.31688	2.32026	2.32284	2.33110	2.33504	2.33380	2.32635
-.96	2.15889	2.23883	2.27112	2.28834	2.29895	2.30608	2.31117	2.31497	2.31788	2.32754	2.33281	2.33278	2.32635
-.95	2.15352	2.23046	2.26350	2.28152	2.29278	2.30043	2.30595	2.31009	2.31330	2.32420	2.33069	2.33179	2.32635
-.94	2.15330	2.22393	2.25703	2.27553	2.28726	2.29532	2.30118	2.30562	2.30908	2.32107	2.32868	2.33084	2.32635
-.93	2.15837	2.21920	2.25165	2.27033	2.28237	2.29073	2.29687	2.30154	2.30521	2.31814	2.32676	2.32993	2.32635
-.92	2.16871	2.21621	2.24733	2.26591	2.27809	2.28665	2.29298	2.29784	2.30168	2.31542	2.32495	2.32906	2.32635
-.91	2.18410	2.21491	2.24403	2.26223	2.27440	2.28306	2.28951	2.29451	2.29848	2.31288	2.32324	2.32822	2.32635
-.90	2.20410	2.21522	2.24171	2.25926	2.27127	2.27993	2.28645	2.29153	2.29559	2.31054	2.32162	2.32742	2.32635
-.89	2.22805	2.21709	2.24033	2.25696	2.26867	2.27725	2.28377	2.28889	2.29301	2.30838	2.32010	2.32665	2.32635
-.88	2.25497	2.22041	2.23983	2.25532	2.26660	2.27500	2.28146	2.28658	2.29072	2.30639	2.31866	2.32591	2.32635
-.87	2.28348	2.22508	2.24018	2.25430	2.26501	2.27317	2.27952	2.28458	2.28871	2.30457	2.31732	2.32521	2.32635
-.86	2.31174	2.23099	2.24132	2.25386	2.26390	2.27173	2.27791	2.28289	2.28698	2.30292	2.31606	2.32453	2.32635
-.85	2.33738	2.23801	2.24320	2.25398	2.26324	2.27066	2.27663	2.28149	2.28551	2.30143	2.31489	2.32390	2.32635
-.84	2.35763	2.24599	2.24577	2.25462	2.26300	2.26996	2.27566	2.28036	2.28429	2.30010	2.31380	2.32329	2.32635
-.83	2.36962	2.25479	2.24897	2.25575	2.26315	2.26960	2.27499	2.27950	2.28331	2.29892	2.31279	2.32271	2.32635
-.82	2.37090	2.26424	2.25273	2.25733	2.26369	2.26956	2.27460	2.27890	2.28256	2.29788	2.31186	2.32216	2.32635
-.81	2.36002	2.27417	2.25701	2.25933	2.26458	2.26982	2.27449	2.27853	2.28202	2.29697	2.31100	2.32164	2.32635
-.80	2.33686	2.28440	2.26174	2.26172	2.26579	2.27037	2.27462	2.27840	2.28170	2.29621	2.31022	2.32116	2.32635
-.79	2.30270	2.29476	2.26685	2.26445	2.26731	2.27118	2.27500	2.27847	2.28158	2.29557	2.30950	2.32069	2.32635
-.78	2.25983	2.30506	2.27228	2.26750	2.26911	2.27225	2.27559	2.27876	2.28164	2.29505	2.30886	2.32026	2.32635
-.77	2.21101	2.31512	2.27797	2.27083	2.27116	2.27354	2.27640	2.27924	2.28188	2.29466	2.30829	2.31986	2.32635
-.76	2.15895	2.32476	2.28386	2.27440	2.27345	2.27505	2.27741	2.27989	2.28229	2.29437	2.30778	2.31948	2.32635
-.75	2.10601	2.33380	2.28989	2.27818	2.27594	2.27676	2.27859	2.28072	2.28285	2.29420	2.30733	2.31912	2.32635
-.74	2.05396	2.34211	2.29598	2.28213	2.27862	2.27864	2.27995	2.28170	2.28356	2.29413	2.30694	2.31879	2.32635
-.73	2.00405	2.34953	2.30210	2.28623	2.28147	2.28069	2.28146	2.28283	2.28442	2.29416	2.30662	2.31849	2.32635
-.72	1.95704	2.35594	2.30817	2.29044	2.28445	2.28288	2.28311	2.28410	2.28540	2.29428	2.30635	2.31821	2.32635
-.71	1.91333	2.36125	2.31414	2.29472	2.28756	2.28520	2.28488	2.28548	2.28649	2.29449	2.30613	2.31796	2.32635
-.70	1.87305	2.36539	2.31997	2.29905	2.29076	2.28763	2.28678	2.28699	2.28770	2.29479	2.30597	2.31772	2.32635
-.69	1.83616	2.36829	2.32560	2.30340	2.29404	2.29016	2.28877	2.28859	2.28901	2.29517	2.30586	2.31751	2.32635
-.68	1.80252	2.36995	2.33100	2.30773	2.29737	2.29277	2.29086	2.29029	2.29042	2.29562	2.30580	2.31732	2.32635
-.67	1.77191	2.37035	2.33611	2.31203	2.30075	2.29545	2.29303	2.29207	2.29190	2.29615	2.30578	2.31716	2.32635
-.66	1.74410	2.36953	2.34091	2.31627	2.30415	2.29818	2.29526	2.29393	2.29347	2.29674	2.30581	2.31701	2.32635
-.65	1.71883	2.36751	2.34537	2.32042	2.30754	2.30095	2.29755	2.29584	2.29509	2.29740	2.30589	2.31689	2.32635
-.64	1.69588	2.36436	2.34945	2.32446	2.31093	2.30375	2.29988	2.29782	2.29678	2.29812	2.30601	2.31678	2.32635
-.63	1.67501	2.36015	2.35314	2.32838	2.31428	2.30656	2.30225	2.29984	2.29852	2.29889	2.30616	2.31669	2.32635
-.62	1.65601	2.35495	2.35642	2.33215	2.31760	2.30937	2.30464	2.30189	2.30031	2.29971	2.30636	2.31663	2.32635
-.61	1.63870	2.34886	2.35928	2.33576	2.32085	2.31218	2.30705	2.30398	2.30213	2.30058	2.30659	2.31658	2.32635

5.6 Factors for Computing Critical Values of the Noncentral t-Distribution

Values of λ are given for each $\eta(\delta)$ to give $\Pr\left\{T_f \le t_o \middle| \delta\right\} = .99$ (Continued)

η	f = 1	2	3	4	5	6	7	8	9	16	36	144	∞
-.60	1.62290	2.34196	2.36171	2.33919	2.32404	2.31496	2.30947	2.30609	2.30399	2.30150	2.30686	2.31654	2.32635
-.59	1.60846	2.33435	2.36370	2.34243	2.32714	2.31771	2.31188	2.30821	2.30587	2.30245	2.30716	2.31653	2.32635
-.58	1.59523	2.32612	2.36525	2.34547	2.33015	2.32043	2.31429	2.31034	2.30776	2.30344	2.30749	2.31653	2.32635
-.57	1.58310	2.31735	2.36638	2.34830	2.33306	2.32310	2.31667	2.31247	2.30967	2.30446	2.30786	2.31655	2.32635
-.56	1.57195	2.30814	2.36707	2.35092	2.33585	2.32571	2.31904	2.31459	2.31158	2.30552	2.30825	2.31658	2.32635
-.55	1.56169	2.29857	2.36735	2.35331	2.33853	2.32825	2.32137	2.31670	2.31349	2.30660	2.30867	2.31663	2.32635
-.54	1.55223	2.28871	2.36722	2.35547	2.34108	2.33073	2.32366	2.31880	2.31540	2.30770	2.30911	2.31669	2.32635
-.53	1.54349	2.27862	2.36669	2.35740	2.34350	2.33313	2.32591	2.32087	2.31730	2.30883	2.30958	2.31677	2.32635
-.52	1.53540	2.26838	2.36579	2.35910	2.34578	2.33545	2.32810	2.32291	2.31918	2.30997	2.31007	2.31686	2.32635
-.51	1.52791	2.25803	2.36453	2.36057	2.34792	2.33768	2.33025	2.32491	2.32105	2.31113	2.31058	2.31697	2.32635
-.50	1.52095	2.24764	2.36292	2.36180	2.34992	2.33982	2.33233	2.32688	2.32289	2.31230	2.31111	2.31708	2.32635
-.49	1.51448	2.23723	2.36099	2.36281	2.35177	2.34186	2.33435	2.32881	2.32470	2.31348	2.31166	2.31721	2.32635
-.48	1.50846	2.22686	2.35875	2.36359	2.35346	2.34380	2.33630	2.33069	2.32649	2.31466	2.31223	2.31736	2.32635
-.47	1.50285	2.21656	2.35623	2.36414	2.35501	2.34564	2.33819	2.33253	2.32824	2.31585	2.31281	2.31751	2.32635
-.46	1.49761	2.20635	2.35344	2.36448	2.35640	2.34737	2.33999	2.33430	2.32995	2.31704	2.31341	2.31767	2.32635
-.45	1.49271	2.19626	2.35040	2.36460	2.35765	2.34900	2.34173	2.33603	2.33162	2.31823	2.31401	2.31785	2.32635
-.44	1.48812	2.18631	2.34714	2.36452	2.35874	2.35051	2.34338	2.33769	2.33324	2.31942	2.31464	2.31803	2.32635
-.43	1.48382	2.17651	2.34367	2.36423	2.35968	2.35192	2.34495	2.33930	2.33482	2.32060	2.31527	2.31822	2.32635
-.42	1.47978	2.16689	2.34000	2.36375	2.36047	2.35322	2.34644	2.34084	2.33636	2.32178	2.31591	2.31843	2.32635
-.41	1.47598	2.15745	2.33617	2.36309	2.36111	2.35441	2.34784	2.34232	2.33784	2.32295	2.31656	2.31864	2.32635
-.40	1.47241	2.14821	2.33218	2.36224	2.36161	2.35548	2.34916	2.34373	2.33927	2.32411	2.31722	2.31886	2.32635
-.39	1.46905	2.13916	2.32805	2.36122	2.36197	2.35644	2.35039	2.34507	2.34065	2.32525	2.31788	2.31908	2.32635
-.38	1.46588	2.13032	2.32380	2.36004	2.36219	2.35730	2.35154	2.34635	2.34197	2.32639	2.31855	2.31932	2.32635
-.37	1.46288	2.12168	2.31944	2.35870	2.36227	2.35804	2.35259	2.34755	2.34323	2.32750	2.31922	2.31956	2.32635
-.36	1.46005	2.11325	2.31498	2.35721	2.36222	2.35868	2.35357	2.34868	2.34444	2.32860	2.31990	2.31981	2.32635
-.35	1.45738	2.10502	2.31045	2.35558	2.36204	2.35920	2.35445	2.34974	2.34559	2.32969	2.32058	2.32007	2.32635
-.34	1.45484	2.09701	2.30584	2.35382	2.36173	2.35963	2.35524	2.35073	2.34667	2.33075	2.32126	2.32033	2.32635
-.33	1.45244	2.08920	2.30118	2.35193	2.36130	2.35994	2.35595	2.35165	2.34770	2.33179	2.32194	2.32059	2.32635
-.32	1.45016	2.08160	2.29647	2.34992	2.36076	2.36016	2.35658	2.35250	2.34867	2.33281	2.32262	2.32086	2.32635
-.31	1.44800	2.07420	2.29173	2.34780	2.36010	2.36028	2.35712	2.35327	2.34957	2.33381	2.32330	2.32114	2.32635
-.30	1.44595	2.06699	2.28695	2.34558	2.35933	2.36029	2.35757	2.35397	2.35042	2.33478	2.32397	2.32142	2.32635
-.29	1.44399	2.05999	2.28216	2.34327	2.35846	2.36022	2.35794	2.35460	2.35120	2.33573	2.32464	2.32170	2.32635
-.28	1.44214	2.05317	2.27736	2.34086	2.35748	2.36005	2.35823	2.35516	2.35192	2.33665	2.32531	2.32199	2.32635
-.27	1.44037	2.04654	2.27256	2.33837	2.35641	2.35978	2.35844	2.35565	2.35258	2.33754	2.32598	2.32228	2.32635
-.26	1.43868	2.04009	2.26776	2.33580	2.35525	2.35943	2.35857	2.35607	2.35318	2.33841	2.32664	2.32258	2.32635
-.25	1.43707	2.03383	2.26297	2.33317	2.35399	2.35900	2.35862	2.35642	2.35372	2.33925	2.32729	2.32288	2.32635
-.24	1.43553	2.02773	2.25819	2.33047	2.35266	2.35848	2.35859	2.35670	2.35420	2.34006	2.32794	2.32318	2.32635
-.23	1.43407	2.02181	2.25344	2.32770	2.35124	2.35787	2.35849	2.35691	2.35461	2.34084	2.32858	2.32348	2.32635
-.22	1.43266	2.01605	2.24871	2.32489	2.34974	2.35720	2.35832	2.35706	2.35497	2.34159	2.32921	2.32378	2.32635
-.21	1.43132	2.01044	2.24400	2.32203	2.34818	2.35644	2.35807	2.35714	2.35527	2.34232	2.32983	2.32408	2.32635

5.6 Factors for Computing Critical Values of the Noncentral t-Distribution
Values of λ are given for each $\eta(\delta)$ to give $Pr\left\{T_f \le t_o \mid \delta\right\} = .99$ (Continued)

η	f = 1	2	3	4	5	6	7	8	9	16	36	144	∞
-.20	1.43004	2.00500	2.23933	2.31912	2.34654	2.35561	2.35776	2.35716	2.35550	2.34301	2.33045	2.32439	2.32635
-.19	1.42881	1.99970	2.23470	2.31618	2.34484	2.35472	2.35737	2.35712	2.35569	2.34366	2.33105	2.32469	2.32635
-.18	1.42764	1.99455	2.23010	2.31320	2.34308	2.35375	2.35692	2.35701	2.35581	2.34429	2.33164	2.32500	2.32635
-.17	1.42651	1.98955	2.22555	2.31019	2.34126	2.35272	2.35641	2.35684	2.35588	2.34489	2.33223	2.32531	2.32635
-.16	1.42543	1.98468	2.22104	2.30715	2.33938	2.35163	2.35583	2.35661	2.35589	2.34545	2.33280	2.32561	2.32635
-.15	1.42439	1.97994	2.21657	2.30409	2.33746	2.35047	2.35520	2.35633	2.35585	2.34598	2.33336	2.32592	2.32635
-.14	1.42339	1.97533	2.21216	2.30101	2.33549	2.34926	2.35450	2.35599	2.35575	2.34648	2.33391	2.32622	2.32635
-.13	1.42244	1.97085	2.20779	2.29792	2.33347	2.34800	2.35375	2.35559	2.35561	2.34694	2.33444	2.32652	2.32635
-.12	1.42152	1.96649	2.20347	2.29481	2.33141	2.34668	2.35294	2.35514	2.35541	2.34737	2.33497	2.32683	2.32635
-.11	1.42063	1.96224	2.19920	2.29169	2.32931	2.34531	2.35208	2.35463	2.35516	2.34777	2.33547	2.32713	2.32635
-.10	1.41978	1.95811	2.19499	2.28857	2.32717	2.34389	2.35117	2.35408	2.35486	2.34814	2.33597	2.32742	2.32635
-.09	1.41896	1.95409	2.19083	2.28544	2.32501	2.34243	2.35021	2.35347	2.35451	2.34847	2.33645	2.32772	2.32635
-.08	1.41818	1.95018	2.18672	2.28232	2.32281	2.34093	2.34920	2.35282	2.35411	2.34878	2.33692	2.32801	2.32635
-.07	1.41742	1.94636	2.18267	2.27919	2.32058	2.33938	2.34814	2.35211	2.35367	2.34904	2.33737	2.32830	2.32635
-.06	1.41669	1.94265	2.17867	2.27606	2.31833	2.33779	2.34704	2.35137	2.35318	2.34928	2.33780	2.32859	2.32635
-.05	1.41598	1.93904	2.17472	2.27294	2.31605	2.33617	2.34590	2.35057	2.35265	2.34948	2.33822	2.32888	2.32635
-.04	1.41530	1.93552	2.17083	2.26982	2.31375	2.33451	2.34471	2.34974	2.35208	2.34965	2.33863	2.32916	2.32635
-.03	1.41465	1.93209	2.16699	2.26672	2.31143	2.33282	2.34349	2.34886	2.35146	2.34979	2.33902	2.32943	2.32635
-.02	1.41402	1.92874	2.16321	2.26362	2.30910	2.33110	2.34223	2.34794	2.35080	2.34989	2.33939	2.32971	2.32635
-.01	1.41341	1.92548	2.15949	2.26054	2.30675	2.32934	2.34093	2.34699	2.35010	2.34997	2.33975	2.32997	2.32635
.00	1.41282	1.92231	2.15581	2.25746	2.30438	2.32756	2.33960	2.34599	2.34936	2.35001	2.34009	2.33024	2.32635
.01	1.41225	1.91921	2.15219	2.25440	2.30200	2.32576	2.33823	2.34496	2.34859	2.35002	2.34041	2.33050	2.32635
.02	1.41170	1.91619	2.14863	2.25136	2.29962	2.32393	2.33683	2.34389	2.34778	2.35000	2.34071	2.33075	2.32635
.03	1.41117	1.91325	2.14512	2.24833	2.29722	2.32207	2.33540	2.34279	2.34693	2.34994	2.34100	2.33100	2.32635
.04	1.41066	1.91038	2.14165	2.24532	2.29482	2.32020	2.33394	2.34165	2.34604	2.34986	2.34127	2.33125	2.32635
.05	1.41016	1.90758	2.13825	2.24233	2.29241	2.31830	2.33246	2.34049	2.34513	2.34975	2.34152	2.33149	2.32635
.06	1.40968	1.90484	2.13489	2.23935	2.29000	2.31639	2.33094	2.33929	2.34418	2.34960	2.34175	2.33172	2.32635
.07	1.40922	1.90218	2.13158	2.23640	2.28758	2.31446	2.32941	2.33806	2.34320	2.34943	2.34197	2.33195	2.32635
.08	1.40877	1.89957	2.12833	2.23347	2.28516	2.31251	2.32784	2.33681	2.34218	2.34922	2.34217	2.33217	2.32635
.09	1.40833	1.89703	2.12512	2.23055	2.28274	2.31055	2.32626	2.33553	2.34114	2.34899	2.34235	2.33238	2.32635
.10	1.40791	1.89455	2.12197	2.22766	2.28032	2.30857	2.32465	2.33422	2.34007	2.34873	2.34251	2.33259	2.32635
.11	1.40751	1.89213	2.11886	2.22479	2.27790	2.30658	2.32303	2.33288	2.33897	2.34844	2.34265	2.33279	2.32635
.12	1.40711	1.88977	2.11580	2.22194	2.27549	2.30458	2.32138	2.33152	2.33785	2.34812	2.34277	2.33299	2.32635
.13	1.40673	1.88746	2.11279	2.21912	2.27307	2.30258	2.31972	2.33014	2.33669	2.34777	2.34288	2.33318	2.32635
.14	1.40636	1.88520	2.10982	2.21632	2.27066	2.30056	2.31804	2.32874	2.33552	2.34739	2.34297	2.33336	2.32635
.15	1.40600	1.88300	2.10690	2.21354	2.26826	2.29853	2.31634	2.32731	2.33431	2.34699	2.34303	2.33353	2.32635
.16	1.40565	1.88085	2.10403	2.21079	2.26586	2.29650	2.31463	2.32587	2.33309	2.34656	2.34308	2.33370	2.32635
.17	1.40532	1.87874	2.10119	2.20806	2.26347	2.29446	2.31290	2.32440	2.33184	2.34610	2.34311	2.33386	2.32635
.18	1.40499	1.87669	2.09841	2.20535	2.26108	2.29242	2.31116	2.32292	2.33057	2.34562	2.34312	2.33401	2.32635
.19	1.40467	1.87468	2.09567	2.20267	2.25870	2.29037	2.30941	2.32142	2.32928	2.34511	2.34311	2.33415	2.32635
.20	1.40437	1.87271	2.09296	2.20001	2.25633	2.28831	2.30764	2.31990	2.32797	2.34458	2.34309	2.33428	2.32635

5.6 Factors for Computing Critical Values of the Noncentral t-Distribution

Values of λ are given for each $\eta(\delta)$ to give $Pr\{T_f \leq t_o | \delta\} = .99$ (Continued)

	f												
η	1	2	3	4	5	6	7	8	9	16	36	144	∞
.21	1.40407	1.87079	2.09031	2.19738	2.25397	2.28626	2.30587	2.31837	2.32663	2.34402	2.34304	2.33441	2.32635
.22	1.40378	1.86892	2.08769	2.19477	2.25161	2.28420	2.30408	2.31682	2.32528	2.34343	2.34297	2.33453	2.32635
.23	1.40350	1.86708	2.08511	2.19219	2.24927	2.28214	2.30229	2.31525	2.32392	2.34283	2.34289	2.33463	2.32635
.24	1.40323	1.86529	2.08257	2.18963	2.24694	2.28008	2.30048	2.31367	2.32253	2.34219	2.34279	2.33473	2.32635
.25	1.40297	1.86353	2.08008	2.18709	2.24461	2.27802	2.29867	2.31208	2.32113	2.34154	2.34266	2.33483	2.32635
.26	1.40271	1.86181	2.07762	2.18458	2.24230	2.27596	2.29685	2.31048	2.31971	2.34086	2.34252	2.33491	2.32635
.27	1.40246	1.86013	2.07519	2.18210	2.24000	2.27390	2.29503	2.30886	2.31827	2.34015	2.34236	2.33498	2.32635
.28	1.40222	1.85849	2.07281	2.17964	2.23771	2.27184	2.29320	2.30724	2.31682	2.33943	2.34218	2.33504	2.32635
.29	1.40199	1.85688	2.07046	2.17720	2.23543	2.26978	2.29136	2.30560	2.31536	2.33868	2.34198	2.33510	2.32635
.30	1.40176	1.85530	2.06815	2.17479	2.23316	2.26773	2.28952	2.30395	2.31388	2.33791	2.34176	2.33514	2.32635
.31	1.40155	1.85376	2.06588	2.17240	2.23091	2.26568	2.28768	2.30229	2.31239	2.33712	2.34153	2.33518	2.32635
.32	1.40133	1.85226	2.06364	2.17004	2.22867	2.26363	2.28583	2.30063	2.31089	2.33631	2.34127	2.33520	2.32635
.33	1.40113	1.85078	2.06143	2.16770	2.22644	2.26159	2.28397	2.29895	2.30938	2.33548	2.34099	2.33522	2.32635
.34	1.40093	1.84934	2.05926	2.16539	2.22423	2.25955	2.28212	2.29727	2.30785	2.33463	2.34070	2.33522	2.32635
.35	1.40073	1.84792	2.05712	2.16310	2.22203	2.25751	2.28026	2.29558	2.30631	2.33375	2.34039	2.33522	2.32635
.36	1.40054	1.84654	2.05501	2.16083	2.21984	2.25548	2.27840	2.29389	2.30477	2.33286	2.34006	2.33520	2.32635
.37	1.40036	1.84519	2.05294	2.15858	2.21767	2.25345	2.27654	2.29219	2.30321	2.33195	2.33971	2.33518	2.32635
.38	1.40019	1.84386	2.05089	2.15636	2.21550	2.25144	2.27468	2.29048	2.30164	2.33102	2.33934	2.33514	2.32635
.39	1.40001	1.84256	2.04888	2.15417	2.21336	2.24942	2.27282	2.28877	2.30007	2.33007	2.33895	2.33509	2.32635
.40	1.39985	1.84129	2.04690	2.15199	2.21123	2.24741	2.27096	2.28705	2.29848	2.32910	2.33855	2.33503	2.32635
.41	1.39969	1.84004	2.04495	2.14984	2.20911	2.24541	2.26910	2.28533	2.29689	2.32811	2.33812	2.33497	2.32635
.42	1.39953	1.83883	2.04303	2.14772	2.20700	2.24342	2.26724	2.28360	2.29529	2.32711	2.33768	2.33489	2.32635
.43	1.39938	1.83763	2.04114	2.14561	2.20491	2.24143	2.26538	2.28187	2.29369	2.32609	2.33722	2.33480	2.32635
.44	1.39923	1.83646	2.03927	2.14353	2.20284	2.23945	2.26352	2.28014	2.29207	2.32505	2.33674	2.33469	2.32635
.45	1.39909	1.83532	2.03744	2.14147	2.20078	2.23748	2.26166	2.27841	2.29045	2.32399	2.33624	2.33458	2.32635
.46	1.39896	1.83420	2.03563	2.13943	2.19873	2.23551	2.25981	2.27667	2.28883	2.32292	2.33573	2.33446	2.32635
.47	1.39882	1.83310	2.03385	2.13741	2.19670	2.23355	2.25796	2.27493	2.28720	2.32183	2.33519	2.33432	2.32635
.48	1.39870	1.83203	2.03210	2.13542	2.19468	2.23160	2.25611	2.27319	2.28556	2.32073	2.33464	2.33418	2.32635
.49	1.39857	1.83098	2.03037	2.13344	2.19268	2.22966	2.25426	2.27144	2.28392	2.31961	2.33407	2.33402	2.32635
.50	1.39845	1.82995	2.02867	2.13149	2.19069	2.22773	2.25242	2.26970	2.28227	2.31848	2.33349	2.33385	2.32635
.51	1.39834	1.82894	2.02699	2.12956	2.18871	2.22580	2.25057	2.26795	2.28062	2.31733	2.33288	2.33367	2.32635
.52	1.39823	1.82795	2.02534	2.12765	2.18676	2.22388	2.24874	2.26621	2.27897	2.31616	2.33226	2.33347	2.32635
.53	1.39812	1.82698	2.02372	2.12576	2.18481	2.22198	2.24690	2.26446	2.27731	2.31498	2.33162	2.33327	2.32635
.54	1.39802	1.82604	2.02212	2.12390	2.18288	2.22008	2.24507	2.26271	2.27565	2.31379	2.33096	2.33305	2.32635
.55	1.39792	1.82511	2.02054	2.12205	2.18097	2.21819	2.24325	2.26097	2.27398	2.31258	2.33029	2.33282	2.32635
.56	1.39782	1.82420	2.01899	2.12022	2.17907	2.21631	2.24143	2.25922	2.27231	2.31136	2.32960	2.33258	2.32635
.57	1.39773	1.82332	2.01746	2.11841	2.17718	2.21443	2.23961	2.25747	2.27064	2.31013	2.32889	2.33232	2.32635
.58	1.39764	1.82245	2.01596	2.11663	2.17531	2.21257	2.23780	2.25573	2.26897	2.30888	2.32816	2.33206	2.32635
.59	1.39756	1.82160	2.01448	2.11486	2.17345	2.21072	2.23599	2.25399	2.26730	2.30762	2.32742	2.33178	2.32635
.60	1.39748	1.82077	2.01302	2.11311	2.17161	2.20887	2.23419	2.25224	2.26562	2.30635	2.32666	2.33149	2.32635

5.6 Factors for Computing Critical Values of the Noncentral t-Distribution

Values of λ are given for each $\eta(\delta)$ to give $\Pr\{T_f \le t_o \mid \delta\} = .99$ (Continued)

	f												
η	1	2	3	4	5	6	7	8	9	16	36	144	∞
.61	1.39740	1.81995	2.01158	2.11138	2.16978	2.20704	2.23239	2.25050	2.26394	2.30507	2.32588	2.33119	2.32635
.62	1.39732	1.81915	2.01017	2.10967	2.16797	2.20522	2.23060	2.24876	2.26226	2.30377	2.32509	2.33087	2.32635
.63	1.39725	1.81838	2.00877	2.10798	2.16617	2.20340	2.22881	2.24703	2.26058	2.30246	2.32428	2.33054	2.32635
.64	1.39719	1.81761	2.00740	2.10631	2.16438	2.20160	2.22703	2.24529	2.25890	2.30114	2.32345	2.33020	2.32635
.65	1.39712	1.81687	2.00605	2.10466	2.16261	2.19980	2.22526	2.24356	2.25722	2.29981	2.32260	2.32985	2.32635
.66	1.39706	1.81614	2.00472	2.10303	2.16086	2.19801	2.22349	2.24183	2.25554	2.29846	2.32174	2.32948	2.32635
.67	1.39700	1.81543	2.00341	2.10141	2.15912	2.19624	2.22172	2.24010	2.25386	2.29711	2.32087	2.32910	2.32635
.68	1.39695	1.81473	2.00212	2.09982	2.15739	2.19447	2.21997	2.23837	2.25217	2.29574	2.31997	2.32871	2.32635
.69	1.39690	1.81405	2.00085	2.09824	2.15568	2.19272	2.21822	2.23665	2.25049	2.29437	2.31907	2.32830	2.32635
.70	1.39685	1.81339	1.99961	2.09668	2.15398	2.19097	2.21647	2.23493	2.24881	2.29298	2.31814	2.32788	2.32635
.71	1.39681	1.81274	1.99838	2.09514	2.15229	2.18924	2.21473	2.23321	2.24713	2.29158	2.31720	2.32745	2.32635
.72	1.39676	1.81211	1.99717	2.09361	2.15062	2.18751	2.21300	2.23150	2.24545	2.29018	2.31624	2.32700	2.32635
.73	1.39672	1.81149	1.99598	2.09210	2.14897	2.18580	2.21128	2.22979	2.24377	2.28876	2.31527	2.32654	2.32635
.74	1.39669	1.81088	1.99480	2.09061	2.14732	2.18409	2.20956	2.22809	2.24209	2.28733	2.31428	2.32607	2.32635
.75	1.39666	1.81029	1.99365	2.08914	2.14570	2.18240	2.20785	2.22638	2.24041	2.28590	2.31327	2.32559	2.32635
.76	1.39663	1.80972	1.99252	2.08769	2.14408	2.18071	2.20614	2.22468	2.23873	2.28445	2.31225	2.32509	2.32635
.77	1.39660	1.80916	1.99140	2.08625	2.14248	2.17904	2.20444	2.22299	2.23705	2.28300	2.31122	2.32458	2.32635
.78	1.39657	1.80861	1.99030	2.08483	2.14089	2.17738	2.20275	2.22130	2.23538	2.28154	2.31017	2.32405	2.32635
.79	1.39655	1.80807	1.98922	2.08342	2.13932	2.17572	2.20107	2.21961	2.23370	2.28006	2.30910	2.32351	2.32635
.80	1.39653	1.80755	1.98816	2.08204	2.13776	2.17408	2.19939	2.21793	2.23203	2.27858	2.30802	2.32296	2.32635
.81	1.39652	1.80704	1.98711	2.08066	2.13622	2.17245	2.19772	2.21625	2.23037	2.27709	2.30692	2.32239	2.32635
.82	1.39650	1.80655	1.98609	2.07931	2.13468	2.17083	2.19606	2.21458	2.22870	2.27560	2.30581	2.32181	2.32635
.83	1.39649	1.80607	1.98508	2.07797	2.13317	2.16922	2.19441	2.21291	2.22703	2.27409	2.30468	2.32121	2.32635
.84	1.39648	1.80560	1.98408	2.07665	2.13166	2.16762	2.19276	2.21125	2.22537	2.27258	2.30353	2.32060	2.32635
.85	1.39648	1.80514	1.98310	2.07534	2.13017	2.16602	2.19112	2.20959	2.22371	2.27106	2.30238	2.31998	2.32635
.86	1.39647	1.80469	1.98214	2.07405	2.12869	2.16444	2.18949	2.20794	2.22205	2.26953	2.30120	2.31934	2.32635
.87	1.39647	1.80426	1.98120	2.07278	2.12723	2.16287	2.18787	2.20629	2.22040	2.26799	2.30001	2.31869	2.32635
.88	1.39647	1.80383	1.98027	2.07152	2.12577	2.16132	2.18625	2.20464	2.21874	2.26645	2.29881	2.31803	2.32635
.89	1.39647	1.80342	1.97935	2.07027	2.12434	2.15977	2.18464	2.20300	2.21709	2.26490	2.29759	2.31735	2.32635
.90	1.39647	1.80302	1.97845	2.06904	2.12291	2.15823	2.18304	2.20137	2.21545	2.26334	2.29636	2.31665	2.32635
.91	1.39647	1.80262	1.97757	2.06783	2.12150	2.15670	2.18144	2.19974	2.21380	2.26177	2.29511	2.31594	2.32635
.92	1.39647	1.80224	1.97670	2.06663	2.12010	2.15518	2.17986	2.19812	2.21216	2.26020	2.29385	2.31522	2.32635
.93	1.39647	1.80187	1.97585	2.06545	2.11872	2.15368	2.17828	2.19650	2.21053	2.25862	2.29258	2.31448	2.32635
.94	1.39647	1.80150	1.97501	2.06428	2.11734	2.15218	2.17671	2.19489	2.20889	2.25704	2.29128	2.31373	2.32635
.95	1.39648	1.80115	1.97418	2.06313	2.11598	2.15070	2.17515	2.19328	2.20726	2.25545	2.28998	2.31297	2.32635
.96	1.39648	1.80080	1.97337	2.06199	2.11464	2.14922	2.17360	2.19168	2.20563	2.25385	2.28866	2.31218	2.32635
.97	1.39648	1.80046	1.97257	2.06086	2.11330	2.14776	2.17205	2.19009	2.20401	2.25224	2.28733	2.31139	2.32635
.98	1.39648	1.80013	1.97179	2.05975	2.11198	2.14630	2.17051	2.18850	2.20239	2.25063	2.28598	2.31058	2.32635
.99	1.39649	1.79981	1.97102	2.05865	2.11067	2.14486	2.16898	2.18692	2.20077	2.24902	2.28461	2.30975	2.32635
1.00	1.39649	1.79950	1.97026	2.05757	2.10938	2.14343	2.16746	2.18534	2.19916	2.24739	2.28324	2.30891	2.32635

5.7 Factors for Computing Critical Values of the Noncentral t-Distribution

Values of λ are given for each $\eta(\delta)$ to give $Pr\left\{T_f \leq t_o \middle| \delta\right\} = .995$ (Continued)

η	f = 1	2	3	4	5	6	7	8	9	16	36	144	∞
-1.00	2.55553	2.60361	2.61769	2.62323	2.62557	2.62648	2.62666	2.62646	2.62603	2.62169	2.61257	2.59770	2.57583
-.99	2.51463	2.57783	2.59825	2.60734	2.61199	2.61452	2.61591	2.61666	2.61700	2.61556	2.60893	2.59611	2.57583
-.98	2.48151	2.55533	2.58083	2.59290	2.59952	2.60347	2.60594	2.60753	2.60855	2.60975	2.60545	2.59458	2.57583
-.97	2.45585	2.53596	2.56534	2.57984	2.58814	2.59331	2.59671	2.59904	2.60067	2.60427	2.60212	2.59310	2.57583
-.96	2.43760	2.51956	2.55168	2.56811	2.57778	2.58399	2.58820	2.59118	2.59335	2.59910	2.59895	2.59167	2.57583
-.95	2.42701	2.50603	2.53979	2.55764	2.56842	2.57548	2.58039	2.58393	2.58656	2.59423	2.59591	2.59029	2.57583
-.94	2.42448	2.49526	2.52959	2.54840	2.56001	2.56776	2.57323	2.57725	2.58029	2.58966	2.59303	2.58896	2.57583
-.93	2.43030	2.48717	2.52101	2.54032	2.55251	2.56080	2.56673	2.57114	2.57451	2.58538	2.59028	2.58768	2.57583
-.92	2.44449	2.48168	2.51397	2.53335	2.54590	2.55456	2.56084	2.56556	2.56922	2.58137	2.58767	2.58645	2.57583
-.91	2.46663	2.47870	2.50844	2.52747	2.54012	2.54901	2.55554	2.56051	2.56439	2.57763	2.58520	2.58526	2.57583
-.90	2.49564	2.47814	2.50433	2.52261	2.53516	2.54414	2.55082	2.55596	2.56001	2.57416	2.58285	2.58412	2.57583
-.89	2.52945	2.47987	2.50158	2.51873	2.53096	2.53990	2.54665	2.55189	2.55605	2.57094	2.58063	2.58302	2.57583
-.88	2.56448	2.48375	2.50013	2.51578	2.52751	2.53628	2.54301	2.54828	2.55252	2.56796	2.57854	2.58197	2.57583
-.87	2.59518	2.48960	2.49989	2.51373	2.52476	2.53325	2.53987	2.54512	2.54938	2.56522	2.57657	2.58097	2.57583
-.86	2.61413	2.49721	2.50080	2.51251	2.52268	2.53078	2.53721	2.54239	2.54662	2.56271	2.57471	2.58000	2.57583
-.85	2.61343	2.50634	2.50276	2.51208	2.52123	2.52884	2.53501	2.54006	2.54424	2.56042	2.57298	2.57908	2.57583
-.84	2.58742	2.51671	2.50569	2.51240	2.52038	2.52740	2.53326	2.53812	2.54219	2.55835	2.57135	2.57820	2.57583
-.83	2.53528	2.52802	2.50949	2.51339	2.52010	2.52644	2.53192	2.53655	2.54048	2.55648	2.56983	2.57736	2.57583
-.82	2.46160	2.53994	2.51407	2.51502	2.52033	2.52593	2.53097	2.53534	2.53910	2.55481	2.56841	2.57656	2.57583
-.81	2.37436	2.55211	2.51932	2.51722	2.52106	2.52584	2.53039	2.53446	2.53801	2.55334	2.56710	2.57580	2.57583
-.80	2.28193	2.56415	2.52513	2.51995	2.52223	2.52615	2.53017	2.53389	2.53722	2.55204	2.56589	2.57508	2.57583
-.79	2.19094	2.57567	2.53140	2.52314	2.52382	2.52682	2.53027	2.53362	2.53669	2.55092	2.56478	2.57440	2.57583
-.78	2.10566	2.58631	2.53801	2.52674	2.52579	2.52783	2.53069	2.53363	2.53643	2.54997	2.56376	2.57375	2.57583
-.77	2.02822	2.59571	2.54485	2.53068	2.52810	2.52916	2.53138	2.53391	2.53640	2.54918	2.56282	2.57313	2.57583
-.76	1.95932	2.60353	2.55182	2.53492	2.53070	2.53077	2.53234	2.53443	2.53661	2.54855	2.56198	2.57256	2.57583
-.75	1.89874	2.60952	2.55879	2.53939	2.53357	2.53263	2.53355	2.53517	2.53702	2.54806	2.56122	2.57201	2.57583
-.74	1.84583	2.61346	2.56568	2.54404	2.53667	2.53473	2.53497	2.53613	2.53764	2.54772	2.56054	2.57150	2.57583
-.73	1.79977	2.61519	2.57237	2.54882	2.53997	2.53703	2.53660	2.53727	2.53844	2.54750	2.55995	2.57102	2.57583
-.72	1.75967	2.61465	2.57877	2.55367	2.54342	2.53951	2.53841	2.53860	2.53940	2.54742	2.55943	2.57058	2.57583
-.71	1.72474	2.61184	2.58479	2.55854	2.54699	2.54215	2.54037	2.54008	2.54053	2.54745	2.55898	2.57016	2.57583
-.70	1.69424	2.60679	2.59036	2.56338	2.55065	2.54491	2.54248	2.54171	2.54179	2.54760	2.55860	2.56978	2.57583
-.69	1.66754	2.59964	2.59541	2.56815	2.55438	2.54778	2.54472	2.54347	2.54319	2.54785	2.55829	2.56942	2.57583
-.68	1.64410	2.59054	2.59988	2.57281	2.55813	2.55073	2.54706	2.54534	2.54470	2.54820	2.55805	2.56910	2.57583
-.67	1.62343	2.57968	2.60371	2.57730	2.56188	2.55374	2.54948	2.54731	2.54632	2.54865	2.55787	2.56880	2.57583
-.66	1.60516	2.56728	2.60688	2.58161	2.56560	2.55680	2.55198	2.54936	2.54802	2.54919	2.55775	2.56853	2.57583
-.65	1.58894	2.55355	2.60936	2.58568	2.56928	2.55987	2.55452	2.55149	2.54981	2.54981	2.55769	2.56828	2.57583
-.64	1.57451	2.53872	2.61112	2.58951	2.57287	2.56294	2.55711	2.55367	2.55166	2.55050	2.55768	2.56807	2.57583
-.63	1.56160	2.52301	2.61216	2.59305	2.57636	2.56600	2.55972	2.55590	2.55357	2.55127	2.55772	2.56787	2.57583
-.62	1.55004	2.50662	2.61249	2.59629	2.57974	2.56901	2.56234	2.55816	2.55553	2.55210	2.55782	2.56770	2.57583
-.61	1.53964	2.48974	2.61211	2.59921	2.58297	2.57198	2.56495	2.56044	2.55752	2.55299	2.55796	2.56756	2.57583

5.7 Factors for Computing Critical Values of the Noncentral t-Distribution

Values of λ are given for each $\eta(\delta)$ to give $\Pr\{T_f \le t_o \mid \delta\} = .995$ (Continued)

	f												
η	1	2	3	4	5	6	7	8	9	16	36	144	∞
-.60	1.53026	2.47254	2.61104	2.60180	2.58606	2.57489	2.56755	2.56273	2.55954	2.55393	2.55815	2.56744	2.57583
-.59	1.52177	2.45517	2.60930	2.60403	2.58897	2.57771	2.57011	2.56502	2.56158	2.55493	2.55838	2.56734	2.57583
-.58	1.51407	2.43776	2.60693	2.60592	2.59170	2.58044	2.57264	2.56730	2.56363	2.55597	2.55866	2.56726	2.57583
-.57	1.50706	2.42042	2.60396	2.60745	2.59424	2.58307	2.57511	2.56956	2.56567	2.55705	2.55897	2.56720	2.57583
-.56	1.50067	2.40325	2.60042	2.60861	2.59657	2.58559	2.57752	2.57179	2.56771	2.55816	2.55932	2.56717	2.57583
-.55	1.49483	2.38632	2.59635	2.60942	2.59870	2.58799	2.57986	2.57398	2.56973	2.55930	2.55970	2.56715	2.57583
-.54	1.48947	2.36970	2.59179	2.60987	2.60061	2.59025	2.58213	2.57613	2.57173	2.56047	2.56012	2.56715	2.57583
-.53	1.48455	2.35343	2.58679	2.60997	2.60230	2.59238	2.58431	2.57823	2.57370	2.56166	2.56056	2.56717	2.57583
-.52	1.48003	2.33755	2.58138	2.60974	2.60376	2.59437	2.58640	2.58026	2.57563	2.56287	2.56104	2.56721	2.57583
-.51	1.47585	2.32209	2.57560	2.60916	2.60501	2.59620	2.58839	2.58224	2.57752	2.56410	2.56154	2.56727	2.57583
-.50	1.47199	2.30708	2.56950	2.60827	2.60602	2.59789	2.59028	2.58414	2.57937	2.56533	2.56207	2.56734	2.57583
-.49	1.46841	2.29251	2.56311	2.60706	2.60681	2.59942	2.59206	2.58597	2.58116	2.56657	2.56262	2.56743	2.57583
-.48	1.46510	2.27841	2.55647	2.60556	2.60738	2.60080	2.59373	2.58772	2.58290	2.56781	2.56318	2.56753	2.57583
-.47	1.46201	2.26477	2.54961	2.60377	2.60773	2.60201	2.59528	2.58939	2.58458	2.56906	2.56377	2.56765	2.57583
-.46	1.45914	2.25159	2.54257	2.60171	2.60787	2.60307	2.59672	2.59097	2.58619	2.57030	2.56438	2.56778	2.57583
-.45	1.45647	2.23886	2.53538	2.59940	2.60779	2.60396	2.59804	2.59247	2.58774	2.57153	2.56500	2.56792	2.57583
-.44	1.45397	2.22659	2.52806	2.59685	2.60750	2.60470	2.59924	2.59387	2.58921	2.57275	2.56563	2.56808	2.57583
-.43	1.45163	2.21475	2.52065	2.59407	2.60702	2.60528	2.60032	2.59518	2.59062	2.57397	2.56628	2.56825	2.57583
-.42	1.44945	2.20334	2.51316	2.59109	2.60634	2.60570	2.60127	2.59639	2.59194	2.57517	2.56694	2.56843	2.57583
-.41	1.44739	2.19235	2.50563	2.58790	2.60547	2.60597	2.60211	2.59750	2.59319	2.57635	2.56761	2.56862	2.57583
-.40	1.44547	2.18176	2.49806	2.58454	2.60442	2.60608	2.60282	2.59852	2.59436	2.57751	2.56829	2.56883	2.57583
-.39	1.44366	2.17156	2.49049	2.58101	2.60319	2.60605	2.60340	2.59943	2.59545	2.57865	2.56897	2.56904	2.57583
-.38	1.44195	2.16174	2.48291	2.57732	2.60180	2.60587	2.60387	2.60025	2.59646	2.57977	2.56965	2.56926	2.57583
-.37	1.44034	2.15229	2.47537	2.57350	2.60025	2.60555	2.60422	2.60097	2.59739	2.58087	2.57035	2.56949	2.57583
-.36	1.43883	2.14318	2.46785	2.56955	2.59854	2.60509	2.60445	2.60159	2.59823	2.58193	2.57104	2.56973	2.57583
-.35	1.43740	2.13441	2.46038	2.56548	2.59670	2.60449	2.60456	2.60211	2.59900	2.58297	2.57173	2.56998	2.57583
-.34	1.43604	2.12596	2.45297	2.56131	2.59471	2.60376	2.60456	2.60253	2.59967	2.58398	2.57243	2.57023	2.57583
-.33	1.43476	2.11782	2.44562	2.55705	2.59259	2.60291	2.60444	2.60286	2.60027	2.58496	2.57312	2.57050	2.57583
-.32	1.43355	2.10998	2.43835	2.55271	2.59035	2.60193	2.60422	2.60309	2.60078	2.58590	2.57381	2.57076	2.57583
-.31	1.43240	2.10242	2.43116	2.54830	2.58800	2.60084	2.60388	2.60322	2.60120	2.58681	2.57450	2.57104	2.57583
-.30	1.43131	2.09514	2.42405	2.54383	2.58554	2.59963	2.60344	2.60326	2.60155	2.58768	2.57518	2.57132	2.57583
-.29	1.43027	2.08811	2.41704	2.53930	2.58297	2.59832	2.60290	2.60321	2.60181	2.58852	2.57586	2.57160	2.57583
-.28	1.42928	2.08134	2.41013	2.53474	2.58032	2.59690	2.60227	2.60307	2.60199	2.58932	2.57653	2.57189	2.57583
-.27	1.42834	2.07481	2.40331	2.53013	2.57757	2.59538	2.60153	2.60284	2.60210	2.59009	2.57720	2.57218	2.57583
-.26	1.42745	2.06851	2.39660	2.52550	2.57474	2.59377	2.60070	2.60252	2.60212	2.59081	2.57785	2.57247	2.57583
-.25	1.42660	2.06242	2.38999	2.52085	2.57184	2.59206	2.59978	2.60212	2.60207	2.59150	2.57850	2.57277	2.57583
-.24	1.42579	2.05655	2.38349	2.51618	2.56887	2.59027	2.59877	2.60163	2.60194	2.59215	2.57913	2.57307	2.57583
-.23	1.42501	2.05088	2.37710	2.51151	2.56584	2.58840	2.59768	2.60107	2.60173	2.59275	2.57976	2.57338	2.57583
-.22	1.42427	2.04540	2.37082	2.50683	2.56274	2.58645	2.59650	2.60042	2.60145	2.59332	2.58037	2.57368	2.57583
-.21	1.42357	2.04011	2.36465	2.50215	2.55960	2.58442	2.59525	2.59970	2.60110	2.59384	2.58097	2.57399	2.57583

5.7 Factors for Computing Critical Values of the Noncentral t-Distribution
Values of λ are given for each $\eta(\delta)$ to give $\Pr\left\{T_f \le t_o \mid \delta\right\} = .995$ (Continued)

η	f = 1	2	3	4	5	6	7	8	9	16	36	144	∞
-.20	1.42289	2.03500	2.35858	2.49748	2.55640	2.58233	2.59392	2.59891	2.60068	2.59432	2.58156	2.57430	2.57583
-.19	1.42224	2.03005	2.35263	2.49282	2.55316	2.58017	2.59252	2.59804	2.60019	2.59476	2.58213	2.57460	2.57583
-.18	1.42163	2.02527	2.34679	2.48817	2.54989	2.57795	2.59105	2.59710	2.59963	2.59516	2.58269	2.57491	2.57583
-.17	1.42103	2.02064	2.34105	2.48355	2.54658	2.57567	2.58952	2.59609	2.59900	2.59552	2.58324	2.57522	2.57583
-.16	1.42046	2.01616	2.33542	2.47894	2.54324	2.57333	2.58792	2.59502	2.59831	2.59583	2.58377	2.57553	2.57583
-.15	1.41992	2.01183	2.32990	2.47436	2.53987	2.57095	2.58626	2.59389	2.59756	2.59611	2.58428	2.57583	2.57583
-.14	1.41940	2.00763	2.32449	2.46981	2.53648	2.56852	2.58454	2.59269	2.59675	2.59634	2.58478	2.57614	2.57583
-.13	1.41889	2.00356	2.31918	2.46529	2.53307	2.56604	2.58277	2.59143	2.59588	2.59652	2.58526	2.57644	2.57583
-.12	1.41841	1.99962	2.31397	2.46080	2.52965	2.56353	2.58094	2.59012	2.59495	2.59667	2.58572	2.57674	2.57583
-.11	1.41795	1.99580	2.30886	2.45634	2.52621	2.56097	2.57907	2.58876	2.59397	2.59678	2.58616	2.57704	2.57583
-.10	1.41750	1.99210	2.30386	2.45192	2.52277	2.55838	2.57715	2.58734	2.59293	2.59684	2.58659	2.57733	2.57583
-.09	1.41708	1.98851	2.29895	2.44754	2.51931	2.55576	2.57518	2.58587	2.59184	2.59686	2.58699	2.57762	2.57583
-.08	1.41666	1.98503	2.29413	2.44320	2.51586	2.55311	2.57317	2.58435	2.59069	2.59684	2.58738	2.57791	2.57583
-.07	1.41627	1.98165	2.28942	2.43890	2.51240	2.55044	2.57112	2.58278	2.58950	2.59678	2.58774	2.57820	2.57583
-.06	1.41588	1.97837	2.28479	2.43464	2.50894	2.54773	2.56903	2.58118	2.58826	2.59668	2.58809	2.57848	2.57583
-.05	1.41552	1.97519	2.28026	2.43042	2.50548	2.54501	2.56691	2.57952	2.58698	2.59654	2.58842	2.57875	2.57583
-.04	1.41516	1.97210	2.27581	2.42624	2.50203	2.54227	2.56475	2.57783	2.58565	2.59636	2.58872	2.57903	2.57583
-.03	1.41482	1.96910	2.27146	2.42211	2.49859	2.53951	2.56257	2.57610	2.58428	2.59615	2.58901	2.57929	2.57583
-.02	1.41449	1.96618	2.26719	2.41803	2.49515	2.53673	2.56035	2.57433	2.58287	2.59589	2.58927	2.57955	2.57583
-.01	1.41417	1.96334	2.26300	2.41399	2.49172	2.53394	2.55811	2.57253	2.58142	2.59559	2.58951	2.57981	2.57583
.00	1.41386	1.96059	2.25890	2.40999	2.48831	2.53114	2.55584	2.57070	2.57993	2.59526	2.58973	2.58006	2.57583
.01	1.41357	1.95791	2.25487	2.40604	2.48490	2.52833	2.55354	2.56883	2.57840	2.59489	2.58993	2.58030	2.57583
.02	1.41328	1.95530	2.25093	2.40213	2.48151	2.52551	2.55123	2.56693	2.57684	2.59448	2.59011	2.58054	2.57583
.03	1.41301	1.95277	2.24706	2.39827	2.47814	2.52269	2.54890	2.56500	2.57525	2.59403	2.59026	2.58077	2.57583
.04	1.41274	1.95030	2.24327	2.39446	2.47478	2.51986	2.54654	2.56305	2.57362	2.59355	2.59039	2.58099	2.57583
.05	1.41248	1.94790	2.23955	2.39069	2.47144	2.51703	2.54417	2.56107	2.57196	2.59304	2.59050	2.58121	2.57583
.06	1.41223	1.94556	2.23590	2.38697	2.46811	2.51419	2.54178	2.55906	2.57028	2.59249	2.59059	2.58142	2.57583
.07	1.41199	1.94328	2.23232	2.38329	2.46481	2.51135	2.53938	2.55704	2.56856	2.59190	2.59065	2.58162	2.57583
.08	1.41175	1.94107	2.22881	2.37966	2.46153	2.50852	2.53697	2.55499	2.56682	2.59128	2.59069	2.58181	2.57583
.09	1.41153	1.93891	2.22537	2.37608	2.45826	2.50568	2.53455	2.55292	2.56505	2.59063	2.59071	2.58200	2.57583
.10	1.41131	1.93680	2.22200	2.37254	2.45502	2.50285	2.53211	2.55083	2.56326	2.58994	2.59071	2.58217	2.57583
.11	1.41110	1.93475	2.21869	2.36904	2.45180	2.50002	2.52967	2.54873	2.56144	2.58922	2.59068	2.58234	2.57583
.12	1.41089	1.93275	2.21544	2.36559	2.44860	2.49720	2.52721	2.54661	2.55960	2.58847	2.59063	2.58250	2.57583
.13	1.41069	1.93080	2.21225	2.36218	2.44542	2.49438	2.52475	2.54447	2.55774	2.58769	2.59055	2.58265	2.57583
.14	1.41050	1.92890	2.20913	2.35881	2.44227	2.49157	2.52229	2.54232	2.55586	2.58688	2.59046	2.58279	2.57583
.15	1.41032	1.92705	2.20606	2.35549	2.43914	2.48876	2.51982	2.54015	2.55397	2.58604	2.59034	2.58292	2.57583
.16	1.41013	1.92524	2.20305	2.35222	2.43603	2.48596	2.51734	2.53798	2.55205	2.58517	2.59019	2.58304	2.57583
.17	1.40996	1.92348	2.20009	2.34898	2.43295	2.48318	2.51487	2.53579	2.55011	2.58427	2.59003	2.58315	2.57583
.18	1.40979	1.92176	2.19719	2.34579	2.42990	2.48040	2.51239	2.53359	2.54816	2.58334	2.58984	2.58326	2.57583
.19	1.40963	1.92008	2.19435	2.34263	2.42686	2.47763	2.50991	2.53138	2.54620	2.58238	2.58962	2.58335	2.57583
.20	1.40947	1.91844	2.19155	2.33952	2.42385	2.47487	2.50743	2.52916	2.54422	2.58140	2.58939	2.58343	2.57583

5.7 Factors for Computing Critical Values of the Noncentral t-Distribution

Values of λ are given for each $\eta(\delta)$ to give $\Pr\left\{T_f \le t_o \,\middle|\, \delta\right\} = .995$ (Continued)

	f												
η	1	2	3	4	5	6	7	8	9	16	36	144	∞
.21	1.40931	1.91684	2.18881	2.33645	2.42087	2.47212	2.50495	2.52694	2.54222	2.58039	2.58913	2.58350	2.57583
.22	1.40916	1.91527	2.18611	2.33342	2.41791	2.46938	2.50247	2.52471	2.54022	2.57935	2.58885	2.58356	2.57583
.23	1.40902	1.91375	2.18347	2.33043	2.41498	2.46666	2.49999	2.52247	2.53820	2.57829	2.58854	2.58361	2.57583
.24	1.40888	1.91226	2.18087	2.32748	2.41207	2.46394	2.49751	2.52022	2.53617	2.57720	2.58821	2.58365	2.57583
.25	1.40874	1.91080	2.17832	2.32456	2.40919	2.46124	2.49504	2.51797	2.53413	2.57609	2.58786	2.58367	2.57583
.26	1.40861	1.90938	2.17581	2.32169	2.40633	2.45856	2.49257	2.51572	2.53208	2.57495	2.58749	2.58369	2.57583
.27	1.40848	1.90798	2.17335	2.31885	2.40350	2.45588	2.49010	2.51347	2.53002	2.57379	2.58709	2.58369	2.57583
.28	1.40835	1.90663	2.17093	2.31605	2.40069	2.45322	2.48764	2.51121	2.52795	2.57260	2.58668	2.58368	2.57583
.29	1.40823	1.90530	2.16856	2.31328	2.39790	2.45058	2.48518	2.50894	2.52587	2.57140	2.58623	2.58366	2.57583
.30	1.40812	1.90400	2.16623	2.31055	2.39515	2.44794	2.48273	2.50668	2.52379	2.57017	2.58577	2.58363	2.57583
.31	1.40800	1.90273	2.16393	2.30786	2.39241	2.44533	2.48028	2.50442	2.52170	2.56892	2.58528	2.58359	2.57583
.32	1.40789	1.90149	2.16168	2.30520	2.38971	2.44273	2.47784	2.50215	2.51960	2.56765	2.58478	2.58353	2.57583
.33	1.40778	1.90027	2.15946	2.30258	2.38702	2.44014	2.47541	2.49989	2.51750	2.56635	2.58425	2.58346	2.57583
.34	1.40768	1.89909	2.15729	2.29999	2.38436	2.43757	2.47298	2.49762	2.51540	2.56504	2.58369	2.58338	2.57583
.35	1.40758	1.89793	2.15515	2.29743	2.38173	2.43501	2.47056	2.49536	2.51329	2.56371	2.58312	2.58329	2.57583
.36	1.40748	1.89679	2.15305	2.29491	2.37912	2.43247	2.46815	2.49309	2.51117	2.56236	2.58252	2.58318	2.57583
.37	1.40739	1.89568	2.15098	2.29242	2.37653	2.42994	2.46574	2.49083	2.50905	2.56098	2.58190	2.58306	2.57583
.38	1.40730	1.89459	2.14895	2.28996	2.37397	2.42743	2.46335	2.48857	2.50693	2.55959	2.58126	2.58293	2.57583
.39	1.40721	1.89353	2.14695	2.28753	2.37144	2.42493	2.46096	2.48631	2.50481	2.55819	2.58060	2.58278	2.57583
.40	1.40712	1.89249	2.14499	2.28514	2.36892	2.42245	2.45858	2.48406	2.50268	2.55676	2.57992	2.58262	2.57583
.41	1.40704	1.89147	2.14306	2.28277	2.36643	2.41999	2.45621	2.48181	2.50056	2.55532	2.57922	2.58245	2.57583
.42	1.40696	1.89048	2.14116	2.28044	2.36397	2.41754	2.45385	2.47956	2.49843	2.55385	2.57849	2.58226	2.57583
.43	1.40688	1.88950	2.13929	2.27813	2.36152	2.41511	2.45149	2.47731	2.49630	2.55238	2.57775	2.58206	2.57583
.44	1.40680	1.88855	2.13746	2.27586	2.35910	2.41270	2.44915	2.47507	2.49416	2.55088	2.57698	2.58185	2.57583
.45	1.40673	1.88761	2.13565	2.27361	2.35671	2.41030	2.44682	2.47283	2.49203	2.54938	2.57619	2.58162	2.57583
.46	1.40666	1.88670	2.13388	2.27139	2.35433	2.40791	2.44450	2.47060	2.48990	2.54785	2.57538	2.58138	2.57583
.47	1.40659	1.88581	2.13213	2.26920	2.35198	2.40554	2.44218	2.46837	2.48777	2.54631	2.57455	2.58112	2.57583
.48	1.40652	1.88493	2.13041	2.26704	2.34965	2.40319	2.43988	2.46615	2.48564	2.54476	2.57370	2.58085	2.57583
.49	1.40646	1.88407	2.12872	2.26491	2.34734	2.40086	2.43759	2.46393	2.48351	2.54319	2.57283	2.58057	2.57583
.50	1.40640	1.88324	2.12706	2.26280	2.34506	2.39854	2.43530	2.46172	2.48138	2.54160	2.57194	2.58027	2.57583
.51	1.40634	1.88242	2.12542	2.26072	2.34279	2.39623	2.43303	2.45951	2.47925	2.54001	2.57103	2.57996	2.57583
.52	1.40628	1.88161	2.12382	2.25866	2.34055	2.39394	2.43077	2.45731	2.47713	2.53840	2.57010	2.57963	2.57583
.53	1.40622	1.88083	2.12223	2.25663	2.33833	2.39167	2.42852	2.45511	2.47501	2.53677	2.56915	2.57929	2.57583
.54	1.40617	1.88006	2.12068	2.25463	2.33613	2.38942	2.42628	2.45292	2.47288	2.53514	2.56819	2.57893	2.57583
.55	1.40612	1.87930	2.11914	2.25265	2.33395	2.38718	2.42405	2.45074	2.47076	2.53349	2.56720	2.57856	2.57583
.56	1.40607	1.87857	2.11764	2.25070	2.33179	2.38495	2.42183	2.44856	2.46865	2.53183	2.56619	2.57817	2.57583
.57	1.40602	1.87785	2.11616	2.24877	2.32966	2.38274	2.41962	2.44639	2.46653	2.53015	2.56516	2.57777	2.57583
.58	1.40597	1.87714	2.11470	2.24686	2.32754	2.38055	2.41742	2.44423	2.46442	2.52847	2.56411	2.57736	2.57583
.59	1.40593	1.87645	2.11326	2.24498	2.32544	2.37837	2.41523	2.44207	2.46231	2.52677	2.56305	2.57692	2.57583
.60	1.40589	1.87577	2.11185	2.24312	2.32337	2.37621	2.41306	2.43992	2.46021	2.52507	2.56196	2.57648	2.57583

5.7 Factors for Computing Critical Values of the Noncentral t-Distribution

Values of λ are given for each $\eta(\delta)$ to give $\Pr\left\{T_f \le t_o \middle| \delta\right\} = .995$ (Continued)

η	f = 1	2	3	4	5	6	7	8	9	16	36	144	∞
.61	1.40585	1.87511	2.11046	2.24129	2.32131	2.37406	2.41089	2.43778	2.45811	2.52335	2.56086	2.57602	2.57583
.62	1.40581	1.87447	2.10909	2.23947	2.31927	2.37193	2.40874	2.43564	2.45601	2.52162	2.55974	2.57554	2.57583
.63	1.40577	1.87383	2.10775	2.23768	2.31726	2.36982	2.40660	2.43351	2.45391	2.51988	2.55860	2.57505	2.57583
.64	1.40574	1.87322	2.10642	2.23592	2.31526	2.36771	2.40447	2.43139	2.45182	2.51813	2.55744	2.57454	2.57583
.65	1.40570	1.87261	2.10512	2.23417	2.31328	2.36563	2.40235	2.42928	2.44974	2.51637	2.55626	2.57402	2.57583
.66	1.40567	1.87202	2.10384	2.23245	2.31132	2.36356	2.40024	2.42717	2.44766	2.51460	2.55506	2.57348	2.57583
.67	1.40564	1.87144	2.10258	2.23074	2.30938	2.36150	2.39814	2.42507	2.44558	2.51282	2.55385	2.57292	2.57583
.68	1.40561	1.87088	2.10134	2.22906	2.30745	2.35946	2.39605	2.42298	2.44350	2.51104	2.55262	2.57235	2.57583
.69	1.40558	1.87032	2.10011	2.22740	2.30555	2.35744	2.39398	2.42089	2.44143	2.50924	2.55137	2.57176	2.57583
.70	1.40556	1.86978	2.09891	2.22576	2.30366	2.35543	2.39191	2.41882	2.43937	2.50743	2.55010	2.57116	2.57583
.71	1.40554	1.86926	2.09773	2.22414	2.30180	2.35343	2.38986	2.41675	2.43731	2.50562	2.54881	2.57054	2.57583
.72	1.40551	1.86874	2.09657	2.22254	2.29994	2.35145	2.38782	2.41469	2.43525	2.50380	2.54751	2.56991	2.57583
.73	1.40549	1.86824	2.09543	2.22096	2.29811	2.34948	2.38578	2.41263	2.43320	2.50196	2.54619	2.56926	2.57583
.74	1.40547	1.86774	2.09430	2.21940	2.29630	2.34753	2.38376	2.41059	2.43116	2.50013	2.54485	2.56859	2.57583
.75	1.40546	1.86726	2.09319	2.21786	2.29450	2.34559	2.38175	2.40855	2.42911	2.49828	2.54349	2.56791	2.57583
.76	1.40544	1.86679	2.09210	2.21634	2.29272	2.34367	2.37976	2.40652	2.42708	2.49642	2.54212	2.56721	2.57583
.77	1.40543	1.86634	2.09103	2.21483	2.29096	2.34176	2.37777	2.40450	2.42505	2.49456	2.54073	2.56649	2.57583
.78	1.40541	1.86589	2.08998	2.21335	2.28921	2.33986	2.37579	2.40248	2.42302	2.49269	2.53932	2.56576	2.57583
.79	1.40540	1.86545	2.08894	2.21188	2.28748	2.33798	2.37383	2.40048	2.42100	2.49081	2.53790	2.56501	2.57583
.80	1.40539	1.86503	2.08792	2.21044	2.28577	2.33611	2.37187	2.39848	2.41899	2.48893	2.53646	2.56425	2.57583
.81	1.40538	1.86461	2.08692	2.20901	2.28407	2.33426	2.36993	2.39649	2.41698	2.48704	2.53500	2.56346	2.57583
.82	1.40537	1.86421	2.08594	2.20759	2.28239	2.33242	2.36800	2.39451	2.41497	2.48514	2.53353	2.56266	2.57583
.83	1.40537	1.86381	2.08497	2.20620	2.28073	2.33059	2.36608	2.39253	2.41298	2.48323	2.53203	2.56185	2.57583
.84	1.40536	1.86343	2.08401	2.20482	2.27908	2.32878	2.36417	2.39057	2.41098	2.48132	2.53053	2.56102	2.57583
.85	1.40536	1.86305	2.08308	2.20346	2.27745	2.32698	2.36227	2.38861	2.40900	2.47940	2.52900	2.56017	2.57583
.86	1.40535	1.86269	2.08215	2.20212	2.27584	2.32519	2.36038	2.38666	2.40701	2.47748	2.52746	2.55930	2.57583
.87	1.40535	1.86233	2.08125	2.20080	2.27424	2.32342	2.35850	2.38472	2.40504	2.47555	2.52590	2.55842	2.57583
.88	1.40535	1.86198	2.08036	2.19949	2.27265	2.32166	2.35663	2.38279	2.40307	2.47361	2.52433	2.55752	2.57583
.89	1.40535	1.86164	2.07948	2.19819	2.27109	2.31992	2.35478	2.38086	2.40110	2.47167	2.52274	2.55660	2.57583
.90	1.40535	1.86131	2.07862	2.19692	2.26953	2.31819	2.35293	2.37895	2.39914	2.46972	2.52113	2.55566	2.57583
.91	1.40535	1.86098	2.07777	2.19566	2.26799	2.31647	2.35110	2.37704	2.39719	2.46776	2.51951	2.55471	2.57583
.92	1.40535	1.86067	2.07694	2.19441	2.26647	2.31476	2.34927	2.37514	2.39524	2.46580	2.51787	2.55374	2.57583
.93	1.40535	1.86036	2.07612	2.19319	2.26496	2.31307	2.34746	2.37325	2.39330	2.46384	2.51622	2.55275	2.57583
.94	1.40535	1.86006	2.07531	2.19197	2.26347	2.31139	2.34566	2.37136	2.39137	2.46186	2.51455	2.55175	2.57583
.95	1.40535	1.85977	2.07452	2.19078	2.26199	2.30972	2.34386	2.36949	2.38944	2.45989	2.51286	2.55072	2.57583
.96	1.40535	1.85948	2.07374	2.18959	2.26053	2.30807	2.34208	2.36762	2.38752	2.45790	2.51116	2.54968	2.57583
.97	1.40535	1.85920	2.07297	2.18843	2.25908	2.30643	2.34031	2.36576	2.38560	2.45592	2.50944	2.54862	2.57583
.98	1.40535	1.85893	2.07222	2.18728	2.25764	2.30480	2.33855	2.36391	2.38369	2.45392	2.50771	2.54755	2.57583
.99	1.40535	1.85866	2.07148	2.18614	2.25622	2.30318	2.33680	2.36207	2.38178	2.45193	2.50596	2.54645	2.57583
1.00	1.40535	1.85840	2.07075	2.18502	2.25482	2.30158	2.33506	2.36024	2.37988	2.44992	2.50419	2.54534	2.57583

6. TABLES OF VALUES OF λ FOR COMPUTING THE NONCENTRALITY PARAMETER OF NONCENTRAL t.

Let $$y = \left(1 + \frac{t^2}{2f}\right)^{-\frac{1}{2}},$$

$$y' = \frac{t}{\sqrt{2f}} \left(1 + \frac{t^2}{2f}\right)^{-\frac{1}{2}}, \text{ and}$$

$$\delta = t - \lambda\left(1 + \frac{t^2}{2f}\right)^{\frac{1}{2}}.$$

Then

$$\Pr\left\{T_f \leq t \mid \delta\right\} = \gamma,$$

where T_f has a noncentral t-distribution with f degrees of freedom and noncentrality parameter δ.

Starting with t compute y and y'; find value of λ in tables; compute δ, which is the noncentrality parameter corresponding to the 100γ percentile of the noncentral t-distribution.

6.1 Factors for Computing the Noncentrality Parameter of the Noncentral t-Distribution

Values of λ are given for $y(t)$ or $y'(t)$ to give $Pr\{T_f \leq t \mid \delta\} = .50$

		f												
y'	y	1	2	3	4	5	6	7	8	9	16	36	144	∞
-1.0	.0	-.46034	-.33489	-.27419	-.23741	-.21221	-.19359	-.17913	-.16748	-.15783	-.11817	-.07867	-.03930	.00000
	.1	-.45564	-.33205	-.27197	-.23553	-.21055	-.19209	-.17775	-.16619	-.15662	-.11728	-.07808	-.03900	.00000
	.2	-.44136	-.32352	-.26532	-.22990	-.20557	-.18759	-.17360	-.16233	-.15299	-.11459	-.07630	-.03812	.00000
	.3	-.41701	-.30924	-.25422	-.22050	-.19727	-.18007	-.16668	-.15589	-.14694	-.11010	-.07333	-.03664	.00000
	.4	-.38323	-.28921	-.23865	-.20731	-.18564	-.16954	-.15699	-.14686	-.13846	-.10381	-.06917	-.03457	.00000
	.5	-.34284	-.26358	-.21864	-.19035	-.17064	-.15596	-.14449	-.13521	-.12751	-.09569	-.06380	-.03190	.00000
	.6	-.29819	-.23281	-.19426	-.16958	-.15225	-.13928	-.12912	-.12089	-.11404	-.08568	-.05717	-.02860	.00000
	.7	-.24990	-.19722	-.16549	-.14488	-.13029	-.11932	-.11070	-.10370	-.09787	-.07363	-.04918	-.02461	.00000
-.6	.8	-.19672	-.15624	-.13170	-.11560	-.10413	-.09547	-.08864	-.08308	-.07844	-.05911	-.03952	-.01979	.00000
-.5		-.15687	-.12485	-.10548	-.09272	-.08360	-.07669	-.07124	-.06680	-.06309	-.04759	-.03184	-.01595	.00000
-.4		-.12125	-.09657	-.08169	-.07187	-.06484	-.05951	-.05530	-.05186	-.04899	-.03698	-.02475	-.01240	.00000
-.3		-.08860	-.07057	-.05973	-.05258	-.04746	-.04357	-.04050	-.03799	-.03589	-.02710	-.01815	-.00910	.00000
-.2		-.05800	-.04618	-.03911	-.03444	-.03109	-.02855	-.02654	-.02489	-.02352	-.01777	-.01190	-.00597	.00000
-.1		-.02869	-.02284	-.01934	-.01704	-.01538	-.01412	-.01313	-.01232	-.01164	-.00879	-.00589	-.00295	.00000
.0	1.0	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000
.1		.02869	.02284	.01934	.01704	.01538	.01412	.01313	.01232	.01164	.00879	.00589	.00295	.00000
.2		.05800	.04618	.03911	.03444	.03109	.02855	.02654	.02489	.02352	.01777	.01190	.00597	.00000
.3		.08860	.07057	.05973	.05258	.04746	.04357	.04050	.03799	.03589	.02710	.01815	.00910	.00000
.4		.12125	.09657	.08169	.07187	.06484	.05951	.05530	.05186	.04899	.03698	.02475	.01240	.00000
.5		.15687	.12485	.10548	.09272	.08360	.07669	.07124	.06680	.06309	.04759	.03184	.01595	.00000
.6	.8	.19672	.15624	.13170	.11560	.10413	.09547	.08864	.08308	.07844	.05911	.03952	.01979	.00000
	.7	.24990	.19722	.16549	.14488	.13029	.11932	.11070	.10370	.09787	.07363	.04918	.02461	.00000
	.6	.29819	.23281	.19426	.16958	.15225	.13928	.12912	.12089	.11404	.08568	.05717	.02860	.00000
	.5	.34284	.26358	.21864	.19035	.17064	.15596	.14449	.13521	.12751	.09569	.06380	.03190	.00000
	.4	.38323	.28921	.23865	.20731	.18564	.16954	.15699	.14686	.13846	.10381	.06917	.03457	.00000
	.3	.41701	.30924	.25422	.22050	.19727	.18007	.16668	.15589	.14694	.11010	.07333	.03664	.00000
	.2	.44136	.32352	.26532	.22990	.20557	.18759	.17360	.16233	.15299	.11459	.07630	.03812	.00000
	.1	.45564	.33205	.27197	.23553	.21055	.19209	.17775	.16619	.15662	.11728	.07808	.03900	.00000
1.0	.0	.46034	.33489	.27419	.23741	.21221	.19359	.17913	.16748	.15783	.11817	.07867	.03930	.00000

6.2 Factors for Computing the Noncentrality Parameter of the Noncentral t-Distribution

Values of λ are given for $y(t)$ or $y'(t)$ to give $\Pr\left\{T_f \le t \mid \delta\right\} = .75$

		f												
y'	y	1	2	3	4	5	6	7	8	9	16	36	144	∞
-1.0	.0	.21263	.35482	.41699	.45342	.47796	.49590	.50973	.52081	.52994	.56711	.60357	.63935	.67449
	.1	.21564	.35682	.41858	.45479	.47918	.49701	.51076	.52177	.53084	.56778	.60402	.63958	.67449
	.2	.22485	.36288	.42343	.45894	.48288	.50037	.51386	.52466	.53357	.56982	.60538	.64026	.67449
	.3	.24074	.37323	.43167	.46600	.48914	.50606	.51911	.52957	.53819	.57327	.60767	.64141	.67449
	.4	.26425	.38827	.44358	.47617	.49816	.51425	.52666	.53661	.54481	.57820	.61094	.64304	.67449
	.5	.29668	.40857	.45957	.48976	.51019	.52515	.53671	.54597	.55360	.58472	.61525	.64518	.67449
	.6	.33880	.43486	.48017	.50724	.52562	.53912	.54955	.55793	.56484	.59302	.62072	.64788	.67449
	.7	.39035	.46797	.50612	.52923	.54502	.55666	.56568	.57293	.57892	.60341	.62754	.65125	.67449
-.6	.8	.45151	.50910	.53865	.55688	.56945	.57876	.58600	.59184	.59667	.61649	.63612	.65547	.67449
-.5		.49862	.54213	.56513	.57950	.58949	.59692	.60272	.60741	.61129	.62729	.64320	.65896	.67449
-.4		.54067	.57251	.58976	.60068	.60831	.61402	.61849	.62210	.62511	.63752	.64994	.66228	.67449
-.3		.57858	.60057	.61276	.62056	.62605	.63017	.63340	.63603	.63821	.64727	.65637	.66546	.67449
-.2		.61312	.62668	.63437	.63934	.64286	.64552	.64761	.64931	.65072	.65661	.66257	.66854	.67449
-.1		.64492	.65121	.65486	.65725	.65895	.66024	.66125	.66208	.66277	.66565	.66858	.67153	.67449
.0	1.0	.67449	.67449	.67449	.67449	.67449	.67449	.67449	.67449	.67449	.67449	.67449	.67449	.67449
.1		.70220	.69681	.69349	.69127	.68966	.68844	.68747	.68668	.68601	.68322	.68035	.67743	.67449
.2		.72836	.71843	.71208	.70777	.70465	.70225	.70034	.69878	.69747	.69193	.68622	.68040	.67449
.3		.75318	.73960	.73048	.72421	.71961	.71608	.71326	.71094	.70899	.70074	.69218	.68341	.67449
.4		.77684	.76054	.74891	.74077	.73475	.73010	.72637	.72330	.72072	.70973	.69829	.68651	.67449
.5		.79951	.78155	.76766	.75771	.75028	.74451	.73987	.73604	.73281	.71903	.70462	.68974	.67449
.6	.8	.82141	.80305	.78708	.77533	.76648	.75955	.75397	.74935	.74545	.72875	.71124	.69311	.67449
	.7	.84613	.82912	.81085	.79692	.78629	.77794	.77119	.76559	.76086	.74059	.71929	.69720	.67449
	.6	.86571	.85109	.83075	.81485	.80265	.79306	.78530	.77887	.77344	.75017	.72576	.70048	.67449
	.5	.88317	.87077	.84805	.83016	.81648	.80575	.79708	.78992	.78388	.75805	.73105	.70314	.67449
	.4	.90062	.88872	.86302	.84310	.82802	.81626	.80680	.79900	.79242	.76444	.73530	.70527	.67449
	.3	.91968	.90450	.87537	.85354	.83723	.82459	.81446	.80613	.79913	.76941	.73859	.70690	.67449
	.2	.94051	.91686	.88460	.86123	.84396	.83065	.82002	.81129	.80396	.77297	.74093	.70806	.67449
	.1	.95763	.92463	.89030	.86594	.84806	.83433	.82339	.81442	.80689	.77511	.74233	.70875	.67449
1.0	.0	.96359	.92728	.89223	.86753	.84944	.83557	.82452	.81546	.80787	.77583	.74280	.70898	.67449

6.3 Factors for Computing the Noncentrality Parameter of the Noncentral t-Distribution

Values of λ are given for $y(t)$ or $y'(t)$ to give $\Pr\{T_f \le t \mid \delta\} = .90$

		f												
y′	y	1	2	3	4	5	6	7	8	9	16	36	144	∞
-1.0	.0	.91196	1.03485	1.08644	1.11605	1.13571	1.14993	1.16080	1.16944	1.17652	1.20490	1.23194	1.25754	1.28155
	.1	.91323	1.03563	1.08702	1.11653	1.13613	1.15030	1.16113	1.16975	1.17681	1.20510	1.23206	1.25760	1.28155
	.2	.91715	1.03803	1.08884	1.11804	1.13743	1.15146	1.16218	1.17072	1.17771	1.20573	1.23246	1.25778	1.28155
	.3	.92416	1.04232	1.09211	1.12074	1.13977	1.15354	1.16408	1.17246	1.17933	1.20688	1.23317	1.25811	1.28155
	.4	.93504	1.04900	1.09721	1.12497	1.14344	1.15681	1.16705	1.17520	1.18187	1.20868	1.23430	1.25863	1.28155
	.5	.95119	1.05888	1.10475	1.13123	1.14888	1.16167	1.17147	1.17927	1.18566	1.21137	1.23599	1.25942	1.28155
	.6	.97492	1.07321	1.11568	1.14032	1.15678	1.16873	1.17789	1.18519	1.19118	1.21531	1.23847	1.26059	1.28155
	.7	1.00946	1.09392	1.13149	1.15347	1.16822	1.17895	1.18720	1.19378	1.19919	1.22103	1.24209	1.26229	1.28155
-.6	.8	1.05844	1.12403	1.15456	1.17271	1.18499	1.19398	1.20090	1.20645	1.21101	1.22952	1.24750	1.26486	1.28155
-.5		1.10130	1.15157	1.17593	1.19065	1.20070	1.20808	1.21380	1.21839	1.22217	1.23759	1.25267	1.26735	1.28155
-.4		1.14255	1.17927	1.19776	1.20911	1.21693	1.22272	1.22721	1.23083	1.23383	1.24608	1.25816	1.27000	1.28155
-.3		1.18152	1.20649	1.21955	1.22771	1.23339	1.23761	1.24090	1.24356	1.24577	1.25485	1.26388	1.27279	1.28155
-.2		1.21784	1.23282	1.24097	1.24615	1.24979	1.25251	1.25464	1.25637	1.25781	1.26376	1.26973	1.27567	1.28155
-.1		1.25128	1.25794	1.26173	1.26418	1.26591	1.26722	1.26825	1.26909	1.26979	1.27270	1.27565	1.27860	1.28155
.0	1.0	1.28155	1.28155	1.28155	1.28155	1.28155	1.28155	1.28155	1.28155	1.28155	1.28155	1.28155	1.28155	1.28155
.1		1.30831	1.30334	1.30018	1.29805	1.29650	1.29531	1.29436	1.29359	1.29294	1.29019	1.28737	1.28448	1.28155
.2		1.33111	1.32297	1.31734	1.31342	1.31053	1.30830	1.30651	1.30504	1.30379	1.29851	1.29301	1.28734	1.28155
.3		1.34935	1.34004	1.33271	1.32742	1.32344	1.32032	1.31781	1.31572	1.31396	1.30640	1.29842	1.29011	1.28155
.4		1.36226	1.35407	1.34596	1.33976	1.33497	1.33117	1.32807	1.32548	1.32328	1.31372	1.30350	1.29274	1.28155
.5		1.36886	1.36451	1.35671	1.35015	1.34489	1.34063	1.33710	1.33413	1.33158	1.32038	1.30820	1.29520	1.28155
.6	.8	1.36774	1.37069	1.36454	1.35831	1.35297	1.34850	1.34473	1.34151	1.33873	1.32627	1.31243	1.29745	1.28155
	.7	1.35440	1.37151	1.36940	1.36455	1.35970	1.35535	1.35155	1.34824	1.34533	1.33194	1.31662	1.29973	1.28155
	.6	1.33300	1.36701	1.36999	1.36703	1.36297	1.35898	1.35534	1.35208	1.34918	1.33543	1.31928	1.30120	1.28155
	.5	1.30734	1.36042	1.36888	1.36785	1.36461	1.36101	1.35756	1.35440	1.35153	1.33767	1.32103	1.30218	1.28155
	.4	1.28034	1.35411	1.36764	1.36819	1.36558	1.36228	1.35898	1.35589	1.35306	1.33915	1.32219	1.30284	1.28155
	.3	1.25520	1.35004	1.36717	1.36862	1.36635	1.36320	1.35997	1.35692	1.35411	1.34013	1.32297	1.30328	1.28155
	.2	1.23648	1.34918	1.36752	1.36920	1.36702	1.36389	1.36068	1.35763	1.35481	1.34077	1.32346	1.30356	1.28155
	.1	1.23146	1.35020	1.36813	1.36972	1.36749	1.36435	1.36112	1.35806	1.35523	1.34113	1.32373	1.30371	1.28155
1.0	.0	1.23650	1.35081	1.36840	1.36992	1.36767	1.36452	1.36128	1.35821	1.35537	1.34125	1.32382	1.30376	1.28155

6.4 Factors for Computing the Noncentrality Parameter of the Noncentral t-Distribution

Values of λ are given for $y(t)$ or $y'(t)$ to give $Pr\left\{T_f \le t \mid \delta\right\} = .95$

		f												
y'	y	1	2	3	4	5	6	7	8	9	10	11	12	13
-1.00	.0	1.35759	1.46164	1.50392	1.52766	1.54314	1.55418	1.56252	1.56908	1.57440	1.57882	1.58256	1.58578	1.58859
	.1	1.35774	1.46154	1.50376	1.52747	1.54295	1.55398	1.56231	1.56887	1.57420	1.57862	1.58237	1.58559	1.58839
	.2	1.35831	1.46135	1.50335	1.52697	1.54241	1.55342	1.56175	1.56831	1.57363	1.57806	1.58181	1.58504	1.58785
	.3	1.35965	1.46132	1.50291	1.52636	1.54171	1.55267	1.56098	1.56752	1.57284	1.57727	1.58103	1.58426	1.58708
	.4	1.36248	1.46195	1.50285	1.52598	1.54116	1.55203	1.56027	1.56678	1.57208	1.57649	1.58023	1.58346	1.58628
	.5	1.36804	1.46409	1.50386	1.52644	1.54131	1.55198	1.56009	1.56650	1.57173	1.57609	1.57979	1.58299	1.58578
	.6	1.37859	1.46913	1.50704	1.52869	1.54300	1.55329	1.56114	1.56735	1.57242	1.57666	1.58027	1.58339	1.58611
	.7	1.39807	1.47942	1.51422	1.53426	1.54757	1.55719	1.56454	1.57037	1.57515	1.57915	1.58255	1.58550	1.58808
-.60	.8	1.43265	1.49897	1.52853	1.54580	1.55738	1.56579	1.57224	1.57739	1.58161	1.58515	1.58817	1.59079	1.59309
-.55		1.44998	1.50928	1.53624	1.55214	1.56283	1.57062	1.57661	1.58139	1.58532	1.58862	1.59144	1.59389	1.59603
-.50		1.46814	1.52040	1.54469	1.55912	1.56887	1.57600	1.58149	1.58588	1.58950	1.59254	1.59514	1.59739	1.59937
-.45		1.48682	1.53219	1.55373	1.56665	1.57542	1.58186	1.58683	1.59081	1.59408	1.59684	1.59921	1.60126	1.60307
-.40		1.50575	1.54448	1.56327	1.57465	1.58241	1.58813	1.59255	1.59610	1.59902	1.60149	1.60361	1.60545	1.60706
-.35		1.52473	1.55712	1.57320	1.58302	1.58976	1.59473	1.59859	1.60170	1.60426	1.60643	1.60829	1.60990	1.61132
-.30		1.54354	1.56998	1.58339	1.59167	1.59738	1.60161	1.60490	1.60755	1.60975	1.61160	1.61320	1.61458	1.61580
-.25		1.56204	1.58292	1.59376	1.60052	1.60521	1.60869	1.61141	1.61361	1.61543	1.61697	1.61829	1.61944	1.62046
-.20		1.58008	1.59583	1.60420	1.60948	1.61316	1.61591	1.61806	1.61980	1.62124	1.62246	1.62352	1.62444	1.62525
-.15		1.59751	1.60858	1.61463	1.61847	1.62117	1.62320	1.62479	1.62607	1.62715	1.62805	1.62884	1.62952	1.63012
-.10		1.61420	1.62108	1.62494	1.62742	1.62917	1.63050	1.63153	1.63238	1.63308	1.63368	1.63419	1.63465	1.63504
-.05		1.63002	1.63320	1.63504	1.63624	1.63709	1.63773	1.63824	1.63866	1.63900	1.63930	1.63955	1.63977	1.63997
.00	1.0	1.64485	1.64485	1.64485	1.64485	1.64485	1.64485	1.64485	1.64485	1.64485	1.64485	1.64485	1.64485	1.64485
.05		1.65856	1.65592	1.65428	1.65319	1.65239	1.65179	1.65131	1.65091	1.65058	1.65030	1.65006	1.64985	1.64966
.10		1.67101	1.66630	1.66324	1.66116	1.65964	1.65848	1.65755	1.65678	1.65614	1.65560	1.65512	1.65471	1.65434
.15		1.68206	1.67588	1.67164	1.66869	1.66653	1.66485	1.66351	1.66241	1.66148	1.66069	1.65999	1.65939	1.65885
.20		1.69157	1.68454	1.67938	1.67571	1.67298	1.67086	1.66915	1.66773	1.66654	1.66552	1.66463	1.66385	1.66315
.25		1.69938	1.69217	1.68636	1.68212	1.67892	1.67642	1.67439	1.67270	1.67128	1.67005	1.66898	1.66804	1.66720
.30		1.70532	1.69864	1.69249	1.68785	1.68429	1.68147	1.67917	1.67726	1.67563	1.67423	1.67300	1.67192	1.67095
.35		1.70919	1.70382	1.69767	1.69280	1.68900	1.68594	1.68344	1.68134	1.67955	1.67800	1.67664	1.67543	1.67436
.40		1.71080	1.70756	1.70177	1.69689	1.69296	1.68977	1.68712	1.68489	1.68297	1.68131	1.67985	1.67855	1.67738
.45		1.70989	1.70970	1.70468	1.70001	1.69611	1.69287	1.69016	1.68784	1.68585	1.68411	1.68257	1.68120	1.67998
.50		1.70618	1.71005	1.70626	1.70206	1.69834	1.69518	1.69247	1.69014	1.68812	1.68634	1.68477	1.68336	1.68209
.55		1.69935	1.70842	1.70638	1.70292	1.69957	1.69659	1.69399	1.69172	1.68972	1.68795	1.68638	1.68496	1.68368
.60	.8	1.68898	1.70455	1.70486	1.70248	1.69969	1.69704	1.69465	1.69250	1.69059	1.68888	1.68734	1.68595	1.68469
	.7	1.64900	1.68572	1.69421	1.69579	1.69522	1.69394	1.69244	1.69093	1.68948	1.68812	1.68685	1.68567	1.68457
	.6	1.59884	1.65995	1.67826	1.68466	1.68682	1.68725	1.68692	1.68625	1.68543	1.68455	1.68367	1.68280	1.68197
	.5	1.54262	1.63109	1.66034	1.67195	1.67701	1.67925	1.68015	1.68037	1.68021	1.67986	1.67939	1.67887	1.67833
	.4	1.48343	1.60229	1.64301	1.65971	1.66749	1.67140	1.67344	1.67447	1.67494	1.67507	1.67500	1.67480	1.67453
	.3	1.42454	1.57686	1.62844	1.64942	1.65941	1.66468	1.66763	1.66933	1.67031	1.67084	1.67110	1.67117	1.67113
	.2	1.37074	1.55847	1.61816	1.64198	1.65346	1.65966	1.66326	1.66543	1.66678	1.66760	1.66810	1.66837	1.66849
	.1	1.33174	1.54938	1.61243	1.63761	1.64988	1.65660	1.66057	1.66302	1.66458	1.66558	1.66622	1.66661	1.66684
1.00	.0	1.32553	1.54704	1.61063	1.63618	1.64869	1.65558	1.65966	1.66221	1.66384	1.66490	1.66558	1.66602	1.66628

6.4 Factors for Computing the Noncentrality Parameter of the Noncentral t-Distribution

Values of λ are given for y(t) or y′(t) to give $\Pr\{T_f \le t \mid \delta\} = .95$ (Continued)

		f												
y′	y	14	15	16	17	18	19	20	21	22	23	24	25	26
-1.00	.0	1.59105	1.59325	1.59521	1.59698	1.59859	1.60006	1.60141	1.60265	1.60379	1.60486	1.60585	1.60678	1.60764
	.1	1.59086	1.59306	1.59503	1.59680	1.59841	1.59988	1.60123	1.60247	1.60362	1.60469	1.60568	1.60661	1.60748
	.2	1.59033	1.59253	1.59450	1.59628	1.59790	1.59938	1.60073	1.60198	1.60314	1.60421	1.60521	1.60614	1.60702
	.3	1.58956	1.59177	1.59375	1.59554	1.59716	1.59865	1.60001	1.60127	1.60243	1.60351	1.60451	1.60545	1.60634
	.4	1.58876	1.59097	1.59295	1.59475	1.59637	1.59786	1.59923	1.60049	1.60166	1.60274	1.60376	1.60470	1.60559
	.5	1.58825	1.59044	1.59241	1.59420	1.59582	1.59730	1.59866	1.59992	1.60109	1.60217	1.60318	1.60412	1.60501
	.6	1.58852	1.59067	1.59260	1.59434	1.59593	1.59739	1.59873	1.59996	1.60111	1.60217	1.60317	1.60410	1.60497
	.7	1.59036	1.59240	1.59423	1.59589	1.59741	1.59879	1.60007	1.60125	1.60234	1.60336	1.60431	1.60520	1.60603
-.60	.8	1.59513	1.59695	1.59859	1.60007	1.60143	1.60267	1.60382	1.60488	1.60586	1.60678	1.60763	1.60843	1.60919
-.55		1.59794	1.59964	1.60118	1.60257	1.60384	1.60500	1.60608	1.60707	1.60799	1.60885	1.60965	1.61041	1.61111
-.50		1.60113	1.60271	1.60413	1.60541	1.60659	1.60767	1.60866	1.60958	1.61044	1.61123	1.61198	1.61268	1.61333
-.45		1.60467	1.60610	1.60740	1.60857	1.60965	1.61063	1.61154	1.61238	1.61316	1.61389	1.61457	1.61521	1.61581
-.40		1.60850	1.60979	1.61095	1.61201	1.61297	1.61386	1.61467	1.61543	1.61613	1.61679	1.61740	1.61798	1.61852
-.35		1.61259	1.61372	1.61475	1.61568	1.61653	1.61731	1.61803	1.61870	1.61932	1.61990	1.62044	1.62095	1.62143
-.30		1.61689	1.61787	1.61875	1.61955	1.62028	1.62095	1.62158	1.62215	1.62269	1.62319	1.62365	1.62409	1.62451
-.25		1.62136	1.62218	1.62291	1.62358	1.62419	1.62475	1.62527	1.62575	1.62620	1.62662	1.62701	1.62738	1.62773
-.20		1.62597	1.62662	1.62720	1.62774	1.62823	1.62867	1.62909	1.62947	1.62983	1.63017	1.63048	1.63078	1.63105
-.15		1.63066	1.63114	1.63158	1.63198	1.63234	1.63268	1.63299	1.63328	1.63355	1.63380	1.63403	1.63425	1.63446
-.10		1.63540	1.63572	1.63601	1.63627	1.63651	1.63674	1.63694	1.63713	1.63731	1.63747	1.63763	1.63778	1.63791
-.05		1.64014	1.64030	1.64044	1.64058	1.64069	1.64080	1.64091	1.64100	1.64109	1.64117	1.64125	1.64132	1.64139
.00	1.0	1.64485	1.64485	1.64485	1.64485	1.64485	1.64485	1.64485	1.64485	1.64485	1.64485	1.64485	1.64485	1.64485
.05		1.64949	1.64933	1.64920	1.64907	1.64895	1.64885	1.64875	1.64866	1.64857	1.64849	1.64842	1.64834	1.64828
.10		1.65400	1.65371	1.65343	1.65319	1.65296	1.65275	1.65256	1.65238	1.65221	1.65205	1.65190	1.65176	1.65163
.15		1.65836	1.65793	1.65753	1.65717	1.65683	1.65653	1.65624	1.65598	1.65573	1.65550	1.65528	1.65508	1.65489
.20		1.66252	1.66196	1.66144	1.66098	1.66054	1.66014	1.65977	1.65943	1.65911	1.65881	1.65853	1.65826	1.65801
.25		1.66644	1.66576	1.66514	1.66457	1.66405	1.66356	1.66312	1.66270	1.66231	1.66195	1.66160	1.66128	1.66097
.30		1.67008	1.66929	1.66857	1.66792	1.66731	1.66675	1.66623	1.66575	1.66530	1.66488	1.66448	1.66410	1.66375
.35		1.67339	1.67251	1.67171	1.67098	1.67030	1.66967	1.66909	1.66855	1.66804	1.66757	1.66712	1.66670	1.66630
.40		1.67633	1.67538	1.67451	1.67371	1.67297	1.67229	1.67166	1.67106	1.67051	1.66999	1.66950	1.66904	1.66860
.45		1.67887	1.67785	1.67693	1.67608	1.67530	1.67457	1.67389	1.67326	1.67266	1.67211	1.67158	1.67109	1.67062
.50		1.68094	1.67989	1.67893	1.67804	1.67723	1.67646	1.67576	1.67509	1.67447	1.67389	1.67334	1.67282	1.67233
.55		1.68251	1.68145	1.68047	1.67956	1.67872	1.67795	1.67722	1.67654	1.67590	1.67530	1.67473	1.67420	1.67369
.60	.8	1.68353	1.68247	1.68150	1.68059	1.67975	1.67897	1.67824	1.67755	1.67691	1.67630	1.67573	1.67519	1.67467
	.7	1.68355	1.68260	1.68172	1.68090	1.68012	1.67940	1.67871	1.67807	1.67746	1.67688	1.67634	1.67582	1.67532
	.6	1.68117	1.68041	1.67969	1.67900	1.67835	1.67773	1.67715	1.67659	1.67606	1.67555	1.67507	1.67461	1.67417
	.5	1.67777	1.67722	1.67669	1.67616	1.67565	1.67516	1.67469	1.67424	1.67380	1.67338	1.67297	1.67259	1.67221
	.4	1.67420	1.67386	1.67349	1.67312	1.67275	1.67239	1.67202	1.67167	1.67132	1.67099	1.67066	1.67034	1.67004
	.3	1.67100	1.67082	1.67061	1.67037	1.67012	1.66986	1.66959	1.66932	1.66906	1.66879	1.66853	1.66828	1.66803
	.2	1.66851	1.66846	1.66836	1.66822	1.66806	1.66787	1.66768	1.66748	1.66727	1.66706	1.66686	1.66665	1.66644
	.1	1.66695	1.66697	1.66694	1.66686	1.66675	1.66662	1.66647	1.66631	1.66614	1.66597	1.66579	1.66561	1.66543
1.00	.0	1.66641	1.66647	1.66645	1.66640	1.66631	1.66619	1.66606	1.66591	1.66575	1.66559	1.66542	1.66525	1.66508

6.4 Factors for Computing the Noncentrality Parameter of the Noncentral t-Distribution
Values of λ are given for y(t) or y′(t) to give $Pr\{T_f \le t | \delta\} = .95$ (continued)

		f												
y′	y	27	28	29	30	31	32	33	34	35	36	40	44	48
-1.00	.0	1.60846	1.60922	1.60995	1.61063	1.61128	1.61189	1.61248	1.61303	1.61357	1.61407	1.61589	1.61743	1.61876
	.1	1.60830	1.60906	1.60979	1.61048	1.61112	1.61174	1.61233	1.61288	1.61342	1.61392	1.61574	1.61729	1.61863
	.2	1.60784	1.60861	1.60934	1.61003	1.61068	1.61130	1.61189	1.61246	1.61299	1.61350	1.61534	1.61690	1.61825
	.3	1.60716	1.60794	1.60868	1.60938	1.61003	1.61066	1.61126	1.61182	1.61236	1.61288	1.61473	1.61631	1.61768
	.4	1.60642	1.60721	1.60795	1.60865	1.60931	1.60995	1.61055	1.61112	1.61166	1.61219	1.61406	1.61565	1.61704
	.5	1.60584	1.60663	1.60737	1.60808	1.60874	1.60937	1.60998	1.61055	1.61110	1.61162	1.61350	1.61511	1.61649
	.6	1.60579	1.60657	1.60730	1.60799	1.60865	1.60927	1.60987	1.61043	1.61098	1.61149	1.61336	1.61495	1.61632
	.7	1.60682	1.60756	1.60826	1.60893	1.60956	1.61016	1.61073	1.61127	1.61179	1.61229	1.61408	1.61561	1.61694
-.60	.8	1.60990	1.61057	1.61120	1.61180	1.61237	1.61291	1.61343	1.61392	1.61439	1.61485	1.61647	1.61786	1.61907
-.55		1.61178	1.61241	1.61301	1.61357	1.61411	1.61462	1.61510	1.61557	1.61601	1.61643	1.61796	1.61927	1.62041
-.50		1.61395	1.61454	1.61509	1.61561	1.61611	1.61659	1.61704	1.61747	1.61788	1.61827	1.61970	1.62092	1.62197
-.45		1.61638	1.61691	1.61742	1.61790	1.61836	1.61879	1.61920	1.61960	1.61998	1.62034	1.62164	1.62276	1.62374
-.40		1.61903	1.61951	1.61997	1.62040	1.62081	1.62121	1.62158	1.62194	1.62228	1.62260	1.62378	1.62479	1.62567
-.35		1.62188	1.62231	1.62271	1.62309	1.62346	1.62381	1.62414	1.62445	1.62475	1.62504	1.62609	1.62698	1.62776
-.30		1.62490	1.62527	1.62561	1.62595	1.62626	1.62656	1.62685	1.62712	1.62738	1.62763	1.62853	1.62931	1.62998
-.25		1.62805	1.62836	1.62865	1.62893	1.62919	1.62944	1.62968	1.62991	1.63013	1.63034	1.63110	1.63175	1.63232
-.20		1.63131	1.63156	1.63179	1.63202	1.63223	1.63243	1.63262	1.63281	1.63298	1.63315	1.63376	1.63428	1.63473
-.15		1.63465	1.63484	1.63501	1.63518	1.63534	1.63549	1.63563	1.63577	1.63590	1.63603	1.63649	1.63688	1.63722
-.10		1.63804	1.63817	1.63828	1.63839	1.63850	1.63860	1.63870	1.63879	1.63887	1.63896	1.63926	1.63952	1.63975
-.05		1.64145	1.64151	1.64157	1.64163	1.64168	1.64173	1.64178	1.64182	1.64187	1.64191	1.64206	1.64219	1.64230
.00	1.0	1.64485	1.64485	1.64485	1.64485	1.64485	1.64485	1.64485	1.64485	1.64485	1.64485	1.64485	1.64485	1.64485
.05		1.64821	1.64816	1.64810	1.64805	1.64799	1.64795	1.64790	1.64785	1.64781	1.64777	1.64762	1.64750	1.64738
.10		1.65151	1.65139	1.65128	1.65117	1.65107	1.65098	1.65089	1.65080	1.65071	1.65063	1.65034	1.65009	1.64987
.15		1.65470	1.65453	1.65437	1.65421	1.65406	1.65392	1.65379	1.65366	1.65354	1.65342	1.65299	1.65262	1.65229
.20		1.65777	1.65755	1.65734	1.65713	1.65694	1.65676	1.65658	1.65641	1.65625	1.65609	1.65553	1.65505	1.65463
.25		1.66069	1.66041	1.66015	1.65991	1.65967	1.65945	1.65923	1.65903	1.65883	1.65864	1.65796	1.65737	1.65685
.30		1.66341	1.66310	1.66279	1.66251	1.66223	1.66197	1.66172	1.66148	1.66125	1.66103	1.66024	1.65955	1.65894
.35		1.66593	1.66557	1.66523	1.66490	1.66460	1.66430	1.66402	1.66375	1.66349	1.66325	1.66235	1.66157	1.66088
.40		1.66819	1.66780	1.66743	1.66707	1.66673	1.66641	1.66610	1.66580	1.66552	1.66525	1.66426	1.66340	1.66265
.45		1.67018	1.66976	1.66936	1.66898	1.66861	1.66827	1.66793	1.66762	1.66731	1.66702	1.66595	1.66503	1.66422
.50		1.67186	1.67142	1.67100	1.67060	1.67021	1.66985	1.66950	1.66916	1.66884	1.66853	1.66740	1.66642	1.66556
.55		1.67321	1.67275	1.67231	1.67190	1.67150	1.67112	1.67076	1.67041	1.67007	1.66975	1.66858	1.66756	1.66666
.60	.8	1.67418	1.67372	1.67327	1.67285	1.67245	1.67206	1.67169	1.67133	1.67099	1.67066	1.66946	1.66842	1.66750
	.7	1.67485	1.67440	1.67398	1.67356	1.67317	1.67279	1.67243	1.67208	1.67175	1.67142	1.67024	1.66920	1.66829
	.6	1.67375	1.67335	1.67296	1.67259	1.67223	1.67189	1.67156	1.67124	1.67093	1.67063	1.66954	1.66858	1.66772
	.5	1.67185	1.67150	1.67117	1.67085	1.67054	1.67024	1.66995	1.66967	1.66940	1.66913	1.66816	1.66730	1.66653
	.4	1.66974	1.66945	1.66917	1.66890	1.66863	1.66838	1.66813	1.66789	1.66765	1.66742	1.66658	1.66582	1.66514
	.3	1.66778	1.66754	1.66731	1.66708	1.66686	1.66664	1.66643	1.66622	1.66602	1.66583	1.66509	1.66443	1.66382
	.2	1.66624	1.66604	1.66584	1.66564	1.66545	1.66526	1.66508	1.66490	1.66473	1.66455	1.66390	1.66331	1.66277
	.1	1.66525	1.66507	1.66490	1.66473	1.66455	1.66439	1.66422	1.66406	1.66390	1.66374	1.66315	1.66260	1.66209
1.00	.0	1.66491	1.66475	1.66458	1.66441	1.66425	1.66408	1.66392	1.66377	1.66361	1.66346	1.66288	1.66235	1.66186

6.4 Factors for Computing the Noncentrality Parameter of the Noncentral t-Distribution

Values of λ are given for $y(t)$ or $y'(t)$ to give $Pr\{T_f \le t \mid \delta\} = .95$ (Continued)

		f												
y'	y	52	56	60	64	68	72	76	80	84	144	240	480	∞
-1.00	.0	1.61993	1.62096	1.62187	1.62269	1.62344	1.62412	1.62474	1.62531	1.62583	1.63073	1.63415	1.63746	1.64485
	.1	1.61980	1.62083	1.62175	1.62257	1.62332	1.62400	1.62462	1.62519	1.62572	1.63064	1.63408	1.63741	1.64485
	.2	1.61942	1.62047	1.62139	1.62223	1.62298	1.62367	1.62430	1.62488	1.62541	1.63039	1.63388	1.63726	1.64485
	.3	1.61887	1.61993	1.62087	1.62171	1.62248	1.62318	1.62381	1.62440	1.62494	1.63001	1.63357	1.63703	1.64485
	.4	1.61824	1.61931	1.62027	1.62113	1.62190	1.62261	1.62326	1.62386	1.62441	1.62958	1.63321	1.63677	1.64485
	.5	1.61771	1.61879	1.61975	1.62062	1.62140	1.62212	1.62277	1.62338	1.62394	1.62918	1.63289	1.63652	1.64485
	.6	1.61753	1.61860	1.61956	1.62042	1.62120	1.62192	1.62257	1.62317	1.62373	1.62898	1.63270	1.63637	1.64485
	.7	1.61811	1.61914	1.62007	1.62090	1.62166	1.62235	1.62298	1.62357	1.62411	1.62921	1.63286	1.63646	1.64485
-.60	.8	1.62013	1.62107	1.62192	1.62268	1.62337	1.62400	1.62458	1.62512	1.62561	1.63030	1.63366	1.63700	1.64485
-.55		1.62141	1.62230	1.62310	1.62382	1.62447	1.62507	1.62561	1.62612	1.62659	1.63102	1.63421	1.63738	1.64485
-.50		1.62291	1.62374	1.62448	1.62515	1.62576	1.62631	1.62682	1.62729	1.62773	1.63187	1.63486	1.63783	1.64485
-.45		1.62459	1.62535	1.62603	1.62665	1.62721	1.62772	1.62819	1.62863	1.62903	1.63285	1.63560	1.63834	1.64485
-.40		1.62645	1.62713	1.62775	1.62831	1.62882	1.62928	1.62970	1.63010	1.63046	1.63392	1.63642	1.63892	1.64485
-.35		1.62845	1.62906	1.62961	1.63010	1.63055	1.63096	1.63134	1.63169	1.63201	1.63509	1.63732	1.63955	1.64485
-.30		1.63058	1.63111	1.63158	1.63201	1.63240	1.63276	1.63309	1.63339	1.63367	1.63635	1.63828	1.64022	1.64485
-.25		1.63281	1.63326	1.63366	1.63402	1.63435	1.63465	1.63492	1.63518	1.63541	1.63767	1.63930	1.64094	1.64485
-.20		1.63514	1.63549	1.63581	1.63610	1.63637	1.63661	1.63683	1.63704	1.63723	1.63904	1.64036	1.64168	1.64485
-.15		1.63752	1.63779	1.63803	1.63825	1.63845	1.63863	1.63880	1.63895	1.63909	1.64046	1.64146	1.64245	1.64485
-.10		1.63995	1.64013	1.64029	1.64044	1.64057	1.64069	1.64080	1.64090	1.64100	1.64191	1.64258	1.64325	1.64487
-.05		1.64240	1.64249	1.64257	1.64264	1.64271	1.64277	1.64283	1.64288	1.64292	1.64338	1.64371	1.64405	1.64735
.00	1.0	1.64485	1.64485	1.64485	1.64485	1.64485	1.64485	1.64485	1.64485	1.64485	1.64485	1.64485	1.64485	1.64485
.05		1.64729	1.64720	1.64712	1.64705	1.64698	1.64692	1.64687	1.64682	1.64677	1.64632	1.64599	1.64566	1.37248
.10		1.64968	1.64950	1.64935	1.64921	1.64908	1.64896	1.64885	1.64875	1.64866	1.64777	1.64711	1.64645	1.41312
.15		1.65201	1.65175	1.65152	1.65131	1.65112	1.65095	1.65079	1.65064	1.65050	1.64918	1.64821	1.64723	1.62674
.20		1.65425	1.65392	1.65362	1.65334	1.65309	1.65287	1.65266	1.65246	1.65228	1.65055	1.64928	1.64799	1.64474
.25		1.65639	1.65598	1.65562	1.65528	1.65498	1.65470	1.65444	1.65421	1.65399	1.65186	1.65030	1.64872	1.64485
.30		1.65841	1.65793	1.65750	1.65711	1.65676	1.65643	1.65613	1.65585	1.65559	1.65310	1.65127	1.64941	1.64485
.35		1.66028	1.65974	1.65925	1.65881	1.65841	1.65804	1.65770	1.65738	1.65709	1.65426	1.65217	1.65005	1.64485
.40		1.66198	1.66139	1.66085	1.66036	1.65992	1.65951	1.65913	1.65878	1.65846	1.65532	1.65301	1.65065	1.64485
.45		1.66350	1.66285	1.66227	1.66174	1.66126	1.66082	1.66041	1.66003	1.65968	1.65628	1.65376	1.65119	1.64485
.50		1.66480	1.66411	1.66350	1.66294	1.66242	1.66195	1.66152	1.66112	1.66074	1.65711	1.65442	1.65167	1.64485
.55		1.66587	1.66515	1.66451	1.66392	1.66339	1.66289	1.66244	1.66202	1.66162	1.65781	1.65498	1.65207	1.64485
.60	.8	1.66668	1.66595	1.66528	1.66468	1.66413	1.66362	1.66315	1.66272	1.66231	1.65837	1.65542	1.65239	1.64485
	.7	1.66747	1.66673	1.66607	1.66546	1.66490	1.66439	1.66391	1.66347	1.66306	1.65901	1.65597	1.65281	1.64485
	.6	1.66696	1.66626	1.66563	1.66505	1.66452	1.66403	1.66358	1.66316	1.66276	1.65886	1.65588	1.65278	1.64485
	.5	1.66583	1.66520	1.66462	1.66409	1.66361	1.66315	1.66273	1.66234	1.66198	1.65832	1.65550	1.65253	1.64485
	.4	1.66451	1.66395	1.66343	1.66295	1.66251	1.66210	1.66171	1.66136	1.66102	1.65764	1.65500	1.65220	1.64485
	.3	1.66327	1.66276	1.66229	1.66186	1.66146	1.66108	1.66074	1.66041	1.66010	1.65698	1.65451	1.65187	1.64485
	.2	1.66226	1.66180	1.66138	1.66098	1.66061	1.66027	1.65995	1.65964	1.65936	1.65644	1.65411	1.65159	1.64485
	.1	1.66162	1.66119	1.66079	1.66042	1.66007	1.65974	1.65944	1.65915	1.65888	1.65610	1.65385	1.65141	1.64485
1.00	.0	1.66140	1.66098	1.66059	1.66022	1.65988	1.65956	1.65926	1.65898	1.65872	1.65598	1.65376	1.65135	1.64485

6.5 Factors for Computing the Noncentrality Parameter of the Noncentral t-Distribution

Values of λ are given for $y(t)$ or $y'(t)$ to give $\Pr\{T_f \le t \mid \delta\} = .975$

		f												
y'	y	1	2	3	4	5	6	7	8	9	16	36	144	∞
-1.0	.0	1.75561	1.84129	1.87449	1.89244	1.90379	1.91165	1.91745	1.92192	1.92547	1.93859	1.94902	1.95633	1.95996
	.1	1.75476	1.84039	1.87362	1.89161	1.90299	1.91089	1.91672	1.92121	1.92478	1.93801	1.94859	1.95609	1.95996
	.2	1.75232	1.83777	1.87108	1.88917	1.90066	1.90865	1.91456	1.91912	1.92276	1.93632	1.94733	1.95539	1.95996
	.3	1.74861	1.83369	1.86709	1.88534	1.89698	1.90511	1.91115	1.91583	1.91957	1.93364	1.94533	1.95427	1.95996
	.4	1.74424	1.82862	1.86207	1.88048	1.89229	1.90060	1.90679	1.91161	1.91548	1.93020	1.94275	1.95281	1.95996
	.5	1.74035	1.82341	1.85673	1.87523	1.88719	1.89565	1.90199	1.90695	1.91095	1.92635	1.93984	1.95117	1.95996
	.6	1.73902	1.81951	1.85228	1.87066	1.88263	1.89115	1.89757	1.90262	1.90671	1.92266	1.93700	1.94952	1.95996
	.7	1.74423	1.81949	1.85078	1.86852	1.88019	1.88854	1.89488	1.89989	1.90396	1.92002	1.93482	1.94820	1.95996
-.6	.8	1.76350	1.82806	1.85593	1.87200	1.88268	1.89039	1.89627	1.90094	1.90476	1.91999	1.93434	1.94771	1.95996
-.5		1.79008	1.84271	1.86640	1.88029	1.88961	1.89639	1.90159	1.90573	1.90913	1.92281	1.93589	1.94831	1.95996
-.4		1.82266	1.86251	1.88130	1.89253	1.90015	1.90573	1.91004	1.91348	1.91632	1.92782	1.93897	1.94970	1.95996
-.3		1.85830	1.88578	1.89939	1.90770	1.91341	1.91762	1.92089	1.92351	1.92568	1.93455	1.94325	1.95173	1.95996
-.2		1.89447	1.91083	1.91938	1.92472	1.92843	1.93119	1.93335	1.93509	1.93654	1.94248	1.94839	1.95423	1.95996
-.1		1.92900	1.93606	1.93998	1.94249	1.94426	1.94559	1.94664	1.94749	1.94819	1.95113	1.95408	1.95703	1.95996
.0	1.0	1.95996	1.95996	1.95996	1.95996	1.95996	1.95996	1.95996	1.95996	1.95996	1.95996	1.95996	1.95996	1.95996
.1		1.98558	1.98109	1.97813	1.97609	1.97461	1.97346	1.97255	1.97179	1.97116	1.96849	1.96571	1.96286	1.95996
.2		2.00408	1.99802	1.99327	1.98984	1.98726	1.98524	1.98360	1.98225	1.98111	1.97618	1.97098	1.96556	1.95996
.3		2.01362	2.00926	2.00417	2.00014	1.99697	1.99443	1.99234	1.99059	1.98909	1.98254	1.97544	1.96789	1.95996
.4		2.01211	2.01319	2.00950	2.00586	2.00275	2.00014	1.99793	1.99604	1.99441	1.98703	1.97874	1.96967	1.95996
.5		1.99699	2.00791	2.00775	2.00574	2.00349	2.00138	1.99948	1.99779	1.99628	1.98910	1.98052	1.97075	1.95996
.6	.8	1.96474	1.99096	1.99705	1.99826	1.99791	1.99703	1.99598	1.99490	1.99386	1.98816	1.98043	1.97094	1.95996
	.7	1.89997	1.95281	1.97067	1.97822	1.98175	1.98346	1.98425	1.98455	1.98457	1.98258	1.97753	1.96985	1.95996
	.6	1.82315	1.90593	1.93764	1.95273	1.96090	1.96571	1.96872	1.97068	1.97199	1.97457	1.97301	1.96795	1.95996
	.5	1.73871	1.85465	1.90192	1.92536	1.93855	1.94668	1.95204	1.95575	1.95843	1.96581	1.96797	1.96577	1.95996
	.4	1.64981	1.80255	1.86678	1.89889	1.91711	1.92849	1.93611	1.94150	1.94547	1.95741	1.96310	1.96364	1.95996
	.3	1.55967	1.75361	1.83553	1.87585	1.89858	1.91280	1.92239	1.92923	1.93431	1.95016	1.95888	1.96178	1.95996
	.2	1.47287	1.71327	1.81156	1.85838	1.88452	1.90088	1.91194	1.91987	1.92579	1.94461	1.95564	1.96036	1.95996
	.1	1.39885	1.68874	1.79720	1.84769	1.87585	1.89348	1.90545	1.91404	1.92048	1.94114	1.95361	1.95946	1.95996
1.0	.0	1.36989	1.68177	1.79253	1.84413	1.87293	1.89099	1.90325	1.91207	1.91868	1.93996	1.95292	1.95916	1.95996

6.6 Factors for Computing the Noncentrality Parameter of the Noncentral t-Distribution

Values of λ are given for $y(t)$ or $y'(t)$ to give $Pr\{T_f \leq t \mid \delta\} = .99$

		f												
y'	y	1	2	3	4	5	6	7	8	9	16	36	144	∞
-1.0	.0	2.22856	2.29193	2.31388	2.32457	2.33068	2.33450	2.33704	2.33881	2.34006	2.34314	2.34239	2.33710	2.32635
	.1	2.22653	2.29004	2.31213	2.32293	2.32912	2.33302	2.33563	2.33744	2.33875	2.34205	2.34159	2.33666	2.32635
	.2	2.22052	2.28445	2.30693	2.31805	2.32451	2.32863	2.33142	2.33340	2.33485	2.33883	2.33921	2.33534	2.32635
	.3	2.21079	2.27537	2.29850	2.31014	2.31703	2.32151	2.32461	2.32686	2.32854	2.33363	2.33538	2.33321	2.32635
	.4	2.19788	2.26327	2.28724	2.29959	2.30705	2.31201	2.31552	2.31813	2.32012	2.32669	2.33027	2.33038	2.32635
	.5	2.18276	2.24895	2.27389	2.28705	2.29519	2.30072	2.30472	2.30775	2.31012	2.31845	2.32422	2.32703	2.32635
	.6	2.16730	2.23386	2.25971	2.27368	2.28251	2.28863	2.29314	2.29662	2.29938	2.30958	2.31769	2.32341	2.32635
	.7	2.15527	2.22072	2.24695	2.26147	2.27083	2.27742	2.28236	2.28621	2.28931	2.30118	2.31147	2.31994	2.32635
-.6	.8	2.15478	2.21485	2.23993	2.25415	2.26348	2.27015	2.27521	2.27920	2.28244	2.29518	2.30683	2.31728	2.32635
-.5		2.16866	2.22014	2.24256	2.25552	2.26413	2.27035	2.27510	2.27887	2.28195	2.29424	2.30579	2.31653	2.32635
-.4		2.19336	2.23375	2.25221	2.26311	2.27045	2.27579	2.27990	2.28318	2.28587	2.29672	2.30712	2.31702	2.32635
-.3		2.22518	2.25359	2.26730	2.27558	2.28123	2.28538	2.28859	2.29117	2.29329	2.30193	2.31035	2.31851	2.32635
-.2		2.26027	2.27727	2.28598	2.29137	2.29510	2.29787	2.30003	2.30177	2.30321	2.30913	2.31498	2.32073	2.32635
-.1		2.29505	2.30232	2.30630	2.30884	2.31063	2.31197	2.31302	2.31388	2.31459	2.31753	2.32048	2.32343	2.32635
.0	1.0	2.32635	2.32635	2.32635	2.32635	2.32635	2.32635	2.32635	2.32635	2.32635	2.32635	2.32635	2.32635	2.32635
.1		2.35131	2.34709	2.34423	2.34226	2.34081	2.33969	2.33879	2.33805	2.33743	2.33479	2.33205	2.32923	2.32635
.2		2.36727	2.36235	2.35812	2.35497	2.35257	2.35068	2.34914	2.34786	2.34677	2.34207	2.33706	2.33181	2.32635
.3		2.37159	2.36994	2.36614	2.36286	2.36019	2.35800	2.35617	2.35463	2.35330	2.34739	2.34087	2.33382	2.32635
.4		2.36142	2.36749	2.36633	2.36421	2.36213	2.36025	2.35861	2.35716	2.35589	2.34992	2.34292	2.33501	2.32635
.5		2.33329	2.35224	2.35641	2.35709	2.35668	2.35592	2.35505	2.35418	2.35333	2.34880	2.34266	2.33511	2.32635
.6	.8	2.28250	2.32063	2.33354	2.33912	2.34182	2.34318	2.34386	2.34417	2.34425	2.34306	2.33950	2.33384	2.32635
	.7	2.18737	2.25775	2.28646	2.30122	2.30986	2.31538	2.31912	2.32178	2.32373	2.32944	2.33151	2.33034	2.32635
	.6	2.07813	2.18384	2.23077	2.25630	2.27195	2.28235	2.28969	2.29511	2.29926	2.31306	2.32179	2.32600	2.32635
	.5	1.95953	2.10370	2.17105	2.20863	2.23201	2.24774	2.25897	2.26735	2.27383	2.29613	2.31176	2.32153	2.32635
	.4	1.83486	2.02121	2.11121	2.16182	2.19331	2.21450	2.22963	2.24094	2.24971	2.28023	2.30239	2.31736	2.32635
	.3	1.70723	1.94069	2.05558	2.11962	2.15901	2.18532	2.20403	2.21800	2.22882	2.26659	2.29440	2.31382	2.32635
	.2	1.58087	1.86857	2.00973	2.08608	2.13216	2.16263	2.18422	2.20029	2.21273	2.25616	2.28832	2.31114	2.32635
	.1	1.46430	1.81648	1.98014	2.06479	2.11517	2.14831	2.17172	2.18914	2.20261	2.24962	2.28453	2.30948	2.32635
1.0	.0	1.39649	1.79950	1.97026	2.05757	2.10938	2.14343	2.16746	2.18534	2.19916	2.24739	2.28324	2.30891	2.32635

6.7 Factors for Computing the Noncentrality Parameter of the Noncentral t-Distribution

Values of λ are given for $y(t)$ or $y'(t)$ to give $Pr\left\{T_f \leq t \mid \delta\right\} = .995$

		f												
y'	y	1	2	3	4	5	6	7	8	9	16	36	144	∞
-1.0	.0	2.55553	2.60361	2.61769	2.62323	2.62557	2.62648	2.62666	2.62646	2.62603	2.62169	2.61257	2.59770	2.57583
	.1	2.55268	2.60102	2.61530	2.62099	2.62346	2.62447	2.62474	2.62461	2.62426	2.62023	2.61149	2.59710	2.57583
	.2	2.54421	2.59332	2.60820	2.61435	2.61719	2.61851	2.61904	2.61914	2.61898	2.61587	2.60827	2.59531	2.57583
	.3	2.53032	2.58071	2.59658	2.60350	2.60695	2.60878	2.60974	2.61020	2.61037	2.60878	2.60305	2.59240	2.57583
	.4	2.51150	2.56361	2.58084	2.58881	2.59311	2.59563	2.59717	2.59814	2.59875	2.59923	2.59604	2.58852	2.57583
	.5	2.48861	2.54280	2.56170	2.57097	2.57630	2.57967	2.58194	2.58353	2.58468	2.58769	2.58759	2.58386	2.57583
	.6	2.46339	2.51971	2.54044	2.55115	2.55763	2.56196	2.56503	2.56731	2.56907	2.57491	2.57826	2.57873	2.57583
	.7	2.43939	2.49708	2.51943	2.53147	2.53907	2.54432	2.54818	2.55114	2.55349	2.56214	2.56893	2.57360	2.57583
-.6	.8	2.42475	2.48056	2.50332	2.51603	2.52429	2.53014	2.53454	2.53798	2.54077	2.55154	2.56109	2.56924	2.57583
-.5		2.42890	2.47870	2.49994	2.51209	2.52011	2.52587	2.53025	2.53371	2.53653	2.54769	2.55803	2.56745	2.57583
-.4		2.44713	2.48740	2.50546	2.51603	2.52311	2.52825	2.53218	2.53532	2.53789	2.54820	2.55800	2.56724	2.57583
-.3		2.47557	2.50443	2.51812	2.52634	2.53191	2.53600	2.53916	2.54169	2.54377	2.55221	2.56040	2.56829	2.57583
-.2		2.50951	2.52691	2.53570	2.54112	2.54485	2.54762	2.54977	2.55151	2.55294	2.55882	2.56462	2.57030	2.57583
-.1		2.54432	2.55173	2.55576	2.55832	2.56011	2.56146	2.56251	2.56337	2.56408	2.56703	2.56998	2.57292	2.57583
.0	1.0	2.57583	2.57583	2.57583	2.57583	2.57583	2.57583	2.57583	2.57583	2.57583	2.57583	2.57583	2.57583	2.57583
.1		2.60033	2.59629	2.59351	2.59158	2.59015	2.58905	2.58817	2.58744	2.58683	2.58422	2.58150	2.57870	2.57583
.2		2.61448	2.61035	2.60647	2.60353	2.60126	2.59946	2.59799	2.59676	2.59572	2.59118	2.58632	2.58118	2.57583
.3		2.61506	2.61526	2.61236	2.60961	2.60730	2.60536	2.60373	2.60234	2.60113	2.59570	2.58961	2.58296	2.57583
.4		2.59868	2.60812	2.60872	2.60769	2.60634	2.60501	2.60377	2.60265	2.60164	2.59673	2.59070	2.58369	2.57583
.5		2.56127	2.58557	2.59272	2.59530	2.59622	2.59643	2.59632	2.59605	2.59570	2.59314	2.58886	2.58302	2.57583
.6	.8	2.49733	2.54324	2.56079	2.56944	2.57431	2.57730	2.57925	2.58058	2.58150	2.58369	2.58332	2.58061	2.57583
	.7	2.38078	2.46234	2.49829	2.51805	2.53032	2.53859	2.54449	2.54889	2.55229	2.56381	2.57136	2.57523	2.57583
	.6	2.24879	2.36879	2.42568	2.45835	2.47927	2.49371	2.50423	2.51223	2.51850	2.54084	2.55754	2.56899	2.57583
	.5	2.10637	2.26766	2.34790	2.39504	2.42560	2.44684	2.46240	2.47427	2.48363	2.51741	2.54355	2.56271	2.57583
	.4	1.95686	2.16298	2.26917	2.33220	2.37309	2.40146	2.42221	2.43802	2.45047	2.49546	2.53059	2.55693	2.57583
	.3	1.80334	2.05916	2.19429	2.27432	2.32571	2.36106	2.38674	2.40623	2.42153	2.47660	2.51957	2.55207	2.57583
	.2	1.64980	1.96278	2.12994	2.22683	2.28775	2.32910	2.35890	2.38141	2.39903	2.46212	2.51119	2.54839	2.57583
	.1	1.50408	1.88686	2.08591	2.19573	2.26325	2.30862	2.34115	2.36564	2.38477	2.45302	2.50597	2.54611	2.57583
1.0	.0	1.40535	1.85840	2.07075	2.18502	2.25482	2.30158	2.33506	2.36024	2.37988	2.44992	2.50419	2.54534	2.57583

7. TABLES OF VARIABLES SAMPLING PLANS.

LTPD = Lot Tolerance Percent Defective (Percentage defective in the lot corresponding to a 0.10 chance of acceptance of the lot). The first number given is the proportion and the second is the normal deviate corresponding to that proportion.

n = Size of sample taken from the lot.

k = The constant to use in the acceptance criterion.

IQ = The Indifference Quality (Percentage defective in the lot corresponding to a 0.50 chance of accepting the lot). The first number given is the percentage and the second is the normal deviate corresponding to that percentage.

AQL = Acceptable Quality Level (Percentage defective in the lot corresponding to a 0.95 chance of accepting the lot). The first number given is the percentage and the second is the normal deviate corresponding to that percentage.

ML = Manufacturer's Level (Percentage defective in the lot corresponding to a 0.99 chance of accepting the lot). The first number given is the percentage and the second is the normal deviate corresponding to that percentage.

AOQL = Average Outgoing Quality Limit. If all rejected lots are 100% tested and all rejected items replaced with good items, then the average proportion defective in both the accepted and rejected lots is a function of the proportion defective in the lots before inspection. This function is known as the average outgoing quality or AOQ. The maximum value of the AOQ is the AOQL. The first number given is the AOQL expressed as a percentage; the second is the percentage defective in the original lots which correspond to the AOQL; and the third number is the normal deviate corresponding to the second number.

7.1 Variables Sampling Plans with LTPD = 30%

or $K_{LTPD} = -.52440$

n	k	IQ		AQL		ML		AOQL		
10	1.066	15.083	-1.033	4.417	-1.704	2.340	-1.988	7.694	13.007	-1.126
11	1.032	15.787	-1.003	5.116	-1.634	2.873	-1.900	8.157	13.179	-1.118
12	1.004	16.387	-.979	5.765	-1.575	3.392	-1.826	8.581	13.356	-1.110
13	.980	16.918	-.957	6.372	-1.524	3.897	-1.763	8.978	13.541	-1.101
14	.959	17.395	-.939	6.943	-1.480	4.386	-1.708	9.352	13.731	-1.092
15	.940	17.839	-.922	7.486	-1.440	4.863	-1.658	9.713	13.930	-1.083
16	.924	18.218	-.907	7.982	-1.406	5.309	-1.616	10.039	14.110	-1.075
17	.910	18.555	-.894	8.442	-1.376	5.732	-1.578	10.342	14.281	-1.068
18	.896	18.900	-.882	8.900	-1.347	6.156	-1.542	10.652	14.474	-1.059
19	.885	19.172	-.872	9.299	-1.323	6.536	-1.511	10.916	14.628	-1.053
20	.874	19.449	-.861	9.695	-1.299	6.914	-1.482	11.185	14.797	-1.045
21	.864	19.704	-.852	10.067	-1.278	7.275	-1.456	11.439	14.959	-1.038
22	.855	19.935	-.844	10.416	-1.258	7.617	-1.431	11.677	15.111	-1.032
23	.846	20.170	-.836	10.761	-1.239	7.956	-1.408	11.918	15.273	-1.025
24	.838	20.380	-.828	11.081	-1.222	8.275	-1.387	12.141	15.422	-1.018
25	.831	20.565	-.822	11.376	-1.207	8.573	-1.368	12.345	15.557	-1.013
26	.824	20.751	-.815	11.667	-1.192	8.867	-1.349	12.551	15.697	-1.007
27	.818	20.912	-.809	11.933	-1.178	9.140	-1.332	12.737	15.821	-1.002
28	.812	21.074	-.804	12.195	-1.165	9.409	-1.316	12.923	15.949	-.997
29	.806	21.237	-.798	12.454	-1.153	9.674	-1.300	13.110	16.081	-.991
30	.801	21.373	-.794	12.687	-1.141	9.917	-1.286	13.275	16.194	-.987
31	.796	21.510	-.789	12.917	-1.130	10.156	-1.273	13.441	16.310	-.982
32	.791	21.648	-.784	13.143	-1.120	10.393	-1.259	13.607	16.428	-.977
33	.786	21.788	-.779	13.367	-1.109	10.626	-1.247	13.772	16.549	-.972
34	.782	21.899	-.776	13.564	-1.100	10.836	-1.235	13.916	16.649	-.968
35	.778	22.010	-.772	13.759	-1.091	11.043	-1.224	14.059	16.751	-.964
36	.774	22.123	-.768	13.951	-1.083	11.247	-1.213	14.201	16.854	-.960
37	.770	22.236	-.764	14.141	-1.074	11.449	-1.203	14.344	16.959	-.956
38	.766	22.350	-.760	14.329	-1.066	11.648	-1.193	14.486	17.065	-.952
39	.763	22.434	-.758	14.489	-1.059	11.823	-1.184	14.604	17.149	-.948
40	.760	22.519	-.755	14.648	-1.052	11.995	-1.175	14.723	17.233	-.945
41	.756	22.635	-.751	14.829	-1.044	12.187	-1.166	14.863	17.342	-.941
42	.753	22.721	-.748	14.984	-1.037	12.355	-1.157	14.981	17.429	-.937
43	.750	22.807	-.745	15.136	-1.031	12.520	-1.149	15.098	17.515	-.934
44	.747	22.894	-.742	15.287	-1.024	12.684	-1.141	15.214	17.603	-.931
45	.745	22.951	-.740	15.411	-1.019	12.822	-1.135	15.306	17.667	-.928
46	.742	23.038	-.738	15.559	-1.013	12.982	-1.127	15.422	17.755	-.925
47	.740	23.096	-.736	15.679	-1.008	13.116	-1.121	15.513	17.820	-.922
48	.737	23.184	-.733	15.823	-1.002	13.272	-1.114	15.627	17.909	-.919
49	.735	23.242	-.731	15.940	-.997	13.403	-1.108	15.717	17.974	-.916
50	.732	23.330	-.728	16.082	-.991	13.556	-1.101	15.831	18.065	-.913
51	.730	23.389	-.726	16.197	-.986	13.683	-1.095	15.920	18.130	-.910
52	.728	23.448	-.724	16.310	-.982	13.809	-1.089	16.009	18.196	-.908
53	.726	23.506	-.722	16.421	-.977	13.933	-1.083	16.097	18.262	-.905
54	.724	23.565	-.720	16.532	-.973	14.056	-1.078	16.184	18.329	-.903

7.1 Variables Sampling Plans with LTPD = 30%

or K_{LTPD} = - .52440 (Continued)

n	k	IQ		AQL		ML		AOQL		
55	.722	23.625	-.718	16.641	-.968	14.177	-1.072	16.271	18.395	-.900
56	.720	23.684	-.717	16.749	-.964	14.297	-1.067	16.358	18.462	-.898
57	.718	23.743	-.715	16.856	-.960	14.416	-1.062	16.444	18.528	-.895
58	.716	23.803	-.713	16.963	-.956	14.533	-1.057	16.530	18.595	-.893
59	.715	23.832	-.712	17.041	-.953	14.624	-1.053	16.591	18.637	-.891
60	.713	23.892	-.710	17.145	-.948	14.740	-1.048	16.676	18.704	-.889
61	.711	23.952	-.708	17.248	-.944	14.854	-1.043	16.760	18.771	-.886
62	.709	24.012	-.706	17.351	-.940	14.966	-1.038	16.845	18.838	-.884
63	.708	24.042	-.705	17.425	-.938	15.053	-1.034	16.903	18.880	-.882
64	.706	24.102	-.703	17.525	-.934	15.164	-1.029	16.987	18.947	-.880
65	.705	24.132	-.702	17.598	-.931	15.248	-1.026	17.044	18.988	-.878
66	.703	24.193	-.700	17.697	-.927	15.357	-1.021	17.127	19.056	-.876
67	.702	24.222	-.699	17.768	-.924	15.439	-1.018	17.184	19.097	-.874
68	.701	24.252	-.698	17.838	-.922	15.520	-1.014	17.241	19.138	-.873
69	.699	24.313	-.696	17.935	-.918	15.627	-1.010	17.323	19.206	-.870
70	.698	24.343	-.695	18.003	-.915	15.706	-1.007	17.378	19.247	-.869
71	.696	24.404	-.693	18.099	-.912	15.811	-1.002	17.460	19.315	-.866
72	.695	24.434	-.692	18.166	-.909	15.888	-.999	17.515	19.356	-.865
73	.694	24.465	-.691	18.233	-.907	15.965	-.996	17.570	19.397	-.863
74	.693	24.495	-.690	18.299	-.904	16.041	-.993	17.624	19.438	-.862
75	.692	24.525	-.690	18.364	-.902	16.116	-.990	17.678	19.479	-.860
76	.690	24.587	-.688	18.457	-.898	16.217	-.986	17.758	19.547	-.858
77	.689	24.617	-.687	18.521	-.896	16.291	-.983	17.811	19.588	-.856
78	.688	24.647	-.686	18.584	-.893	16.364	-.980	17.865	19.629	-.855
79	.687	24.678	-.685	18.647	-.891	16.437	-.977	17.917	19.670	-.853
80	.686	24.708	-.684	18.710	-.889	16.508	-.974	17.970	19.711	-.852
81	.685	24.739	-.683	18.771	-.886	16.579	-.971	18.022	19.751	-.851
82	.684	24.770	-.682	18.833	-.884	16.650	-.968	18.074	19.792	-.849
83	.683	24.800	-.681	18.894	-.882	16.719	-.965	18.126	19.833	-.848
84	.682	24.831	-.680	18.954	-.880	16.788	-.963	18.177	19.873	-.846
85	.681	24.862	-.679	19.014	-.877	16.857	-.960	18.228	19.914	-.845
86	.680	24.893	-.678	19.074	-.875	16.925	-.957	18.279	19.954	-.843
87	.679	24.923	-.677	19.133	-.873	16.992	-.954	18.330	19.994	-.842
88	.678	24.954	-.676	19.191	-.871	17.059	-.952	18.380	20.035	-.840
89	.677	24.985	-.675	19.249	-.869	17.125	-.949	18.431	20.075	-.839
90	.676	25.016	-.674	19.307	-.867	17.191	-.947	18.481	20.115	-.838
91	.675	25.047	-.673	19.365	-.865	17.257	-.944	18.530	20.156	-.836
92	.674	25.078	-.672	19.422	-.862	17.321	-.942	18.580	20.196	-.835
93	.673	25.109	-.671	19.478	-.860	17.386	-.939	18.629	20.236	-.833
94	.673	25.108	-.671	19.506	-.859	17.422	-.938	18.651	20.248	-.833
95	.672	25.140	-.670	19.562	-.857	17.486	-.935	18.700	20.288	-.831
96	.671	25.171	-.669	19.617	-.855	17.549	-.933	18.749	20.328	-.830
97	.670	25.202	-.668	19.673	-.853	17.611	-.930	18.797	20.368	-.829
98	.669	25.233	-.667	19.727	-.851	17.673	-.928	18.845	20.407	-.827
99	.669	25.233	-.667	19.753	-.850	17.707	-.927	18.866	20.419	-.827

7.1 Variables Sampling Plans with LTPD = 30%

or K_{LTPD} = -.52440 (Continued)

n	k	IQ		AQL		ML		AOQL		
100	.668	25.264	-.666	19.807	-.849	17.768	-.924	18.914	20.459	-.825
110	.661	25.482	-.659	20.246	-.833	18.276	-.905	19.301	20.769	-.814
120	.655	25.670	-.654	20.630	-.819	18.723	-.888	19.643	21.044	-.805
130	.649	25.860	-.648	20.993	-.807	19.142	-.873	19.971	21.313	-.796
140	.645	25.986	-.644	21.278	-.797	19.480	-.860	20.231	21.520	-.789
150	.640	26.146	-.639	21.578	-.787	19.828	-.848	20.509	21.751	-.781
160	.637	26.241	-.636	21.806	-.779	20.100	-.838	20.719	21.918	-.775
170	.633	26.369	-.632	22.053	-.770	20.388	-.828	20.951	22.111	-.768
180	.630	26.465	-.629	22.259	-.763	20.633	-.819	21.146	22.271	-.763
190	.627	26.562	-.626	22.458	-.757	20.867	-.811	21.335	22.427	-.758
200	.624	26.659	-.623	22.649	-.750	21.091	-.803	21.518	22.581	-.753
210	.622	26.723	-.621	22.803	-.745	21.277	-.797	21.667	22.701	-.749
220	.619	26.820	-.618	22.982	-.739	21.485	-.790	21.840	22.849	-.744
230	.617	26.885	-.616	23.125	-.735	21.655	-.784	21.979	22.964	-.740
240	.615	26.950	-.614	23.263	-.730	21.820	-.778	22.114	23.076	-.736
250	.613	27.015	-.612	23.397	-.726	21.978	-.773	22.246	23.187	-.733
260	.612	27.047	-.611	23.495	-.723	22.101	-.769	22.345	23.265	-.730
270	.610	27.113	-.609	23.622	-.719	22.250	-.764	22.470	23.372	-.727
280	.608	27.178	-.607	23.745	-.715	22.394	-.759	22.593	23.477	-.723
290	.607	27.211	-.606	23.834	-.712	22.504	-.755	22.682	23.550	-.721
300	.605	27.277	-.604	23.952	-.708	22.641	-.751	22.800	23.652	-.718
310	.604	27.309	-.603	24.036	-.705	22.743	-.747	22.885	23.721	-.715
320	.603	27.342	-.603	24.117	-.703	22.843	-.744	22.968	23.790	-.713
330	.602	27.375	-.602	24.196	-.700	22.939	-.741	23.049	23.857	-.711
340	.600	27.441	-.600	24.305	-.697	23.064	-.737	23.159	23.954	-.708
350	.599	27.474	-.599	24.381	-.694	23.156	-.734	23.236	24.019	-.706
360	.598	27.507	-.598	24.454	-.692	23.245	-.731	23.312	24.082	-.704
370	.597	27.540	-.597	24.527	-.689	23.331	-.728	23.387	24.145	-.702
380	.596	27.573	-.596	24.597	-.687	23.416	-.725	23.459	24.207	-.700
390	.595	27.606	-.595	24.666	-.685	23.499	-.723	23.531	24.268	-.698
400	.594	27.639	-.594	24.734	-.683	23.580	-.720	23.601	24.328	-.696
410	.593	27.672	-.593	24.801	-.681	23.659	-.717	23.670	24.388	-.694
420	.593	27.671	-.593	24.834	-.680	23.705	-.716	23.707	24.415	-.693
430	.592	27.705	-.592	24.899	-.678	23.781	-.713	23.774	24.473	-.691
440	.591	27.738	-.591	24.962	-.676	23.856	-.711	23.840	24.530	-.689
450	.590	27.771	-.590	25.024	-.674	23.929	-.709	23.905	24.586	-.688
460	.589	27.804	-.589	25.086	-.672	24.001	-.706	23.969	24.642	-.686
470	.589	27.804	-.589	25.114	-.671	24.040	-.705	24.001	24.666	-.685
480	.588	27.837	-.588	25.174	-.669	24.110	-.703	24.063	24.721	-.683
490	.587	27.871	-.587	25.233	-.667	24.179	-.701	24.124	24.775	-.682
500	.587	27.871	-.587	25.258	-.666	24.214	-.699	24.154	24.797	-.681
510	.586	27.904	-.586	25.316	-.665	24.281	-.697	24.214	24.850	-.679
520	.586	27.904	-.586	25.340	-.664	24.315	-.696	24.242	24.871	-.679
530	.585	27.937	-.585	25.396	-.662	24.379	-.694	24.300	24.923	-.677
540	.584	27.971	-.584	25.452	-.660	24.443	-.692	24.358	24.975	-.675

7.1 Variables Sampling Plans with LTPD = 30%

or K_{LTPD} = - .52440 (Continued)

n	k	IQ		AQL		ML		AOQL		
550	.584	27.970	-.584	25.474	-.660	24.474	-.691	24.384	24.994	-.675
560	.583	28.004	-.583	25.528	-.658	24.537	-.689	24.441	25.045	-.673
570	.583	28.004	-.583	25.550	-.657	24.566	-.688	24.466	25.064	-.672
580	.582	28.037	-.582	25.603	-.656	24.627	-.686	24.522	25.114	-.671
590	.582	28.037	-.582	25.623	-.655	24.655	-.685	24.545	25.132	-.670
600	.581	28.071	-.581	25.676	-.653	24.715	-.683	24.600	25.181	-.669
610	.581	28.070	-.581	25.695	-.653	24.741	-.683	24.622	25.199	-.668
620	.580	28.104	-.580	25.746	-.651	24.800	-.681	24.676	25.247	-.667
630	.580	28.104	-.580	25.764	-.651	24.825	-.680	24.698	25.264	-.666
640	.579	28.137	-.579	25.815	-.649	24.882	-.678	24.751	25.312	-.665
650	.579	28.137	-.579	25.833	-.649	24.907	-.677	24.772	25.328	-.664
660	.579	28.137	-.579	25.850	-.648	24.930	-.677	24.792	25.343	-.664
670	.578	28.171	-.578	25.899	-.646	24.986	-.675	24.844	25.391	-.662
680	.578	28.171	-.578	25.916	-.646	25.009	-.674	24.863	25.406	-.662
690	.577	28.204	-.577	25.964	-.644	25.064	-.672	24.914	25.453	-.660
700	.577	28.204	-.577	25.980	-.644	25.085	-.672	24.933	25.467	-.660
710	.577	28.204	-.577	25.995	-.643	25.107	-.671	24.951	25.481	-.659
720	.576	28.238	-.576	26.043	-.642	25.160	-.669	25.001	25.527	-.658
730	.576	28.238	-.576	26.058	-.642	25.181	-.669	25.019	25.541	-.658
740	.575	28.271	-.575	26.105	-.640	25.233	-.667	25.069	25.587	-.656
750	.575	28.271	-.575	26.120	-.640	25.253	-.667	25.086	25.600	-.656
760	.575	28.271	-.575	26.133	-.639	25.272	-.666	25.103	25.613	-.655
770	.574	28.305	-.574	26.180	-.638	25.324	-.664	25.151	25.658	-.654
780	.574	28.305	-.574	26.193	-.637	25.342	-.664	25.167	25.671	-.654
790	.574	28.305	-.574	26.206	-.637	25.361	-.663	25.183	25.683	-.653
800	.573	28.339	-.573	26.252	-.636	25.411	-.662	25.231	25.728	-.652
810	.573	28.339	-.573	26.265	-.635	25.429	-.661	25.247	25.740	-.651
820	.573	28.338	-.573	26.277	-.635	25.446	-.661	25.262	25.751	-.651
830	.573	28.338	-.573	26.289	-.634	25.463	-.660	25.277	25.763	-.651
840	.572	28.372	-.572	26.335	-.633	25.512	-.658	25.324	25.807	-.649
850	.572	28.372	-.572	26.346	-.633	25.529	-.658	25.338	25.818	-.649
860	.572	28.372	-.572	26.358	-.632	25.545	-.657	25.352	25.829	-.649
870	.571	28.406	-.571	26.402	-.631	25.593	-.656	25.399	25.873	-.647
880	.571	28.406	-.571	26.413	-.631	25.609	-.655	25.413	25.883	-.647
890	.571	28.406	-.571	26.424	-.630	25.624	-.655	25.426	25.894	-.647
900	.571	28.406	-.571	26.435	-.630	25.639	-.655	25.440	25.904	-.646
910	.570	28.439	-.570	26.479	-.629	25.687	-.653	25.485	25.947	-.645
920	.570	28.439	-.570	26.489	-.628	25.702	-.653	25.498	25.958	-.645
930	.570	28.439	-.570	26.500	-.628	25.716	-.652	25.511	25.968	-.644
940	.570	28.439	-.570	26.510	-.628	25.730	-.652	25.524	25.977	-.644
950	.569	28.473	-.569	26.553	-.626	25.777	-.650	25.568	26.020	-.643
960	.569	28.473	-.569	26.563	-.626	25.790	-.650	25.581	26.029	-.642
970	.569	28.473	-.569	26.572	-.626	25.804	-.649	25.593	26.039	-.642
980	.569	28.473	-.569	26.582	-.626	25.817	-.649	25.605	26.048	-.642
990	.568	28.507	-.568	26.625	-.624	25.863	-.648	25.649	26.090	-.641
1000	.568	28.507	-.568	26.634	-.624	25.876	-.647	25.661	26.099	-.640

7.2 Variables Sampling Plans with LTPD = 25%

or $K_{LTPD} = -.67449$

n	k	IQ		AQL		ML		AOQL		
10	1.257	11.182	-1.217	2.618	-1.940	1.229	-2.248	5.606	10.528	-1.252
11	1.219	11.817	-1.184	3.133	-1.862	1.581	-2.149	5.964	10.606	-1.248
12	1.188	12.358	-1.157	3.619	-1.797	1.935	-2.067	6.293	10.699	-1.243
13	1.162	12.828	-1.135	4.079	-1.742	2.285	-1.998	6.598	10.803	-1.237
14	1.139	13.259	-1.114	4.521	-1.693	2.634	-1.938	6.892	10.923	-1.231
15	1.119	13.644	-1.096	4.939	-1.651	2.974	-1.885	7.168	11.047	-1.224
16	1.101	13.999	-1.080	5.339	-1.613	3.309	-1.837	7.434	11.177	-1.217
17	1.085	14.322	-1.066	5.717	-1.579	3.633	-1.795	7.685	11.308	-1.210
18	1.071	14.609	-1.053	6.070	-1.549	3.943	-1.757	7.918	11.431	-1.204
19	1.058	14.881	-1.042	6.410	-1.521	4.246	-1.723	8.145	11.558	-1.197
20	1.046	15.136	-1.031	6.735	-1.496	4.541	-1.691	8.364	11.685	-1.191
21	1.035	15.373	-1.021	7.045	-1.472	4.825	-1.662	8.573	11.810	-1.185
22	1.025	15.591	-1.011	7.338	-1.451	5.098	-1.635	8.771	11.931	-1.178
23	1.016	15.789	-1.003	7.614	-1.432	5.358	-1.611	8.957	12.044	-1.173
24	1.007	15.991	-.995	7.887	-1.413	5.617	-1.588	9.145	12.166	-1.167
25	1.000	16.147	-.988	8.126	-1.397	5.848	-1.568	9.305	12.260	-1.162
26	.992	16.330	-.981	8.379	-1.380	6.093	-1.547	9.481	12.379	-1.156
27	.985	16.490	-.975	8.613	-1.365	6.321	-1.528	9.644	12.485	-1.151
28	.979	16.628	-.969	8.828	-1.351	6.534	-1.511	9.790	12.578	-1.147
29	.973	16.768	-.963	9.040	-1.338	6.744	-1.495	9.938	12.676	-1.142
30	.967	16.909	-.958	9.250	-1.326	6.953	-1.479	10.086	12.777	-1.137
31	.961	17.051	-.952	9.458	-1.313	7.160	-1.464	10.235	12.882	-1.132
32	.956	17.169	-.947	9.645	-1.302	7.350	-1.450	10.367	12.971	-1.128
33	.951	17.289	-.943	9.831	-1.291	7.538	-1.437	10.499	13.062	-1.123
34	.947	17.384	-.939	9.995	-1.282	7.708	-1.425	10.614	13.137	-1.120
35	.942	17.506	-.934	10.177	-1.272	7.893	-1.412	10.747	13.233	-1.115
36	.938	17.602	-.931	10.338	-1.263	8.058	-1.401	10.862	13.312	-1.112
37	.934	17.700	-.927	10.496	-1.254	8.223	-1.390	10.976	13.393	-1.108
38	.930	17.798	-.923	10.654	-1.245	8.385	-1.380	11.091	13.475	-1.104
39	.926	17.897	-.919	10.809	-1.237	8.546	-1.369	11.206	13.558	-1.100
40	.923	17.970	-.916	10.943	-1.230	8.688	-1.360	11.302	13.623	-1.097
41	.919	18.070	-.913	11.095	-1.221	8.846	-1.350	11.416	13.709	-1.093
42	.916	18.145	-.910	11.226	-1.215	8.984	-1.342	11.512	13.776	-1.090
43	.913	18.219	-.907	11.355	-1.208	9.121	-1.333	11.607	13.844	-1.087
44	.910	18.295	-.904	11.483	-1.201	9.256	-1.325	11.702	13.912	-1.084
45	.907	18.370	-.901	11.609	-1.195	9.390	-1.317	11.796	13.982	-1.081
46	.904	18.446	-.898	11.735	-1.188	9.523	-1.309	11.891	14.052	-1.078
47	.901	18.522	-.896	11.859	-1.182	9.654	-1.302	11.985	14.123	-1.075
48	.899	18.572	-.894	11.960	-1.177	9.765	-1.295	12.059	14.173	-1.073
49	.896	18.649	-.891	12.082	-1.171	9.894	-1.288	12.153	14.245	-1.069
50	.894	18.700	-.889	12.181	-1.166	10.002	-1.281	12.227	14.297	-1.067
51	.891	18.778	-.886	12.301	-1.160	10.128	-1.274	12.320	14.370	-1.064
52	.889	18.829	-.884	12.397	-1.155	10.234	-1.268	12.393	14.422	-1.062
53	.887	18.880	-.882	12.493	-1.151	10.338	-1.262	12.466	14.475	-1.059
54	.884	18.958	-.879	12.610	-1.145	10.462	-1.256	12.559	14.549	-1.056

7.2 Variables Sampling Plans with LTPD = 25%

or K_{LTPD} = -.67449 (Continued)

n	k	IQ		AQL		ML		AOQL		
55	.882	19.010	-.878	12.704	-1.140	10.564	-1.250	12.631	14.603	-1.054
56	.880	19.062	-.876	12.797	-1.136	10.666	-1.245	12.703	14.656	-1.051
57	.878	19.114	-.874	12.889	-1.132	10.766	-1.239	12.774	14.710	-1.049
58	.876	19.166	-.872	12.981	-1.127	10.865	-1.234	12.846	14.764	-1.047
59	.875	19.191	-.871	13.048	-1.124	10.943	-1.230	12.896	14.796	-1.045
60	.873	19.243	-.869	13.138	-1.120	11.040	-1.224	12.966	14.851	-1.043
61	.871	19.296	-.867	13.227	-1.116	11.137	-1.219	13.037	14.905	-1.040
62	.869	19.349	-.865	13.315	-1.112	11.233	-1.214	13.107	14.960	-1.038
63	.868	19.374	-.864	13.380	-1.109	11.306	-1.210	13.156	14.993	-1.037
64	.866	19.427	-.862	13.467	-1.105	11.401	-1.205	13.226	15.048	-1.034
65	.864	19.481	-.860	13.553	-1.101	11.494	-1.201	13.295	15.104	-1.032
66	.863	19.506	-.859	13.615	-1.098	11.565	-1.197	13.343	15.137	-1.031
67	.861	19.560	-.857	13.700	-1.094	11.657	-1.192	13.412	15.192	-1.028
68	.860	19.586	-.857	13.761	-1.091	11.727	-1.189	13.459	15.225	-1.027
69	.858	19.640	-.855	13.845	-1.087	11.817	-1.184	13.528	15.281	-1.024
70	.857	19.666	-.854	13.905	-1.085	11.885	-1.181	13.575	15.314	-1.023
71	.855	19.720	-.852	13.988	-1.081	11.975	-1.176	13.643	15.371	-1.021
72	.854	19.746	-.851	14.047	-1.078	12.042	-1.173	13.689	15.404	-1.019
73	.853	19.772	-.850	14.105	-1.076	12.108	-1.170	13.735	15.437	-1.018
74	.851	19.827	-.848	14.186	-1.072	12.195	-1.165	13.803	15.494	-1.015
75	.850	19.853	-.847	14.243	-1.069	12.260	-1.162	13.848	15.527	-1.014
76	.849	19.880	-.846	14.299	-1.067	12.324	-1.159	13.893	15.560	-1.013
77	.848	19.906	-.845	14.355	-1.064	12.388	-1.156	13.938	15.594	-1.011
78	.846	19.961	-.843	14.435	-1.061	12.473	-1.152	14.005	15.651	-1.009
79	.845	19.988	-.842	14.490	-1.059	12.535	-1.149	14.050	15.684	-1.008
80	.844	20.015	-.841	14.545	-1.056	12.597	-1.146	14.094	15.718	-1.006
81	.843	20.042	-.840	14.599	-1.054	12.659	-1.143	14.138	15.751	-1.005
82	.842	20.069	-.839	14.653	-1.051	12.719	-1.140	14.182	15.785	-1.003
83	.841	20.096	-.838	14.706	-1.049	12.780	-1.137	14.226	15.818	-1.002
84	.840	20.123	-.837	14.759	-1.047	12.839	-1.134	14.269	15.852	-1.001
85	.839	20.150	-.836	14.811	-1.045	12.899	-1.131	14.313	15.885	-.999
86	.838	20.177	-.835	14.863	-1.042	12.957	-1.128	14.356	15.919	-.998
87	.837	20.204	-.834	14.915	-1.040	13.016	-1.126	14.399	15.952	-.996
88	.836	20.231	-.833	14.966	-1.038	13.074	-1.123	14.441	15.985	-.995
89	.835	20.258	-.832	15.018	-1.036	13.131	-1.120	14.484	16.019	-.994
90	.834	20.286	-.831	15.068	-1.034	13.188	-1.118	14.526	16.052	-.992
91	.833	20.313	-.830	15.119	-1.031	13.245	-1.115	14.568	16.086	-.991
92	.832	20.341	-.830	15.169	-1.029	13.301	-1.112	14.610	16.119	-.990
93	.831	20.368	-.829	15.218	-1.027	13.357	-1.110	14.652	16.153	-.988
94	.830	20.395	-.828	15.268	-1.025	13.412	-1.107	14.694	16.186	-.987
95	.829	20.423	-.827	15.317	-1.023	13.467	-1.105	14.736	16.220	-.985
96	.828	20.451	-.826	15.366	-1.021	13.522	-1.102	14.777	16.253	-.984
97	.827	20.478	-.825	15.414	-1.019	13.576	-1.100	14.818	16.286	-.983
98	.827	20.477	-.825	15.437	-1.018	13.607	-1.098	14.836	16.296	-.982
99	.826	20.505	-.824	15.485	-1.016	13.660	-1.096	14.877	16.329	-.981

7.2 Variables Sampling Plans with LTPD = 25%

or K_{LTPD} = -.67449 (Continued)

n	k	IQ		AQL		ML		AOQL		
100	.825	20.533	-.823	15.533	-1.014	13.713	-1.093	14.918	16.362	-.980
110	.818	20.726	-.816	15.921	-.998	14.157	-1.073	15.248	16.621	-.969
120	.811	20.921	-.809	16.286	-.983	14.573	-1.055	15.565	16.877	-.959
130	.805	21.090	-.803	16.608	-.970	14.942	-1.039	15.847	17.106	-.950
140	.800	21.231	-.798	16.888	-.959	15.265	-1.025	16.096	17.306	-.942
150	.796	21.344	-.795	17.130	-.949	15.547	-1.013	16.311	17.477	-.935
160	.792	21.457	-.791	17.360	-.940	15.815	-1.002	16.518	17.645	-.929
170	.788	21.572	-.787	17.580	-.931	16.070	-.992	16.719	17.810	-.923
180	.785	21.657	-.784	17.765	-.924	16.288	-.983	16.889	17.947	-.917
190	.782	21.744	-.781	17.943	-.918	16.496	-.974	17.053	18.081	-.912
200	.779	21.830	-.778	18.115	-.911	16.696	-.966	17.213	18.213	-.907
210	.776	21.917	-.775	18.281	-.905	16.889	-.959	17.368	18.343	-.902
220	.774	21.975	-.773	18.414	-.900	17.048	-.952	17.494	18.444	-.899
230	.772	22.033	-.771	18.543	-.895	17.201	-.946	17.615	18.543	-.895
240	.769	22.120	-.768	18.695	-.889	17.375	-.939	17.760	18.668	-.890
250	.767	22.179	-.766	18.816	-.885	17.517	-.934	17.876	18.764	-.887
260	.766	22.207	-.765	18.905	-.881	17.628	-.930	17.962	18.831	-.884
270	.764	22.266	-.763	19.019	-.877	17.761	-.924	18.072	18.924	-.881
280	.762	22.325	-.761	19.130	-.873	17.891	-.920	18.180	19.015	-.877
290	.761	22.354	-.760	19.211	-.870	17.990	-.916	18.259	19.078	-.875
300	.759	22.413	-.758	19.318	-.866	18.113	-.911	18.363	19.168	-.872
310	.758	22.442	-.757	19.393	-.863	18.206	-.908	18.438	19.228	-.870
320	.756	22.502	-.755	19.496	-.860	18.324	-.903	18.538	19.315	-.866
330	.755	22.531	-.754	19.568	-.857	18.411	-.900	18.610	19.374	-.864
340	.754	22.560	-.753	19.638	-.855	18.496	-.897	18.680	19.432	-.862
350	.753	22.590	-.752	19.706	-.852	18.578	-.894	18.748	19.488	-.860
360	.751	22.650	-.750	19.802	-.849	18.687	-.890	18.843	19.572	-.857
370	.750	22.679	-.749	19.867	-.846	18.765	-.887	18.909	19.627	-.855
380	.749	22.709	-.748	19.931	-.844	18.842	-.884	18.973	19.681	-.853
390	.748	22.739	-.747	19.994	-.842	18.917	-.881	19.037	19.735	-.851
400	.747	22.768	-.746	20.056	-.840	18.990	-.878	19.099	19.788	-.849
410	.747	22.768	-.747	20.088	-.838	19.034	-.877	19.133	19.812	-.848
420	.746	22.798	-.746	20.147	-.836	19.104	-.874	19.193	19.863	-.847
430	.745	22.828	-.745	20.206	-.834	19.173	-.872	19.252	19.914	-.845
440	.744	22.858	-.744	20.263	-.832	19.241	-.869	19.311	19.965	-.843
450	.743	22.888	-.743	20.320	-.830	19.308	-.867	19.369	20.014	-.841
460	.742	22.917	-.742	20.376	-.828	19.373	-.864	19.426	20.064	-.839
470	.742	22.917	-.742	20.402	-.827	19.409	-.863	19.454	20.084	-.839
480	.741	22.947	-.741	20.456	-.825	19.472	-.861	19.509	20.133	-.837
490	.740	22.977	-.740	20.510	-.824	19.534	-.858	19.564	20.181	-.835
500	.740	22.977	-.740	20.534	-.823	19.567	-.857	19.590	20.200	-.835
510	.739	23.007	-.739	20.586	-.821	19.628	-.855	19.644	20.247	-.833
520	.738	23.037	-.738	20.638	-.819	19.687	-.853	19.696	20.294	-.831
530	.738	23.037	-.738	20.659	-.818	19.717	-.852	19.721	20.311	-.831
540	.737	23.067	-.737	20.710	-.817	19.775	-.850	19.772	20.357	-.829

7.2 Variables Sampling Plans with LTPD = 25%

or K_{LTPD} = -.67449 (Continued)

n	k	IQ		AQL		ML		AOQL		
550	.736	23.097	-.736	20.760	-.815	19.833	-.848	19.824	20.403	-.827
560	.736	23.097	-.736	20.780	-.814	19.861	-.847	19.846	20.420	-.827
570	.735	23.128	-.735	20.829	-.812	19.916	-.845	19.897	20.465	-.825
580	.735	23.127	-.735	20.848	-.812	19.943	-.844	19.918	20.481	-.825
590	.734	23.158	-.734	20.896	-.810	19.998	-.842	19.967	20.525	-.823
600	.734	23.157	-.734	20.914	-.809	20.023	-.841	19.988	20.540	-.822
610	.733	23.188	-.733	20.962	-.808	20.076	-.839	20.037	20.584	-.821
620	.733	23.188	-.733	20.979	-.807	20.100	-.838	20.056	20.599	-.820
630	.732	23.218	-.732	21.025	-.806	20.153	-.836	20.104	20.642	-.819
640	.732	23.218	-.732	21.042	-.805	20.176	-.835	20.123	20.656	-.818
650	.731	23.248	-.731	21.088	-.803	20.227	-.834	20.170	20.699	-.817
660	.731	23.248	-.731	21.103	-.803	20.249	-.833	20.188	20.712	-.816
670	.730	23.278	-.730	21.148	-.801	20.300	-.831	20.235	20.755	-.815
680	.730	23.278	-.730	21.164	-.801	20.321	-.830	20.252	20.768	-.815
690	.730	23.278	-.730	21.178	-.800	20.341	-.829	20.269	20.781	-.814
700	.729	23.309	-.729	21.223	-.799	20.391	-.828	20.315	20.822	-.813
710	.729	23.308	-.729	21.237	-.798	20.410	-.827	20.331	20.835	-.812
720	.728	23.339	-.728	21.280	-.797	20.459	-.825	20.376	20.876	-.811
730	.728	23.339	-.728	21.294	-.796	20.478	-.825	20.392	20.888	-.810
740	.728	23.339	-.728	21.307	-.796	20.496	-.824	20.408	20.900	-.810
750	.727	23.369	-.727	21.350	-.794	20.544	-.822	20.452	20.941	-.808
760	.727	23.369	-.727	21.363	-.794	20.562	-.822	20.467	20.952	-.808
770	.727	23.369	-.727	21.376	-.793	20.579	-.821	20.482	20.964	-.808
780	.726	23.400	-.726	21.418	-.792	20.626	-.819	20.525	21.004	-.806
790	.726	23.399	-.726	21.430	-.792	20.643	-.819	20.539	21.015	-.806
800	.726	23.399	-.726	21.442	-.791	20.659	-.818	20.554	21.025	-.806
810	.725	23.430	-.725	21.484	-.790	20.705	-.817	20.596	21.065	-.804
820	.725	23.430	-.725	21.495	-.789	20.721	-.816	20.610	21.076	-.804
830	.725	23.430	-.725	21.506	-.789	20.736	-.816	20.623	21.086	-.803
840	.724	23.460	-.724	21.547	-.788	20.781	-.814	20.665	21.125	-.802
850	.724	23.460	-.724	21.558	-.787	20.797	-.814	20.679	21.135	-.802
860	.724	23.460	-.724	21.569	-.787	20.811	-.813	20.691	21.145	-.801
870	.723	23.491	-.723	21.609	-.785	20.856	-.811	20.733	21.184	-.800
880	.723	23.491	-.723	21.620	-.785	20.870	-.811	20.745	21.193	-.800
890	.723	23.491	-.723	21.630	-.785	20.884	-.810	20.758	21.203	-.799
900	.723	23.491	-.723	21.640	-.784	20.898	-.810	20.770	21.212	-.799
910	.722	23.521	-.722	21.680	-.783	20.941	-.808	20.811	21.250	-.798
920	.722	23.521	-.722	21.690	-.783	20.955	-.808	20.822	21.260	-.797
930	.722	23.521	-.722	21.699	-.782	20.968	-.808	20.834	21.268	-.797
940	.722	23.521	-.722	21.709	-.782	20.981	-.807	20.845	21.277	-.797
950	.721	23.552	-.721	21.748	-.781	21.024	-.806	20.886	21.315	-.796
960	.721	23.552	-.721	21.757	-.780	21.037	-.805	20.897	21.324	-.795
970	.721	23.552	-.721	21.766	-.780	21.049	-.805	20.908	21.332	-.795
980	.721	23.552	-.721	21.775	-.780	21.061	-.804	20.918	21.341	-.795
990	.720	23.582	-.720	21.814	-.779	21.103	-.803	20.958	21.378	-.793
1000	.720	23.582	-.720	21.822	-.778	21.115	-.802	20.969	21.386	-.793

7.3 Variables Sampling Plans with LTPD = 20%

or $K_{LTPD} = -.84162$

n	k	IQ		AQL		ML		AOQL		
10	1.474	7.696	-1.426	1.343	-2.214	.538	-2.551	3.861	8.319	-1.384
11	1.433	8.211	-1.391	1.669	-2.128	.730	-2.442	4.106	8.288	-1.386
12	1.398	8.677	-1.361	1.996	-2.055	.939	-2.350	4.344	8.303	-1.385
13	1.368	9.096	-1.335	2.318	-1.992	1.156	-2.271	4.574	8.344	-1.382
14	1.343	9.458	-1.313	2.625	-1.939	1.374	-2.205	4.784	8.392	-1.379
15	1.321	9.788	-1.294	2.922	-1.892	1.593	-2.146	4.986	8.453	-1.375
16	1.301	10.098	-1.276	3.213	-1.850	1.815	-2.094	5.185	8.528	-1.370
17	1.284	10.367	-1.261	3.485	-1.814	2.030	-2.048	5.366	8.598	-1.366
18	1.268	10.628	-1.247	3.753	-1.780	2.245	-2.006	5.547	8.680	-1.361
19	1.254	10.860	-1.234	4.005	-1.750	2.454	-1.968	5.715	8.758	-1.356
20	1.241	11.080	-1.222	4.250	-1.722	2.660	-1.933	5.879	8.840	-1.351
21	1.229	11.287	-1.211	4.485	-1.697	2.862	-1.902	6.038	8.924	-1.345
22	1.218	11.479	-1.201	4.711	-1.673	3.058	-1.872	6.190	9.006	-1.340
23	1.208	11.656	-1.192	4.927	-1.652	3.248	-1.845	6.335	9.086	-1.335
24	1.199	11.818	-1.184	5.130	-1.632	3.431	-1.821	6.470	9.162	-1.331
25	1.190	11.982	-1.176	5.333	-1.613	3.614	-1.797	6.609	9.245	-1.326
26	1.182	12.129	-1.169	5.524	-1.596	3.789	-1.776	6.738	9.321	-1.321
27	1.174	12.279	-1.161	5.714	-1.579	3.964	-1.755	6.869	9.404	-1.316
28	1.167	12.410	-1.155	5.890	-1.564	4.129	-1.736	6.989	9.477	-1.312
29	1.160	12.543	-1.148	6.066	-1.549	4.294	-1.718	7.110	9.555	-1.307
30	1.154	12.658	-1.143	6.227	-1.536	4.447	-1.701	7.220	9.623	-1.303
31	1.148	12.773	-1.137	6.387	-1.523	4.600	-1.685	7.331	9.694	-1.299
32	1.143	12.870	-1.133	6.532	-1.512	4.741	-1.671	7.429	9.754	-1.296
33	1.137	12.988	-1.127	6.690	-1.499	4.893	-1.655	7.541	9.831	-1.291
34	1.132	13.087	-1.122	6.833	-1.488	5.032	-1.642	7.641	9.897	-1.287
35	1.127	13.186	-1.118	6.975	-1.478	5.171	-1.628	7.741	9.964	-1.284
36	1.123	13.265	-1.114	7.101	-1.468	5.297	-1.617	7.827	10.018	-1.281
37	1.118	13.366	-1.109	7.241	-1.458	5.434	-1.604	7.928	10.090	-1.276
38	1.114	13.447	-1.106	7.365	-1.449	5.558	-1.593	8.015	10.148	-1.273
39	1.110	13.528	-1.102	7.488	-1.440	5.681	-1.582	8.102	10.207	-1.270
40	1.106	13.610	-1.098	7.609	-1.432	5.803	-1.572	8.189	10.268	-1.266
41	1.103	13.671	-1.095	7.714	-1.425	5.910	-1.562	8.261	10.314	-1.264
42	1.099	13.754	-1.091	7.834	-1.416	6.030	-1.552	8.349	10.378	-1.260
43	1.096	13.815	-1.089	7.937	-1.409	6.136	-1.543	8.422	10.426	-1.258
44	1.092	13.899	-1.085	8.056	-1.401	6.255	-1.534	8.510	10.492	-1.254
45	1.089	13.962	-1.082	8.157	-1.395	6.359	-1.525	8.582	10.543	-1.251
46	1.086	14.024	-1.079	8.257	-1.388	6.462	-1.517	8.655	10.594	-1.248
47	1.083	14.088	-1.076	8.356	-1.381	6.564	-1.509	8.728	10.646	-1.246
48	1.080	14.151	-1.074	8.455	-1.375	6.666	-1.501	8.801	10.699	-1.243
49	1.078	14.193	-1.072	8.536	-1.370	6.752	-1.495	8.857	10.735	-1.241
50	1.075	14.257	-1.069	8.633	-1.364	6.852	-1.487	8.930	10.789	-1.238
51	1.072	14.321	-1.066	8.730	-1.358	6.951	-1.479	9.003	10.844	-1.235
52	1.070	14.364	-1.064	8.808	-1.353	7.035	-1.473	9.059	10.882	-1.233
53	1.067	14.429	-1.061	8.903	-1.347	7.133	-1.466	9.132	10.938	-1.230
54	1.065	14.472	-1.059	8.980	-1.342	7.215	-1.460	9.188	10.977	-1.228

7.3 Variables Sampling Plans with LTPD = 20%

or K_{LTPD} = -.84162 (Continued)

n	k	IQ		AQL		ML		AOQL		
55	1.063	14.514	-1.057	9.057	-1.337	7.296	-1.454	9.244	11.017	-1.226
56	1.061	14.558	-1.056	9.132	-1.333	7.376	-1.448	9.300	11.056	-1.224
57	1.059	14.601	-1.054	9.207	-1.328	7.456	-1.443	9.356	11.096	-1.221
58	1.056	14.667	-1.051	9.300	-1.323	7.551	-1.436	9.429	11.155	-1.218
59	1.054	14.711	-1.049	9.374	-1.318	7.629	-1.430	9.484	11.196	-1.216
60	1.052	14.755	-1.047	9.447	-1.314	7.707	-1.425	9.540	11.237	-1.214
61	1.051	14.776	-1.046	9.501	-1.311	7.768	-1.421	9.578	11.260	-1.213
62	1.049	14.820	-1.044	9.573	-1.306	7.844	-1.416	9.633	11.302	-1.211
63	1.047	14.864	-1.042	9.645	-1.302	7.920	-1.410	9.689	11.344	-1.208
64	1.045	14.909	-1.040	9.716	-1.298	7.996	-1.405	9.744	11.386	-1.206
65	1.043	14.953	-1.038	9.787	-1.294	8.071	-1.400	9.799	11.429	-1.204
66	1.042	14.975	-1.038	9.838	-1.291	8.128	-1.396	9.836	11.453	-1.203
67	1.040	15.019	-1.036	9.908	-1.287	8.202	-1.392	9.891	11.496	-1.201
68	1.038	15.064	-1.034	9.978	-1.283	8.276	-1.387	9.946	11.539	-1.198
69	1.037	15.086	-1.033	10.028	-1.280	8.332	-1.383	9.983	11.564	-1.197
70	1.035	15.131	-1.031	10.096	-1.276	8.404	-1.378	10.037	11.607	-1.195
71	1.034	15.153	-1.030	10.145	-1.273	8.459	-1.375	10.074	11.632	-1.194
72	1.032	15.199	-1.028	10.213	-1.270	8.530	-1.370	10.128	11.676	-1.191
73	1.031	15.221	-1.027	10.261	-1.267	8.584	-1.367	10.164	11.701	-1.190
74	1.029	15.267	-1.025	10.328	-1.263	8.655	-1.362	10.218	11.745	-1.188
75	1.028	15.289	-1.024	10.376	-1.260	8.708	-1.359	10.254	11.771	-1.187
76	1.027	15.311	-1.023	10.422	-1.258	8.760	-1.356	10.290	11.796	-1.185
77	1.025	15.357	-1.021	10.488	-1.254	8.830	-1.351	10.344	11.840	-1.183
78	1.024	15.379	-1.020	10.535	-1.252	8.881	-1.348	10.380	11.866	-1.182
79	1.023	15.402	-1.019	10.580	-1.249	8.932	-1.345	10.415	11.892	-1.180
80	1.022	15.424	-1.018	10.626	-1.247	8.983	-1.342	10.450	11.917	-1.179
81	1.020	15.471	-1.016	10.691	-1.243	9.051	-1.338	10.504	11.962	-1.177
82	1.019	15.493	-1.015	10.736	-1.241	9.101	-1.335	10.539	11.988	-1.176
83	1.018	15.516	-1.015	10.780	-1.238	9.150	-1.332	10.574	12.014	-1.174
84	1.017	15.539	-1.014	10.824	-1.236	9.199	-1.329	10.609	12.040	-1.173
85	1.016	15.562	-1.013	10.868	-1.234	9.248	-1.326	10.643	12.066	-1.172
86	1.015	15.585	-1.012	10.911	-1.231	9.296	-1.323	10.678	12.092	-1.170
87	1.014	15.608	-1.011	10.955	-1.229	9.344	-1.320	10.712	12.118	-1.169
88	1.013	15.631	-1.010	10.998	-1.227	9.391	-1.317	10.747	12.144	-1.168
89	1.012	15.654	-1.009	11.040	-1.224	9.438	-1.314	10.781	12.170	-1.167
90	1.011	15.677	-1.008	11.083	-1.222	9.485	-1.311	10.815	12.196	-1.165
91	1.010	15.700	-1.007	11.125	-1.220	9.532	-1.309	10.849	12.222	-1.164
92	1.009	15.723	-1.006	11.166	-1.218	9.578	-1.306	10.882	12.249	-1.163
93	1.008	15.746	-1.005	11.208	-1.216	9.624	-1.303	10.916	12.275	-1.161
94	1.007	15.769	-1.004	11.249	-1.213	9.670	-1.301	10.950	12.301	-1.160
95	1.006	15.792	-1.003	11.291	-1.211	9.715	-1.298	10.983	12.327	-1.159
96	1.005	15.816	-1.002	11.331	-1.209	9.760	-1.295	11.017	12.354	-1.157
97	1.004	15.839	-1.001	11.372	-1.207	9.805	-1.293	11.050	12.380	-1.156
98	1.003	15.862	-1.000	11.413	-1.205	9.850	-1.290	11.083	12.407	-1.155
99	1.002	15.886	-.999	11.453	-1.203	9.894	-1.288	11.116	12.433	-1.154

7.3 Variables Sampling Plans with LTPD = 20%

or K_{LTPD} = -.84162 (Continued)

n	k	IQ		AQL		ML		AOQL		
100	1.001	15.909	-.998	11.493	-1.201	9.938	-1.285	11.150	12.459	-1.152
110	.993	16.097	-.990	11.840	-1.183	10.326	-1.263	11.436	12.684	-1.141
120	.986	16.263	-.984	12.149	-1.168	10.673	-1.244	11.695	12.888	-1.132
130	.980	16.406	-.978	12.422	-1.154	10.982	-1.227	11.925	13.070	-1.123
140	.975	16.526	-.973	12.661	-1.143	11.255	-1.213	12.129	13.230	-1.116
150	.970	16.647	-.968	12.889	-1.132	11.514	-1.200	12.326	13.389	-1.108
160	.966	16.744	-.964	13.086	-1.122	11.740	-1.188	12.497	13.525	-1.102
170	.962	16.842	-.960	13.274	-1.114	11.956	-1.177	12.663	13.659	-1.096
180	.958	16.940	-.957	13.456	-1.105	12.163	-1.167	12.825	13.792	-1.090
190	.955	17.014	-.954	13.609	-1.098	12.341	-1.158	12.962	13.902	-1.085
200	.952	17.088	-.951	13.757	-1.091	12.512	-1.150	13.095	14.010	-1.080
210	.949	17.163	-.948	13.900	-1.085	12.676	-1.142	13.224	14.116	-1.075
220	.947	17.212	-.946	14.015	-1.080	12.813	-1.135	13.329	14.199	-1.071
230	.944	17.288	-.943	14.150	-1.074	12.967	-1.128	13.453	14.303	-1.067
240	.942	17.337	-.941	14.257	-1.069	13.094	-1.122	13.552	14.383	-1.063
250	.940	17.388	-.939	14.362	-1.064	13.216	-1.116	13.649	14.462	-1.060
260	.938	17.438	-.937	14.464	-1.060	13.335	-1.111	13.743	14.540	-1.056
270	.936	17.488	-.935	14.563	-1.055	13.450	-1.105	13.836	14.617	-1.053
280	.934	17.539	-.933	14.659	-1.051	13.562	-1.100	13.927	14.694	-1.050
290	.933	17.564	-.932	14.730	-1.048	13.648	-1.096	13.993	14.746	-1.047
300	.931	17.615	-.930	14.822	-1.044	13.754	-1.091	14.081	14.820	-1.044
310	.929	17.666	-.928	14.912	-1.040	13.858	-1.087	14.167	14.894	-1.041
320	.928	17.691	-.927	14.977	-1.037	13.936	-1.083	14.229	14.943	-1.039
330	.927	17.716	-.926	15.040	-1.035	14.012	-1.080	14.289	14.992	-1.037
340	.925	17.768	-.924	15.126	-1.031	14.109	-1.075	14.372	15.063	-1.034
350	.924	17.793	-.923	15.186	-1.029	14.181	-1.072	14.430	15.111	-1.032
360	.923	17.819	-.922	15.244	-1.026	14.251	-1.069	14.486	15.157	-1.030
370	.922	17.844	-.921	15.301	-1.024	14.320	-1.066	14.542	15.203	-1.028
380	.921	17.870	-.920	15.357	-1.021	14.386	-1.063	14.597	15.249	-1.026
390	.920	17.896	-.919	15.412	-1.019	14.452	-1.060	14.651	15.294	-1.024
400	.919	17.921	-.918	15.466	-1.017	14.516	-1.057	14.704	15.338	-1.022
410	.918	17.947	-.917	15.519	-1.014	14.578	-1.055	14.756	15.382	-1.020
420	.917	17.973	-.916	15.571	-1.012	14.640	-1.052	14.807	15.425	-1.018
430	.916	17.999	-.915	15.623	-1.010	14.700	-1.049	14.858	15.468	-1.017
440	.915	18.025	-.914	15.673	-1.008	14.759	-1.047	14.908	15.511	-1.015
450	.914	18.051	-.913	15.723	-1.006	14.817	-1.044	14.957	15.553	-1.013
460	.913	18.076	-.912	15.772	-1.004	14.874	-1.042	15.006	15.594	-1.011
470	.912	18.102	-.911	15.820	-1.002	14.930	-1.039	15.054	15.635	-1.010
480	.912	18.102	-.911	15.842	-1.001	14.961	-1.038	15.077	15.652	-1.009
490	.911	18.128	-.910	15.889	-.999	15.015	-1.036	15.124	15.693	-1.007
500	.910	18.154	-.909	15.935	-.997	15.069	-1.033	15.170	15.733	-1.005
510	.910	18.154	-.910	15.956	-.996	15.097	-1.032	15.192	15.749	-1.005
520	.909	18.180	-.909	16.001	-.994	15.149	-1.030	15.237	15.788	-1.003
530	.908	18.206	-.908	16.046	-.993	15.201	-1.028	15.282	15.828	-1.002
540	.908	18.206	-.908	16.065	-.992	15.227	-1.027	15.302	15.842	-1.001

7.3 Variables Sampling Plans with LTPD = 20%

or K_{LTPD} = -.84162 (Continued)

n	k	IQ		AQL		ML		AOQL		
550	.907	18.232	-.907	16.109	-.990	15.277	-1.025	15.346	15.881	-.999
560	.906	18.259	-.906	16.152	-.988	15.326	-1.023	15.390	15.919	-.998
570	.906	18.258	-.906	16.170	-.988	15.351	-1.022	15.408	15.933	-.997
580	.905	18.285	-.905	16.212	-.986	15.399	-1.019	15.451	15.971	-.996
590	.905	18.284	-.905	16.229	-.985	15.422	-1.019	15.469	15.984	-.995
600	.904	18.311	-.904	16.271	-.983	15.469	-1.017	15.511	16.022	-.994
610	.904	18.311	-.904	16.287	-.983	15.491	-1.016	15.529	16.034	-.993
620	.903	18.337	-.903	16.328	-.981	15.537	-1.014	15.570	16.071	-.992
630	.903	18.337	-.903	16.343	-.980	15.558	-1.013	15.587	16.084	-.991
640	.902	18.363	-.902	16.383	-.979	15.604	-1.011	15.627	16.120	-.990
650	.902	18.363	-.902	16.398	-.978	15.624	-1.010	15.643	16.132	-.989
660	.901	18.389	-.901	16.437	-.977	15.668	-1.008	15.683	16.168	-.988
670	.901	18.389	-.901	16.451	-.976	15.687	-1.007	15.699	16.180	-.987
680	.900	18.416	-.900	16.490	-.975	15.731	-1.006	15.738	16.215	-.986
690	.900	18.416	-.900	16.504	-.974	15.750	-1.005	15.753	16.226	-.985
700	.899	18.442	-.899	16.542	-.972	15.793	-1.003	15.792	16.262	-.984
710	.899	18.442	-.899	16.555	-.972	15.810	-1.002	15.806	16.273	-.983
720	.899	18.442	-.899	16.568	-.971	15.828	-1.002	15.820	16.283	-.983
730	.898	18.468	-.898	16.606	-.970	15.870	-1.000	15.859	16.318	-.981
740	.898	18.468	-.898	16.618	-.969	15.886	-.999	15.872	16.328	-.981
750	.897	18.495	-.897	16.655	-.968	15.928	-.997	15.910	16.363	-.980
760	.897	18.495	-.897	16.667	-.967	15.944	-.997	15.923	16.373	-.979
770	.897	18.494	-.897	16.678	-.967	15.960	-.996	15.936	16.382	-.979
780	.896	18.521	-.896	16.715	-.965	16.000	-.994	15.974	16.417	-.977
790	.896	18.521	-.896	16.726	-.965	16.015	-.994	15.986	16.426	-.977
800	.896	18.521	-.896	16.737	-.965	16.030	-.993	15.998	16.435	-.977
810	.895	18.547	-.895	16.773	-.963	16.070	-.992	16.035	16.469	-.975
820	.895	18.547	-.895	16.783	-.963	16.084	-.991	16.047	16.478	-.975
830	.895	18.547	-.895	16.794	-.962	16.099	-.990	16.058	16.487	-.975
840	.894	18.574	-.894	16.829	-.961	16.138	-.989	16.095	16.521	-.973
850	.894	18.574	-.894	16.839	-.961	16.151	-.988	16.106	16.529	-.973
860	.894	18.574	-.894	16.849	-.960	16.165	-.988	16.117	16.537	-.973
870	.893	18.600	-.893	16.884	-.959	16.203	-.986	16.153	16.571	-.971
880	.893	18.600	-.893	16.894	-.958	16.216	-.986	16.164	16.579	-.971
890	.893	18.600	-.893	16.903	-.958	16.229	-.985	16.174	16.587	-.971
900	.892	18.627	-.892	16.938	-.957	16.267	-.984	16.210	16.620	-.969
910	.892	18.627	-.892	16.947	-.956	16.279	-.983	16.220	16.628	-.969
920	.892	18.627	-.892	16.956	-.956	16.291	-.983	16.230	16.636	-.969
930	.892	18.627	-.892	16.964	-.956	16.303	-.982	16.240	16.643	-.968
940	.891	18.653	-.891	16.999	-.954	16.341	-.981	16.275	16.676	-.967
950	.891	18.653	-.891	17.007	-.954	16.352	-.980	16.285	16.683	-.967
960	.891	18.653	-.891	17.015	-.954	16.364	-.980	16.295	16.691	-.966
970	.890	18.680	-.890	17.049	-.952	16.400	-.978	16.329	16.723	-.965
980	.890	18.680	-.890	17.057	-.952	16.412	-.978	16.339	16.730	-.965
990	.890	18.680	-.890	17.065	-.952	16.423	-.977	16.348	16.737	-.965
1000	.890	18.680	-.890	17.073	-.951	16.433	-.977	16.357	16.744	-.964

7.4 Variables Sampling Plans with LTPD = 15%

or $K_{LTPD} = -1.03643$

n	k	IQ		AQL		ML		AOQL		
10	1.733	4.696	-1.675	.546	-2.545	.175	-2.920	2.445	6.350	-1.526
11	1.686	5.098	-1.635	.720	-2.447	.259	-2.796	2.600	6.239	-1.535
12	1.647	5.455	-1.602	.900	-2.366	.355	-2.693	2.750	6.174	-1.540
13	1.614	5.775	-1.574	1.083	-2.296	.460	-2.605	2.894	6.140	-1.543
14	1.585	6.072	-1.549	1.269	-2.236	.573	-2.529	3.036	6.133	-1.544
15	1.560	6.338	-1.527	1.452	-2.183	.690	-2.462	3.171	6.139	-1.543
16	1.538	6.582	-1.508	1.632	-2.136	.811	-2.404	3.301	6.157	-1.542
17	1.519	6.798	-1.491	1.806	-2.096	.932	-2.353	3.423	6.178	-1.540
18	1.501	7.011	-1.475	1.980	-2.058	1.058	-2.305	3.546	6.214	-1.537
19	1.485	7.204	-1.461	2.149	-2.024	1.183	-2.263	3.663	6.253	-1.534
20	1.471	7.377	-1.448	2.309	-1.994	1.305	-2.225	3.772	6.289	-1.531
21	1.458	7.541	-1.437	2.466	-1.966	1.427	-2.190	3.879	6.330	-1.528
22	1.446	7.696	-1.426	2.618	-1.940	1.548	-2.158	3.983	6.373	-1.524
23	1.435	7.840	-1.416	2.766	-1.916	1.667	-2.128	4.083	6.417	-1.521
24	1.424	7.988	-1.406	2.915	-1.893	1.789	-2.099	4.186	6.470	-1.516
25	1.415	8.109	-1.398	3.049	-1.874	1.902	-2.074	4.276	6.511	-1.513
26	1.406	8.233	-1.390	3.185	-1.854	2.016	-2.050	4.368	6.559	-1.510
27	1.398	8.344	-1.382	3.312	-1.837	2.126	-2.028	4.453	6.602	-1.506
28	1.390	8.456	-1.375	3.440	-1.820	2.237	-2.007	4.540	6.650	-1.502
29	1.382	8.571	-1.368	3.569	-1.803	2.349	-1.987	4.630	6.703	-1.498
30	1.375	8.672	-1.361	3.689	-1.788	2.455	-1.968	4.712	6.750	-1.495
31	1.369	8.759	-1.356	3.799	-1.774	2.554	-1.951	4.785	6.789	-1.492
32	1.363	8.847	-1.350	3.909	-1.761	2.654	-1.934	4.860	6.832	-1.488
33	1.357	8.936	-1.345	4.020	-1.748	2.754	-1.918	4.935	6.878	-1.485
34	1.351	9.026	-1.339	4.129	-1.736	2.854	-1.903	5.012	6.927	-1.481
35	1.346	9.102	-1.335	4.229	-1.725	2.946	-1.889	5.080	6.967	-1.478
36	1.341	9.178	-1.330	4.328	-1.714	3.039	-1.875	5.148	7.009	-1.475
37	1.336	9.254	-1.325	4.427	-1.703	3.131	-1.862	5.217	7.053	-1.472
38	1.331	9.332	-1.321	4.526	-1.693	3.223	-1.849	5.286	7.099	-1.468
39	1.327	9.394	-1.317	4.614	-1.684	3.307	-1.837	5.346	7.135	-1.466
40	1.323	9.456	-1.313	4.701	-1.675	3.390	-1.826	5.406	7.173	-1.463
41	1.319	9.519	-1.309	4.788	-1.666	3.473	-1.815	5.466	7.212	-1.460
42	1.315	9.582	-1.306	4.874	-1.657	3.556	-1.805	5.527	7.252	-1.457
43	1.311	9.646	-1.302	4.960	-1.649	3.639	-1.794	5.588	7.294	-1.454
44	1.307	9.710	-1.298	5.046	-1.640	3.721	-1.784	5.649	7.337	-1.451
45	1.304	9.758	-1.295	5.119	-1.633	3.793	-1.775	5.700	7.368	-1.449
46	1.301	9.806	-1.293	5.192	-1.626	3.866	-1.767	5.750	7.400	-1.447
47	1.297	9.872	-1.289	5.277	-1.619	3.947	-1.757	5.812	7.446	-1.443
48	1.294	9.921	-1.286	5.349	-1.612	4.019	-1.749	5.863	7.481	-1.441
49	1.291	9.970	-1.283	5.421	-1.605	4.090	-1.740	5.915	7.516	-1.438
50	1.288	10.020	-1.280	5.492	-1.599	4.160	-1.732	5.966	7.551	-1.436
51	1.286	10.052	-1.279	5.551	-1.594	4.220	-1.726	6.005	7.575	-1.434
52	1.283	10.102	-1.276	5.622	-1.587	4.291	-1.718	6.057	7.612	-1.432
53	1.280	10.152	-1.273	5.692	-1.581	4.360	-1.710	6.108	7.649	-1.429
54	1.278	10.185	-1.271	5.749	-1.576	4.419	-1.704	6.148	7.674	-1.427

7.4 Variables Sampling Plans with LTPD = 15%

or $K_{LTPD} = -1.03643$ (Continued)

n	k	IQ		AQL		ML		AOQL	
55	1.275	10.236	-1.268	5.819	-1.570	4.488	-1.697	6.200	7.713 -1.425
56	1.273	10.269	-1.266	5.875	-1.565	4.546	-1.691	6.239	7.739 -1.423
57	1.270	10.321	-1.263	5.944	-1.559	4.614	-1.683	6.291	7.779 -1.420
58	1.268	10.354	-1.262	6.000	-1.555	4.672	-1.678	6.331	7.806 -1.418
59	1.266	10.388	-1.260	6.055	-1.550	4.728	-1.672	6.371	7.833 -1.416
60	1.264	10.422	-1.258	6.110	-1.546	4.785	-1.666	6.411	7.861 -1.415
61	1.262	10.456	-1.256	6.164	-1.541	4.841	-1.660	6.450	7.889 -1.413
62	1.260	10.491	-1.254	6.218	-1.537	4.896	-1.655	6.490	7.917 -1.411
63	1.258	10.525	-1.252	6.272	-1.532	4.952	-1.650	6.529	7.946 -1.409
64	1.256	10.560	-1.250	6.326	-1.528	5.007	-1.644	6.569	7.974 -1.407
65	1.254	10.595	-1.248	6.379	-1.524	5.062	-1.639	6.609	8.004 -1.405
66	1.252	10.629	-1.246	6.432	-1.520	5.116	-1.634	6.648	8.033 -1.403
67	1.250	10.664	-1.245	6.484	-1.515	5.170	-1.629	6.688	8.063 -1.401
68	1.248	10.700	-1.243	6.537	-1.511	5.224	-1.624	6.728	8.093 -1.399
69	1.247	10.717	-1.242	6.575	-1.508	5.265	-1.620	6.754	8.109 -1.398
70	1.245	10.752	-1.240	6.627	-1.504	5.319	-1.615	6.794	8.139 -1.396
71	1.243	10.787	-1.238	6.678	-1.500	5.372	-1.610	6.834	8.170 -1.394
72	1.242	10.805	-1.237	6.716	-1.497	5.412	-1.606	6.860	8.187 -1.393
73	1.240	10.840	-1.235	6.767	-1.493	5.465	-1.601	6.899	8.218 -1.391
74	1.239	10.858	-1.234	6.803	-1.491	5.504	-1.598	6.926	8.235 -1.389
75	1.237	10.893	-1.232	6.854	-1.487	5.556	-1.593	6.965	8.266 -1.387
76	1.236	10.911	-1.231	6.890	-1.484	5.595	-1.590	6.991	8.283 -1.386
77	1.234	10.947	-1.229	6.940	-1.480	5.647	-1.585	7.031	8.315 -1.384
78	1.233	10.964	-1.228	6.976	-1.478	5.685	-1.582	7.057	8.333 -1.383
79	1.232	10.982	-1.227	7.011	-1.475	5.724	-1.578	7.082	8.350 -1.382
80	1.230	11.018	-1.226	7.061	-1.471	5.775	-1.574	7.122	8.382 -1.380
81	1.229	11.036	-1.225	7.095	-1.469	5.812	-1.571	7.148	8.400 -1.379
82	1.228	11.054	-1.224	7.130	-1.466	5.850	-1.568	7.173	8.418 -1.377
83	1.226	11.091	-1.222	7.179	-1.463	5.900	-1.563	7.213	8.451 -1.375
84	1.225	11.108	-1.221	7.213	-1.460	5.937	-1.560	7.238	8.469 -1.374
85	1.224	11.126	-1.220	7.247	-1.458	5.973	-1.557	7.264	8.487 -1.373
86	1.223	11.144	-1.219	7.280	-1.455	6.010	-1.554	7.289	8.505 -1.372
87	1.222	11.162	-1.218	7.314	-1.453	6.046	-1.551	7.314	8.523 -1.371
88	1.220	11.199	-1.216	7.362	-1.449	6.095	-1.547	7.354	8.557 -1.369
89	1.219	11.217	-1.215	7.395	-1.447	6.131	-1.544	7.379	8.575 -1.367
90	1.218	11.236	-1.214	7.428	-1.445	6.167	-1.541	7.404	8.594 -1.366
91	1.217	11.254	-1.213	7.460	-1.442	6.202	-1.538	7.429	8.612 -1.365
92	1.216	11.272	-1.212	7.493	-1.440	6.237	-1.535	7.454	8.631 -1.364
93	1.215	11.290	-1.211	7.525	-1.438	6.272	-1.532	7.479	8.649 -1.363
94	1.214	11.309	-1.210	7.557	-1.436	6.307	-1.530	7.504	8.668 -1.361
95	1.213	11.327	-1.209	7.589	-1.433	6.341	-1.527	7.529	8.687 -1.360
96	1.212	11.345	-1.208	7.621	-1.431	6.375	-1.524	7.554	8.706 -1.359
97	1.211	11.364	-1.207	7.652	-1.429	6.409	-1.521	7.578	8.725 -1.358
98	1.210	11.382	-1.206	7.684	-1.427	6.443	-1.519	7.603	8.744 -1.357
99	1.209	11.401	-1.205	7.715	-1.425	6.477	-1.516	7.628	8.763 -1.356

7.4 Variables Sampling Plans with LTPD = 15%

or $K_{LTPD} = -1.03643$ (Continued)

n	k	IQ		AQL		ML		AOQL		
100	1.208	11.419	-1.205	7.746	-1.422	6.510	-1.513	7.652	8.782	-1.354
110	1.199	11.587	-1.196	8.034	-1.403	6.822	-1.489	7.881	8.959	-1.343
120	1.192	11.719	-1.189	8.276	-1.387	7.090	-1.469	8.075	9.106	-1.334
130	1.185	11.853	-1.182	8.508	-1.372	7.344	-1.451	8.264	9.256	-1.325
140	1.180	11.948	-1.178	8.697	-1.360	7.557	-1.436	8.418	9.373	-1.318
150	1.174	12.065	-1.172	8.896	-1.347	7.776	-1.420	8.584	9.507	-1.310
160	1.170	12.142	-1.168	9.053	-1.338	7.954	-1.408	8.715	9.608	-1.304
170	1.165	12.241	-1.163	9.221	-1.327	8.141	-1.396	8.859	9.725	-1.297
180	1.162	12.299	-1.160	9.349	-1.320	8.288	-1.386	8.967	9.808	-1.293
190	1.158	12.379	-1.156	9.490	-1.311	8.446	-1.376	9.088	9.907	-1.287
200	1.155	12.438	-1.153	9.609	-1.304	8.582	-1.367	9.191	9.989	-1.282
210	1.152	12.498	-1.150	9.724	-1.297	8.713	-1.359	9.291	10.069	-1.278
220	1.149	12.558	-1.148	9.836	-1.291	8.840	-1.351	9.389	10.149	-1.273
230	1.146	12.619	-1.145	9.944	-1.285	8.963	-1.343	9.486	10.229	-1.269
240	1.144	12.659	-1.143	10.032	-1.280	9.065	-1.337	9.563	10.290	-1.265
250	1.142	12.700	-1.141	10.117	-1.275	9.164	-1.331	9.639	10.350	-1.262
260	1.140	12.740	-1.139	10.200	-1.270	9.259	-1.325	9.713	10.410	-1.259
270	1.138	12.781	-1.137	10.280	-1.266	9.352	-1.319	9.785	10.469	-1.255
280	1.136	12.822	-1.135	10.359	-1.261	9.443	-1.314	9.857	10.528	-1.252
290	1.134	12.863	-1.133	10.436	-1.257	9.531	-1.309	9.927	10.586	-1.249
300	1.132	12.904	-1.131	10.511	-1.253	9.616	-1.304	9.995	10.643	-1.246
310	1.131	12.925	-1.130	10.566	-1.250	9.682	-1.300	10.045	10.682	-1.244
320	1.129	12.966	-1.128	10.638	-1.246	9.764	-1.295	10.112	10.739	-1.241
330	1.127	13.008	-1.126	10.709	-1.242	9.845	-1.290	10.178	10.795	-1.238
340	1.126	13.028	-1.125	10.759	-1.239	9.905	-1.287	10.225	10.832	-1.236
350	1.125	13.049	-1.124	10.809	-1.237	9.964	-1.284	10.271	10.869	-1.234
360	1.123	13.091	-1.122	10.876	-1.233	10.040	-1.279	10.334	10.924	-1.231
370	1.122	13.111	-1.121	10.924	-1.231	10.096	-1.276	10.378	10.959	-1.229
380	1.121	13.132	-1.120	10.970	-1.228	10.151	-1.273	10.422	10.995	-1.227
390	1.120	13.153	-1.119	11.015	-1.226	10.204	-1.270	10.465	11.030	-1.225
400	1.119	13.174	-1.118	11.060	-1.223	10.256	-1.267	10.507	11.065	-1.223
410	1.118	13.195	-1.117	11.103	-1.221	10.308	-1.264	10.548	11.099	-1.221
420	1.117	13.216	-1.116	11.146	-1.219	10.358	-1.261	10.589	11.133	-1.219
430	1.116	13.237	-1.115	11.188	-1.217	10.407	-1.259	10.629	11.167	-1.218
440	1.115	13.258	-1.114	11.230	-1.214	10.456	-1.256	10.669	11.200	-1.216
450	1.114	13.279	-1.113	11.271	-1.212	10.503	-1.253	10.708	11.233	-1.214
460	1.113	13.300	-1.112	11.311	-1.210	10.550	-1.251	10.747	11.266	-1.213
470	1.112	13.321	-1.111	11.351	-1.208	10.596	-1.248	10.785	11.298	-1.211
480	1.111	13.342	-1.110	11.390	-1.206	10.642	-1.246	10.823	11.331	-1.209
490	1.111	13.342	-1.110	11.409	-1.205	10.667	-1.244	10.842	11.343	-1.208
500	1.110	13.363	-1.109	11.447	-1.203	10.711	-1.242	10.879	11.375	-1.207
510	1.109	13.385	-1.108	11.484	-1.201	10.754	-1.240	10.915	11.407	-1.205
520	1.108	13.406	-1.107	11.522	-1.199	10.797	-1.237	10.952	11.438	-1.204
530	1.108	13.406	-1.107	11.538	-1.198	10.820	-1.236	10.968	11.450	-1.203
540	1.107	13.427	-1.106	11.575	-1.197	10.861	-1.234	11.004	11.481	-1.201

7.4 Variables Sampling Plans with LTPD = 15%

or K_{LTPD} = -1.03643 (Continued)

n	k	IQ		AQL		ML		AOQL		
550	1.106	13.449	-1.105	11.611	-1.195	10.902	-1.232	11.039	11.511	-1.200
560	1.106	13.448	-1.105	11.626	-1.194	10.923	-1.231	11.055	11.522	-1.199
570	1.105	13.470	-1.104	11.662	-1.192	10.963	-1.228	11.089	11.553	-1.198
580	1.104	13.491	-1.103	11.697	-1.190	11.003	-1.226	11.123	11.583	-1.196
590	1.104	13.491	-1.103	11.711	-1.190	11.023	-1.225	11.138	11.593	-1.196
600	1.103	13.513	-1.102	11.745	-1.188	11.061	-1.223	11.172	11.623	-1.194
610	1.103	13.512	-1.102	11.759	-1.187	11.080	-1.222	11.186	11.633	-1.194
620	1.102	13.534	-1.101	11.793	-1.185	11.118	-1.220	11.219	11.662	-1.192
630	1.102	13.534	-1.102	11.806	-1.185	11.136	-1.219	11.233	11.672	-1.192
640	1.101	13.555	-1.101	11.839	-1.183	11.173	-1.217	11.265	11.701	-1.190
650	1.101	13.555	-1.101	11.851	-1.182	11.190	-1.216	11.278	11.711	-1.190
660	1.100	13.577	-1.100	11.884	-1.181	11.227	-1.215	11.311	11.739	-1.188
670	1.100	13.577	-1.100	11.896	-1.180	11.243	-1.214	11.323	11.748	-1.188
680	1.099	13.598	-1.099	11.928	-1.179	11.279	-1.212	11.355	11.777	-1.186
690	1.099	13.598	-1.099	11.940	-1.178	11.295	-1.211	11.367	11.786	-1.186
700	1.098	13.620	-1.098	11.971	-1.176	11.330	-1.209	11.399	11.814	-1.184
710	1.098	13.620	-1.098	11.982	-1.176	11.345	-1.208	11.410	11.823	-1.184
720	1.097	13.641	-1.097	12.014	-1.174	11.380	-1.207	11.441	11.851	-1.182
730	1.097	13.641	-1.097	12.024	-1.174	11.394	-1.206	11.453	11.859	-1.182
740	1.096	13.663	-1.096	12.055	-1.172	11.429	-1.204	11.483	11.887	-1.181
750	1.096	13.663	-1.096	12.066	-1.172	11.443	-1.203	11.494	11.895	-1.180
760	1.096	13.663	-1.096	12.076	-1.171	11.456	-1.203	11.505	11.903	-1.180
770	1.095	13.685	-1.095	12.106	-1.170	11.490	-1.201	11.535	11.930	-1.178
780	1.095	13.684	-1.095	12.116	-1.169	11.503	-1.200	11.545	11.938	-1.178
790	1.094	13.706	-1.094	12.146	-1.168	11.536	-1.199	11.575	11.965	-1.177
800	1.094	13.706	-1.094	12.155	-1.167	11.549	-1.198	11.585	11.973	-1.176
810	1.094	13.706	-1.094	12.164	-1.167	11.561	-1.197	11.595	11.980	-1.176
820	1.093	13.728	-1.093	12.194	-1.165	11.594	-1.196	11.625	12.007	-1.175
830	1.093	13.728	-1.093	12.203	-1.165	11.606	-1.195	11.634	12.014	-1.174
840	1.093	13.728	-1.093	12.211	-1.164	11.618	-1.194	11.644	12.021	-1.174
850	1.092	13.750	-1.092	12.241	-1.163	11.650	-1.193	11.673	12.048	-1.173
860	1.092	13.750	-1.092	12.249	-1.163	11.661	-1.192	11.682	12.055	-1.172
870	1.092	13.749	-1.092	12.257	-1.162	11.672	-1.192	11.691	12.061	-1.172
880	1.091	13.771	-1.091	12.286	-1.161	11.704	-1.190	11.720	12.088	-1.171
890	1.091	13.771	-1.091	12.294	-1.160	11.715	-1.189	11.729	12.095	-1.170
900	1.091	13.771	-1.091	12.302	-1.160	11.726	-1.189	11.737	12.101	-1.170
910	1.090	13.793	-1.090	12.331	-1.159	11.757	-1.187	11.766	12.128	-1.169
920	1.090	13.793	-1.090	12.338	-1.158	11.767	-1.187	11.774	12.134	-1.168
930	1.090	13.793	-1.090	12.346	-1.158	11.777	-1.186	11.782	12.140	-1.168
940	1.089	13.815	-1.089	12.374	-1.156	11.808	-1.185	11.811	12.166	-1.167
950	1.089	13.815	-1.089	12.381	-1.156	11.818	-1.184	11.819	12.172	-1.166
960	1.089	13.815	-1.089	12.388	-1.156	11.828	-1.184	11.827	12.178	-1.166
970	1.089	13.815	-1.089	12.395	-1.155	11.837	-1.183	11.835	12.184	-1.166
980	1.088	13.837	-1.088	12.423	-1.154	11.867	-1.182	11.862	12.210	-1.165
990	1.088	13.837	-1.088	12.430	-1.154	11.877	-1.181	11.870	12.216	-1.164
1000	1.088	13.837	-1.088	12.437	-1.153	11.886	-1.181	11.878	12.221	-1.164

7.5 Variables Sampling Plans with LTPD = 10%

or $K_{LTPD} = -1.28155$

n	k	IQ		AQL		ML		AOQL		
10	2.066	2.301	-1.995	.145	-2.979	.033	-3.405	1.345	4.595	-1.685
11	2.011	2.563	-1.949	.209	-2.864	.056	-3.260	1.425	4.415	-1.704
12	1.966	2.798	-1.911	.280	-2.770	.084	-3.140	1.501	4.286	-1.718
13	1.928	3.012	-1.879	.357	-2.690	.119	-3.039	1.577	4.194	-1.729
14	1.895	3.211	-1.851	.438	-2.621	.158	-2.952	1.652	4.131	-1.736
15	1.867	3.389	-1.826	.521	-2.561	.201	-2.876	1.723	4.084	-1.741
16	1.842	3.556	-1.805	.606	-2.509	.248	-2.810	1.793	4.054	-1.745
17	1.819	3.716	-1.785	.694	-2.460	.299	-2.749	1.865	4.039	-1.746
18	1.800	3.853	-1.768	.778	-2.419	.350	-2.697	1.929	4.024	-1.748
19	1.782	3.988	-1.752	.863	-2.381	.404	-2.649	1.994	4.021	-1.748
20	1.765	4.119	-1.737	.950	-2.345	.460	-2.604	2.060	4.028	-1.747
21	1.750	4.238	-1.724	1.035	-2.313	.517	-2.564	2.123	4.035	-1.747
22	1.737	4.344	-1.712	1.116	-2.285	.573	-2.529	2.180	4.041	-1.746
23	1.724	4.452	-1.700	1.199	-2.258	.631	-2.494	2.240	4.056	-1.744
24	1.712	4.555	-1.690	1.280	-2.232	.690	-2.462	2.299	4.074	-1.742
25	1.702	4.641	-1.681	1.356	-2.210	.746	-2.434	2.350	4.085	-1.741
26	1.691	4.739	-1.671	1.436	-2.187	.806	-2.406	2.409	4.109	-1.738
27	1.682	4.819	-1.663	1.510	-2.167	.863	-2.381	2.460	4.125	-1.736
28	1.673	4.902	-1.654	1.585	-2.148	.921	-2.357	2.512	4.147	-1.734
29	1.665	4.976	-1.647	1.656	-2.131	.976	-2.335	2.560	4.165	-1.732
30	1.657	5.051	-1.640	1.728	-2.114	1.033	-2.314	2.610	4.188	-1.729
31	1.650	5.117	-1.634	1.795	-2.098	1.088	-2.295	2.656	4.207	-1.727
32	1.643	5.185	-1.627	1.863	-2.083	1.143	-2.276	2.703	4.229	-1.725
33	1.636	5.253	-1.621	1.931	-2.068	1.199	-2.257	2.751	4.254	-1.722
34	1.630	5.312	-1.615	1.994	-2.055	1.252	-2.241	2.793	4.274	-1.720
35	1.624	5.372	-1.610	2.057	-2.042	1.306	-2.225	2.837	4.296	-1.717
36	1.618	5.433	-1.604	2.121	-2.029	1.360	-2.209	2.882	4.321	-1.715
37	1.613	5.484	-1.600	2.179	-2.018	1.410	-2.195	2.921	4.340	-1.712
38	1.608	5.535	-1.595	2.237	-2.007	1.460	-2.181	2.960	4.361	-1.710
39	1.603	5.587	-1.590	2.295	-1.996	1.510	-2.167	3.000	4.384	-1.708
40	1.598	5.639	-1.586	2.354	-1.986	1.561	-2.154	3.041	4.408	-1.705
41	1.593	5.692	-1.581	2.412	-1.975	1.612	-2.141	3.082	4.433	-1.702
42	1.589	5.734	-1.577	2.464	-1.966	1.659	-2.130	3.117	4.452	-1.700
43	1.585	5.777	-1.574	2.516	-1.957	1.705	-2.119	3.153	4.472	-1.698
44	1.581	5.820	-1.570	2.568	-1.949	1.752	-2.108	3.188	4.494	-1.696
45	1.577	5.863	-1.566	2.619	-1.940	1.799	-2.097	3.224	4.516	-1.694
46	1.573	5.907	-1.563	2.671	-1.931	1.846	-2.087	3.261	4.539	-1.691
47	1.570	5.939	-1.560	2.716	-1.924	1.887	-2.078	3.290	4.555	-1.690
48	1.566	5.984	-1.556	2.768	-1.916	1.934	-2.068	3.328	4.580	-1.687
49	1.563	6.017	-1.553	2.812	-1.909	1.975	-2.059	3.358	4.597	-1.685
50	1.559	6.062	-1.550	2.864	-1.901	2.022	-2.049	3.395	4.624	-1.682
51	1.556	6.096	-1.547	2.908	-1.895	2.064	-2.041	3.426	4.643	-1.680
52	1.553	6.129	-1.544	2.952	-1.888	2.105	-2.033	3.456	4.663	-1.678
53	1.550	6.164	-1.541	2.996	-1.881	2.146	-2.024	3.487	4.683	-1.676
54	1.547	6.198	-1.538	3.039	-1.875	2.187	-2.017	3.518	4.703	-1.674

7.5 Variables Sampling Plans with LTPD = 10%

or K_{LTPD} = -1.28155 (Continued)

n	k	IQ	AQL	ML	AOQL
55	1.545	6.220 -1.537	3.075 -1.870	2.222 -2.010	3.542 4.716 -1.673
56	1.542	6.255 -1.534	3.119 -1.864	2.263 -2.002	3.573 4.737 -1.671
57	1.539	6.290 -1.531	3.162 -1.857	2.304 -1.995	3.605 4.760 -1.669
58	1.537	6.313 -1.529	3.198 -1.852	2.339 -1.988	3.629 4.774 -1.667
59	1.534	6.348 -1.526	3.241 -1.846	2.380 -1.981	3.660 4.797 -1.665
60	1.532	6.371 -1.524	3.276 -1.842	2.414 -1.975	3.684 4.811 -1.663
61	1.530	6.395 -1.522	3.311 -1.837	2.448 -1.969	3.708 4.826 -1.662
62	1.527	6.430 -1.520	3.354 -1.831	2.489 -1.962	3.740 4.851 -1.660
63	1.525	6.454 -1.518	3.389 -1.827	2.522 -1.956	3.765 4.866 -1.658
64	1.523	6.478 -1.516	3.423 -1.822	2.556 -1.950	3.789 4.882 -1.656
65	1.521	6.501 -1.514	3.457 -1.817	2.590 -1.945	3.813 4.898 -1.655
66	1.519	6.525 -1.512	3.492 -1.813	2.623 -1.939	3.837 4.915 -1.653
67	1.517	6.549 -1.510	3.526 -1.809	2.657 -1.934	3.862 4.932 -1.652
68	1.515	6.573 -1.508	3.559 -1.804	2.690 -1.928	3.886 4.949 -1.650
69	1.513	6.598 -1.506	3.593 -1.800	2.723 -1.923	3.911 4.966 -1.648
70	1.511	6.622 -1.505	3.627 -1.796	2.756 -1.918	3.935 4.984 -1.646
71	1.509	6.646 -1.503	3.660 -1.792	2.789 -1.913	3.960 5.001 -1.645
72	1.508	6.658 -1.502	3.685 -1.788	2.815 -1.909	3.976 5.010 -1.644
73	1.506	6.683 -1.500	3.718 -1.784	2.848 -1.904	4.001 5.028 -1.642
74	1.504	6.708 -1.498	3.751 -1.780	2.880 -1.899	4.025 5.046 -1.640
75	1.503	6.719 -1.497	3.775 -1.777	2.905 -1.895	4.041 5.055 -1.640
76	1.501	6.744 -1.495	3.808 -1.773	2.938 -1.890	4.066 5.074 -1.638
77	1.499	6.769 -1.493	3.841 -1.769	2.970 -1.885	4.091 5.093 -1.636
78	1.498	6.781 -1.492	3.865 -1.767	2.995 -1.882	4.107 5.103 -1.635
79	1.496	6.806 -1.490	3.897 -1.763	3.027 -1.877	4.132 5.122 -1.633
80	1.495	6.819 -1.489	3.921 -1.760	3.051 -1.873	4.148 5.132 -1.632
81	1.493	6.844 -1.488	3.953 -1.756	3.083 -1.869	4.173 5.151 -1.630
82	1.492	6.856 -1.487	3.976 -1.753	3.107 -1.865	4.189 5.161 -1.629
83	1.490	6.882 -1.485	4.008 -1.750	3.139 -1.861	4.214 5.181 -1.628
84	1.489	6.894 -1.484	4.031 -1.747	3.163 -1.857	4.229 5.191 -1.627
85	1.488	6.906 -1.483	4.054 -1.744	3.186 -1.854	4.245 5.202 -1.626
86	1.486	6.932 -1.481	4.086 -1.741	3.218 -1.850	4.270 5.222 -1.624
87	1.485	6.945 -1.480	4.108 -1.738	3.241 -1.846	4.286 5.233 -1.623
88	1.484	6.957 -1.479	4.130 -1.736	3.264 -1.843	4.302 5.243 -1.622
89	1.483	6.970 -1.478	4.152 -1.733	3.287 -1.840	4.318 5.254 -1.621
90	1.481	6.996 -1.476	4.184 -1.730	3.319 -1.836	4.343 5.275 -1.619
91	1.480	7.008 -1.475	4.206 -1.727	3.342 -1.833	4.359 5.286 -1.618
92	1.479	7.021 -1.474	4.228 -1.725	3.364 -1.830	4.375 5.297 -1.617
93	1.478	7.034 -1.473	4.250 -1.722	3.387 -1.827	4.391 5.308 -1.616
94	1.477	7.046 -1.472	4.271 -1.720	3.410 -1.824	4.407 5.319 -1.615
95	1.475	7.073 -1.470	4.303 -1.717	3.441 -1.820	4.432 5.340 -1.613
96	1.474	7.086 -1.469	4.324 -1.714	3.463 -1.817	4.448 5.351 -1.612
97	1.473	7.098 -1.468	4.345 -1.712	3.485 -1.814	4.464 5.363 -1.611
98	1.472	7.111 -1.468	4.367 -1.710	3.507 -1.811	4.479 5.374 -1.610
99	1.471	7.124 -1.467	4.388 -1.707	3.529 -1.808	4.495 5.385 -1.609

7.5 Variables Sampling Plans with LTPD = 10%

or $K_{LTPD} = -1.28155$ (Continued)

n	k	IQ		AQL		ML		AOQL	
100	1.470	7.137	-1.466	4.409	-1.705	3.551	-1.805	4.511	5.397 -1.608
110	1.460	7.269	-1.456	4.614	-1.683	3.766	-1.779	4.668	5.515 -1.597
120	1.452	7.375	-1.448	4.792	-1.665	3.954	-1.756	4.803	5.616 -1.588
130	1.445	7.469	-1.442	4.951	-1.650	4.124	-1.736	4.927	5.709 -1.580
140	1.439	7.551	-1.436	5.094	-1.636	4.279	-1.719	5.038	5.793 -1.572
150	1.433	7.633	-1.430	5.232	-1.623	4.427	-1.703	5.148	5.878 -1.565
160	1.428	7.702	-1.425	5.354	-1.611	4.560	-1.689	5.246	5.953 -1.559
170	1.423	7.773	-1.421	5.473	-1.601	4.688	-1.676	5.341	6.029 -1.552
180	1.419	7.829	-1.417	5.575	-1.591	4.802	-1.664	5.425	6.093 -1.547
190	1.415	7.885	-1.413	5.675	-1.583	4.912	-1.653	5.507	6.158 -1.542
200	1.411	7.943	-1.409	5.772	-1.574	5.018	-1.643	5.587	6.222 -1.536
210	1.408	7.986	-1.406	5.854	-1.567	5.110	-1.634	5.655	6.275 -1.532
220	1.405	8.029	-1.403	5.934	-1.560	5.199	-1.626	5.722	6.328 -1.528
230	1.402	8.072	-1.400	6.012	-1.554	5.286	-1.618	5.788	6.380 -1.524
240	1.399	8.116	-1.397	6.088	-1.547	5.370	-1.610	5.852	6.433 -1.519
250	1.397	8.145	-1.395	6.150	-1.542	5.440	-1.604	5.904	6.473 -1.516
260	1.394	8.190	-1.392	6.222	-1.536	5.521	-1.596	5.967	6.525 -1.512
270	1.392	8.219	-1.390	6.281	-1.532	5.587	-1.590	6.017	6.565 -1.509
280	1.390	8.248	-1.389	6.338	-1.527	5.652	-1.585	6.066	6.604 -1.506
290	1.388	8.278	-1.387	6.393	-1.523	5.715	-1.579	6.114	6.643 -1.503
300	1.386	8.308	-1.385	6.448	-1.518	5.776	-1.574	6.162	6.682 -1.500
310	1.384	8.338	-1.383	6.501	-1.514	5.836	-1.569	6.209	6.721 -1.497
320	1.383	8.353	-1.382	6.541	-1.511	5.883	-1.565	6.243	6.746 -1.495
330	1.381	8.383	-1.380	6.592	-1.507	5.940	-1.560	6.289	6.784 -1.492
340	1.380	8.398	-1.379	6.629	-1.504	5.984	-1.556	6.322	6.809 -1.490
350	1.378	8.428	-1.377	6.679	-1.500	6.040	-1.551	6.366	6.847 -1.487
360	1.377	8.443	-1.376	6.715	-1.497	6.082	-1.548	6.398	6.872 -1.485
370	1.375	8.473	-1.374	6.763	-1.494	6.136	-1.543	6.442	6.910 -1.483
380	1.374	8.488	-1.373	6.797	-1.491	6.175	-1.540	6.472	6.934 -1.481
390	1.373	8.504	-1.372	6.831	-1.489	6.215	-1.537	6.502	6.958 -1.479
400	1.372	8.519	-1.371	6.864	-1.486	6.253	-1.534	6.532	6.981 -1.477
410	1.370	8.550	-1.369	6.910	-1.483	6.303	-1.530	6.574	7.018 -1.474
420	1.369	8.565	-1.368	6.941	-1.480	6.340	-1.527	6.603	7.042 -1.473
430	1.368	8.580	-1.367	6.973	-1.478	6.376	-1.524	6.631	7.065 -1.471
440	1.367	8.595	-1.366	7.003	-1.476	6.412	-1.521	6.659	7.088 -1.469
450	1.366	8.611	-1.365	7.034	-1.473	6.447	-1.518	6.687	7.111 -1.468
460	1.365	8.626	-1.364	7.063	-1.471	6.481	-1.516	6.715	7.134 -1.466
470	1.364	8.642	-1.363	7.093	-1.469	6.515	-1.513	6.742	7.156 -1.464
480	1.363	8.657	-1.362	7.122	-1.467	6.548	-1.510	6.769	7.179 -1.463
490	1.363	8.657	-1.362	7.136	-1.466	6.567	-1.509	6.782	7.187 -1.462
500	1.362	8.672	-1.361	7.164	-1.464	6.600	-1.506	6.808	7.209 -1.460
510	1.361	8.688	-1.360	7.192	-1.462	6.631	-1.504	6.834	7.231 -1.459
520	1.360	8.704	-1.359	7.220	-1.460	6.663	-1.501	6.860	7.253 -1.457
530	1.359	8.719	-1.358	7.247	-1.458	6.694	-1.499	6.885	7.275 -1.456
540	1.359	8.719	-1.358	7.259	-1.457	6.711	-1.498	6.897	7.283 -1.455

7.5 Variables Sampling Plans with LTPD = 10%

or $K_{LTPD} = -1.28155$ (Continued)

n	k	IQ	AQL	ML	AOQL
550	1.358	8.735 -1.357	7.286 -1.455	6.741 -1.495	6.922 7.305 -1.453
560	1.357	8.750 -1.356	7.312 -1.453	6.770 -1.493	6.947 7.326 -1.452
570	1.356	8.766 -1.355	7.338 -1.451	6.800 -1.491	6.972 7.347 -1.450
580	1.356	8.766 -1.355	7.350 -1.450	6.815 -1.490	6.982 7.355 -1.450
590	1.355	8.782 -1.354	7.375 -1.448	6.844 -1.488	7.007 7.376 -1.448
600	1.355	8.781 -1.354	7.386 -1.448	6.859 -1.486	7.017 7.383 -1.448
610	1.354	8.797 -1.353	7.411 -1.446	6.887 -1.484	7.041 7.404 -1.446
620	1.353	8.813 -1.352	7.436 -1.444	6.915 -1.482	7.065 7.424 -1.445
630	1.353	8.813 -1.352	7.446 -1.443	6.928 -1.481	7.074 7.431 -1.444
640	1.352	8.829 -1.351	7.471 -1.442	6.956 -1.479	7.098 7.452 -1.443
650	1.352	8.828 -1.351	7.481 -1.441	6.969 -1.478	7.107 7.458 -1.442
660	1.351	8.844 -1.350	7.505 -1.439	6.996 -1.476	7.130 7.479 -1.441
670	1.350	8.860 -1.349	7.529 -1.438	7.022 -1.474	7.153 7.499 -1.440
680	1.350	8.860 -1.349	7.538 -1.437	7.035 -1.473	7.162 7.505 -1.439
690	1.349	8.876 -1.348	7.561 -1.435	7.061 -1.471	7.185 7.525 -1.438
700	1.349	8.876 -1.348	7.570 -1.435	7.073 -1.470	7.194 7.531 -1.437
710	1.348	8.892 -1.347	7.594 -1.433	7.098 -1.469	7.216 7.552 -1.436
720	1.348	8.892 -1.347	7.602 -1.432	7.110 -1.468	7.224 7.557 -1.435
730	1.347	8.908 -1.346	7.625 -1.431	7.135 -1.466	7.247 7.577 -1.434
740	1.347	8.908 -1.346	7.633 -1.430	7.146 -1.465	7.255 7.583 -1.434
750	1.347	8.907 -1.346	7.641 -1.430	7.157 -1.464	7.262 7.588 -1.433
760	1.346	8.923 -1.345	7.664 -1.428	7.182 -1.462	7.284 7.608 -1.432
770	1.346	8.923 -1.345	7.671 -1.428	7.192 -1.462	7.292 7.614 -1.432
780	1.345	8.939 -1.345	7.694 -1.426	7.217 -1.460	7.314 7.633 -1.430
790	1.345	8.939 -1.345	7.701 -1.425	7.227 -1.459	7.321 7.638 -1.430
800	1.344	8.955 -1.344	7.723 -1.424	7.251 -1.457	7.343 7.658 -1.428
810	1.344	8.955 -1.344	7.730 -1.423	7.260 -1.457	7.350 7.663 -1.428
820	1.344	8.955 -1.344	7.737 -1.423	7.270 -1.456	7.357 7.668 -1.428
830	1.343	8.971 -1.343	7.759 -1.421	7.294 -1.454	7.378 7.688 -1.426
840	1.343	8.971 -1.343	7.766 -1.421	7.303 -1.454	7.385 7.692 -1.426
850	1.343	8.971 -1.343	7.773 -1.421	7.312 -1.453	7.392 7.697 -1.426
860	1.342	8.987 -1.342	7.794 -1.419	7.335 -1.451	7.413 7.716 -1.424
870	1.342	8.987 -1.342	7.801 -1.419	7.344 -1.451	7.419 7.721 -1.424
880	1.341	9.003 -1.341	7.822 -1.417	7.367 -1.449	7.440 7.740 -1.423
890	1.341	9.003 -1.341	7.828 -1.417	7.376 -1.448	7.447 7.745 -1.422
900	1.341	9.003 -1.341	7.834 -1.416	7.384 -1.448	7.453 7.749 -1.422
910	1.340	9.019 -1.340	7.855 -1.415	7.407 -1.446	7.473 7.768 -1.421
920	1.340	9.019 -1.340	7.861 -1.414	7.415 -1.446	7.480 7.773 -1.421
930	1.340	9.019 -1.340	7.867 -1.414	7.423 -1.445	7.486 7.777 -1.420
940	1.339	9.035 -1.339	7.888 -1.413	7.445 -1.443	7.506 7.796 -1.419
950	1.339	9.035 -1.339	7.894 -1.412	7.453 -1.443	7.512 7.800 -1.419
960	1.339	9.035 -1.339	7.899 -1.412	7.461 -1.442	7.518 7.805 -1.418
970	1.339	9.035 -1.339	7.905 -1.411	7.468 -1.442	7.524 7.809 -1.418
980	1.338	9.051 -1.338	7.926 -1.410	7.490 -1.440	7.544 7.828 -1.417
990	1.338	9.051 -1.338	7.931 -1.410	7.498 -1.440	7.549 7.832 -1.416
1000	1.338	9.051 -1.338	7.936 -1.409	7.505 -1.439	7.555 7.836 -1.416

7.6 Variables Sampling Plans with LTPD = 7.5%

or $K_{LTPD} = -1.43953$

n	k	IQ		AQL		ML		AOQL		
10	2.283	1.376	-2.204	.055	-3.264	.010	-3.724	.910	3.783	-1.776
11	2.224	1.558	-2.155	.084	-3.141	.018	-3.567	.956	3.570	-1.803
12	2.175	1.727	-2.114	.119	-3.038	.029	-3.437	1.003	3.415	-1.823
13	2.133	1.885	-2.078	.159	-2.950	.044	-3.326	1.051	3.302	-1.838
14	2.098	2.027	-2.048	.201	-2.876	.061	-3.232	1.097	3.214	-1.850
15	2.067	2.161	-2.022	.247	-2.811	.082	-3.150	1.143	3.149	-1.859
16	2.040	2.285	-1.998	.295	-2.753	.104	-3.077	1.188	3.100	-1.866
17	2.016	2.400	-1.977	.344	-2.702	.129	-3.013	1.232	3.063	-1.872
18	1.994	2.511	-1.958	.395	-2.656	.156	-2.955	1.277	3.038	-1.875
19	1.974	2.616	-1.940	.447	-2.614	.185	-2.902	1.322	3.021	-1.878
20	1.957	2.708	-1.926	.498	-2.577	.215	-2.855	1.362	3.005	-1.880
21	1.941	2.798	-1.911	.550	-2.543	.246	-2.812	1.402	2.996	-1.881
22	1.926	2.885	-1.898	.602	-2.511	.278	-2.772	1.443	2.992	-1.882
23	1.912	2.968	-1.886	.654	-2.482	.312	-2.735	1.484	2.993	-1.882
24	1.900	3.041	-1.875	.704	-2.455	.344	-2.702	1.521	2.992	-1.882
25	1.888	3.115	-1.864	.755	-2.430	.379	-2.671	1.559	2.997	-1.881
26	1.877	3.186	-1.854	.806	-2.406	.413	-2.641	1.596	3.003	-1.880
27	1.867	3.250	-1.845	.855	-2.385	.448	-2.614	1.632	3.009	-1.880
28	1.858	3.310	-1.837	.902	-2.365	.481	-2.589	1.665	3.014	-1.879
29	1.849	3.370	-1.829	.950	-2.346	.516	-2.565	1.700	3.024	-1.877
30	1.840	3.432	-1.821	.999	-2.327	.552	-2.541	1.736	3.037	-1.875
31	1.832	3.488	-1.814	1.046	-2.310	.587	-2.520	1.769	3.048	-1.874
32	1.825	3.537	-1.807	1.090	-2.294	.621	-2.500	1.799	3.056	-1.873
33	1.818	3.587	-1.801	1.134	-2.279	.655	-2.481	1.830	3.068	-1.871
34	1.811	3.637	-1.794	1.179	-2.264	.690	-2.463	1.862	3.081	-1.869
35	1.805	3.681	-1.789	1.221	-2.250	.723	-2.446	1.891	3.091	-1.868
36	1.798	3.733	-1.782	1.267	-2.236	.759	-2.428	1.925	3.109	-1.865
37	1.793	3.770	-1.778	1.306	-2.224	.791	-2.413	1.950	3.118	-1.864
38	1.787	3.816	-1.772	1.349	-2.212	.825	-2.398	1.981	3.133	-1.862
39	1.782	3.854	-1.768	1.388	-2.201	.857	-2.384	2.007	3.145	-1.860
40	1.777	3.893	-1.763	1.427	-2.190	.890	-2.370	2.034	3.158	-1.858
41	1.772	3.932	-1.759	1.467	-2.179	.922	-2.357	2.062	3.172	-1.856
42	1.767	3.971	-1.754	1.506	-2.168	.955	-2.343	2.090	3.188	-1.854
43	1.763	4.003	-1.750	1.542	-2.159	.985	-2.332	2.114	3.198	-1.852
44	1.758	4.043	-1.746	1.581	-2.149	1.019	-2.319	2.143	3.216	-1.850
45	1.754	4.075	-1.742	1.617	-2.140	1.049	-2.308	2.167	3.228	-1.848
46	1.750	4.108	-1.738	1.653	-2.131	1.080	-2.297	2.191	3.242	-1.846
47	1.746	4.141	-1.735	1.688	-2.123	1.111	-2.287	2.216	3.256	-1.844
48	1.743	4.165	-1.732	1.719	-2.116	1.138	-2.277	2.236	3.265	-1.843
49	1.739	4.198	-1.728	1.755	-2.107	1.169	-2.267	2.262	3.281	-1.841
50	1.735	4.232	-1.724	1.790	-2.099	1.200	-2.257	2.288	3.298	-1.839
51	1.732	4.257	-1.722	1.821	-2.092	1.228	-2.248	2.308	3.309	-1.837
52	1.729	4.282	-1.719	1.852	-2.085	1.255	-2.240	2.329	3.320	-1.836
53	1.726	4.308	-1.716	1.883	-2.079	1.283	-2.231	2.350	3.332	-1.834
54	1.723	4.333	-1.713	1.913	-2.072	1.311	-2.223	2.372	3.345	-1.832

7.6 Variables Sampling Plans with LTPD = 7.5%

or K_{LTPD} = - 1.43953 (Continued)

n	k	IQ		AQL		ML		AOQL		
55	1.720	4.359	-1.710	1.944	-2.065	1.338	-2.215	2.393	3.358	-1.831
56	1.717	4.385	-1.708	1.975	-2.059	1.366	-2.207	2.415	3.371	-1.829
57	1.714	4.411	-1.705	2.005	-2.053	1.394	-2.199	2.436	3.386	-1.827
58	1.711	4.438	-1.702	2.036	-2.046	1.421	-2.191	2.458	3.400	-1.825
59	1.709	4.455	-1.700	2.061	-2.041	1.445	-2.185	2.475	3.408	-1.824
60	1.706	4.482	-1.697	2.091	-2.035	1.473	-2.177	2.497	3.424	-1.822
61	1.704	4.499	-1.695	2.116	-2.030	1.496	-2.171	2.513	3.432	-1.821
62	1.701	4.526	-1.693	2.147	-2.024	1.524	-2.164	2.536	3.449	-1.819
63	1.699	4.544	-1.691	2.171	-2.020	1.547	-2.158	2.552	3.458	-1.817
64	1.696	4.571	-1.688	2.202	-2.014	1.575	-2.151	2.575	3.475	-1.815
65	1.694	4.589	-1.686	2.226	-2.009	1.598	-2.145	2.592	3.485	-1.814
66	1.692	4.607	-1.684	2.251	-2.004	1.621	-2.139	2.609	3.496	-1.812
67	1.690	4.625	-1.682	2.275	-2.000	1.644	-2.133	2.626	3.506	-1.811
68	1.688	4.643	-1.680	2.300	-1.995	1.668	-2.128	2.643	3.517	-1.810
69	1.686	4.662	-1.679	2.324	-1.991	1.691	-2.122	2.660	3.528	-1.808
70	1.684	4.680	-1.677	2.348	-1.987	1.714	-2.117	2.677	3.540	-1.807
71	1.682	4.699	-1.675	2.372	-1.982	1.737	-2.111	2.694	3.552	-1.805
72	1.680	4.717	-1.673	2.396	-1.978	1.759	-2.106	2.712	3.563	-1.804
73	1.678	4.736	-1.671	2.420	-1.974	1.782	-2.101	2.729	3.575	-1.802
74	1.676	4.754	-1.669	2.444	-1.970	1.805	-2.096	2.746	3.588	-1.801
75	1.674	4.773	-1.667	2.468	-1.965	1.828	-2.091	2.764	3.600	-1.799
76	1.673	4.782	-1.666	2.486	-1.962	1.846	-2.087	2.775	3.606	-1.798
77	1.671	4.801	-1.664	2.510	-1.958	1.868	-2.082	2.793	3.618	-1.797
78	1.669	4.820	-1.663	2.533	-1.954	1.891	-2.077	2.810	3.631	-1.795
79	1.668	4.830	-1.662	2.550	-1.951	1.908	-2.073	2.821	3.637	-1.794
80	1.666	4.849	-1.660	2.574	-1.947	1.931	-2.068	2.839	3.651	-1.793
81	1.665	4.858	-1.659	2.591	-1.945	1.948	-2.065	2.850	3.657	-1.792
82	1.663	4.877	-1.657	2.615	-1.941	1.971	-2.060	2.868	3.670	-1.790
83	1.662	4.887	-1.656	2.631	-1.938	1.988	-2.056	2.879	3.677	-1.790
84	1.660	4.906	-1.654	2.655	-1.934	2.010	-2.052	2.897	3.691	-1.788
85	1.659	4.915	-1.653	2.672	-1.931	2.027	-2.048	2.908	3.697	-1.787
86	1.657	4.935	-1.651	2.695	-1.928	2.049	-2.044	2.926	3.711	-1.785
87	1.656	4.945	-1.650	2.711	-1.925	2.066	-2.040	2.938	3.718	-1.784
88	1.654	4.964	-1.648	2.735	-1.921	2.088	-2.036	2.955	3.732	-1.783
89	1.653	4.974	-1.647	2.751	-1.919	2.105	-2.033	2.967	3.739	-1.782
90	1.652	4.983	-1.646	2.767	-1.916	2.122	-2.029	2.978	3.746	-1.781
91	1.651	4.993	-1.646	2.783	-1.914	2.138	-2.026	2.989	3.754	-1.780
92	1.649	5.013	-1.644	2.807	-1.910	2.160	-2.022	3.007	3.768	-1.778
93	1.648	5.023	-1.643	2.823	-1.908	2.177	-2.019	3.019	3.776	-1.777
94	1.647	5.032	-1.642	2.839	-1.905	2.193	-2.015	3.030	3.783	-1.776
95	1.646	5.042	-1.641	2.855	-1.903	2.209	-2.012	3.041	3.790	-1.776
96	1.644	5.062	-1.639	2.878	-1.899	2.231	-2.008	3.059	3.806	-1.774
97	1.643	5.072	-1.638	2.893	-1.897	2.247	-2.005	3.071	3.813	-1.773
98	1.642	5.082	-1.637	2.909	-1.894	2.263	-2.002	3.082	3.821	-1.772
99	1.641	5.092	-1.636	2.925	-1.892	2.279	-1.999	3.093	3.829	-1.771

7.6 Variables Sampling Plans with LTPD = 7.5%

or K_{LTPD} = - 1.43953 (Continued)

n	k	IQ	AQL	ML	AOQL
100	1.640	5.102 -1.635	2.940 -1.890	2.295 -1.996	3.105 3.837 -1.770
110	1.630	5.202 -1.626	3.093 -1.867	2.451 -1.969	3.218 3.918 -1.760
120	1.621	5.294 -1.617	3.234 -1.848	2.595 -1.944	3.323 3.996 -1.751
130	1.613	5.378 -1.609	3.362 -1.830	2.727 -1.922	3.420 4.069 -1.743
140	1.606	5.452 -1.603	3.478 -1.815	2.849 -1.903	3.510 4.136 -1.735
150	1.600	5.515 -1.597	3.583 -1.801	2.960 -1.887	3.590 4.197 -1.728
160	1.595	5.569 -1.592	3.676 -1.790	3.059 -1.872	3.662 4.250 -1.722
170	1.590	5.623 -1.587	3.766 -1.778	3.156 -1.858	3.733 4.305 -1.716
180	1.585	5.678 -1.582	3.854 -1.768	3.249 -1.845	3.803 4.360 -1.710
190	1.581	5.722 -1.579	3.931 -1.759	3.332 -1.834	3.864 4.406 -1.705
200	1.577	5.767 -1.575	4.006 -1.750	3.413 -1.823	3.924 4.454 -1.700
210	1.574	5.800 -1.572	4.069 -1.743	3.483 -1.814	3.975 4.492 -1.696
220	1.570	5.845 -1.568	4.140 -1.735	3.560 -1.804	4.033 4.540 -1.691
230	1.567	5.879 -1.565	4.201 -1.728	3.626 -1.796	4.083 4.578 -1.687
240	1.564	5.914 -1.562	4.260 -1.721	3.691 -1.788	4.131 4.617 -1.683
250	1.562	5.936 -1.560	4.308 -1.716	3.745 -1.781	4.170 4.646 -1.680
260	1.559	5.971 -1.557	4.364 -1.710	3.806 -1.774	4.218 4.685 -1.676
270	1.557	5.994 -1.555	4.410 -1.705	3.858 -1.767	4.255 4.714 -1.673
280	1.555	6.017 -1.553	4.454 -1.700	3.908 -1.762	4.293 4.743 -1.670
290	1.553	6.040 -1.551	4.498 -1.696	3.956 -1.756	4.329 4.772 -1.667
300	1.551	6.063 -1.549	4.540 -1.691	4.004 -1.750	4.365 4.801 -1.664
310	1.549	6.087 -1.548	4.582 -1.687	4.051 -1.745	4.401 4.830 -1.662
320	1.547	6.110 -1.546	4.623 -1.683	4.096 -1.740	4.436 4.858 -1.659
330	1.545	6.134 -1.544	4.664 -1.678	4.141 -1.735	4.471 4.887 -1.656
340	1.543	6.158 -1.542	4.703 -1.674	4.185 -1.730	4.506 4.916 -1.653
350	1.542	6.170 -1.541	4.732 -1.671	4.219 -1.726	4.530 4.934 -1.651
360	1.540	6.193 -1.539	4.771 -1.668	4.261 -1.721	4.564 4.963 -1.648
370	1.539	6.205 -1.538	4.798 -1.665	4.293 -1.718	4.588 4.981 -1.647
380	1.538	6.217 -1.537	4.825 -1.662	4.325 -1.714	4.611 4.999 -1.645
390	1.536	6.241 -1.535	4.862 -1.658	4.365 -1.710	4.644 5.027 -1.642
400	1.535	6.253 -1.534	4.888 -1.656	4.395 -1.707	4.667 5.045 -1.641
410	1.534	6.265 -1.533	4.914 -1.653	4.425 -1.703	4.689 5.063 -1.639
420	1.533	6.277 -1.532	4.939 -1.651	4.454 -1.700	4.711 5.080 -1.637
430	1.531	6.301 -1.530	4.974 -1.647	4.492 -1.696	4.743 5.108 -1.634
440	1.530	6.314 -1.529	4.999 -1.645	4.520 -1.693	4.765 5.126 -1.633
450	1.529	6.326 -1.528	5.023 -1.643	4.548 -1.690	4.786 5.143 -1.631
460	1.528	6.338 -1.527	5.046 -1.640	4.575 -1.688	4.807 5.160 -1.630
470	1.527	6.350 -1.526	5.070 -1.638	4.601 -1.685	4.828 5.177 -1.628
480	1.526	6.362 -1.525	5.093 -1.636	4.627 -1.682	4.849 5.195 -1.626
490	1.525	6.374 -1.524	5.115 -1.634	4.653 -1.679	4.869 5.211 -1.625
500	1.525	6.374 -1.524	5.127 -1.633	4.668 -1.678	4.879 5.218 -1.624
510	1.524	6.386 -1.523	5.149 -1.631	4.693 -1.675	4.899 5.234 -1.623
520	1.523	6.399 -1.522	5.171 -1.629	4.718 -1.673	4.919 5.251 -1.621
530	1.522	6.411 -1.521	5.192 -1.627	4.742 -1.670	4.939 5.268 -1.619
540	1.521	6.423 -1.520	5.213 -1.624	4.767 -1.668	4.958 5.284 -1.618

7.6 Variables Sampling Plans with LTPD = 7.5%

or K_{LTPD} = -1.43953 (Continued)

n	k	IQ	AQL	ML	AOQL
550	1.520	6.436 -1.519	5.235 -1.623	4.790 -1.666	4.978 5.301 -1.616
560	1.520	6.436 -1.519	5.244 -1.622	4.803 -1.664	4.987 5.306 -1.616
570	1.519	6.448 -1.518	5.265 -1.620	4.827 -1.662	5.006 5.323 -1.614
580	1.518	6.460 -1.517	5.286 -1.618	4.850 -1.660	5.025 5.339 -1.613
590	1.518	6.460 -1.517	5.295 -1.617	4.862 -1.658	5.033 5.344 -1.612
600	1.517	6.473 -1.516	5.315 -1.615	4.884 -1.656	5.052 5.361 -1.611
610	1.516	6.485 -1.515	5.335 -1.613	4.906 -1.654	5.070 5.377 -1.609
620	1.516	6.485 -1.515	5.343 -1.612	4.918 -1.653	5.078 5.382 -1.609
630	1.515	6.498 -1.514	5.363 -1.611	4.940 -1.651	5.096 5.398 -1.607
640	1.514	6.510 -1.513	5.382 -1.609	4.961 -1.649	5.114 5.414 -1.606
650	1.514	6.510 -1.513	5.390 -1.608	4.972 -1.648	5.122 5.418 -1.606
660	1.513	6.523 -1.512	5.409 -1.606	4.993 -1.646	5.140 5.434 -1.604
670	1.513	6.522 -1.512	5.417 -1.606	5.003 -1.645	5.147 5.439 -1.604
680	1.512	6.535 -1.511	5.436 -1.604	5.024 -1.643	5.165 5.455 -1.602
690	1.511	6.548 -1.510	5.455 -1.602	5.045 -1.641	5.182 5.470 -1.601
700	1.511	6.548 -1.510	5.462 -1.602	5.054 -1.640	5.189 5.475 -1.600
710	1.510	6.560 -1.509	5.480 -1.600	5.075 -1.638	5.207 5.490 -1.599
720	1.510	6.560 -1.509	5.487 -1.599	5.084 -1.637	5.213 5.495 -1.599
730	1.509	6.573 -1.508	5.506 -1.598	5.104 -1.635	5.230 5.510 -1.597
740	1.509	6.573 -1.508	5.512 -1.597	5.113 -1.634	5.237 5.515 -1.597
750	1.508	6.585 -1.507	5.530 -1.595	5.133 -1.632	5.254 5.530 -1.596
760	1.508	6.585 -1.507	5.537 -1.595	5.142 -1.631	5.260 5.534 -1.595
770	1.507	6.598 -1.506	5.555 -1.593	5.161 -1.629	5.277 5.549 -1.594
780	1.507	6.598 -1.506	5.561 -1.593	5.169 -1.629	5.283 5.553 -1.593
790	1.507	6.598 -1.506	5.567 -1.592	5.178 -1.628	5.289 5.557 -1.593
800	1.506	6.610 -1.505	5.584 -1.591	5.197 -1.626	5.305 5.573 -1.592
810	1.506	6.610 -1.505	5.590 -1.590	5.205 -1.625	5.311 5.576 -1.591
820	1.505	6.623 -1.504	5.608 -1.589	5.223 -1.624	5.328 5.592 -1.590
830	1.505	6.623 -1.504	5.613 -1.588	5.231 -1.623	5.333 5.595 -1.590
840	1.505	6.623 -1.504	5.619 -1.588	5.239 -1.622	5.339 5.599 -1.589
850	1.504	6.636 -1.503	5.636 -1.586	5.257 -1.620	5.355 5.614 -1.588
860	1.504	6.636 -1.503	5.642 -1.586	5.264 -1.620	5.360 5.618 -1.588
870	1.503	6.649 -1.502	5.659 -1.584	5.283 -1.618	5.377 5.633 -1.586
880	1.503	6.648 -1.502	5.664 -1.584	5.290 -1.617	5.382 5.636 -1.586
890	1.503	6.648 -1.503	5.669 -1.583	5.297 -1.617	5.387 5.640 -1.586
900	1.502	6.661 -1.502	5.686 -1.582	5.315 -1.615	5.403 5.655 -1.584
910	1.502	6.661 -1.502	5.691 -1.581	5.322 -1.614	5.408 5.658 -1.584
920	1.502	6.661 -1.502	5.696 -1.581	5.328 -1.614	5.413 5.661 -1.584
930	1.501	6.674 -1.501	5.712 -1.579	5.346 -1.612	5.429 5.676 -1.583
940	1.501	6.674 -1.501	5.717 -1.579	5.353 -1.612	5.434 5.680 -1.582
950	1.501	6.674 -1.501	5.722 -1.579	5.359 -1.611	5.438 5.683 -1.582
960	1.500	6.687 -1.500	5.738 -1.577	5.377 -1.609	5.454 5.697 -1.581
970	1.500	6.687 -1.500	5.743 -1.577	5.383 -1.609	5.459 5.701 -1.580
980	1.500	6.687 -1.500	5.747 -1.576	5.389 -1.608	5.463 5.704 -1.580
990	1.499	6.699 -1.499	5.764 -1.575	5.406 -1.607	5.479 5.718 -1.579
1000	1.499	6.699 -1.499	5.768 -1.575	5.412 -1.606	5.483 5.722 -1.579

7.7 Variables Sampling Plans with LTPD = 5%

or $K_{LTPD} = -1.64485$

n	k	IQ		AQL		ML		AOQL		
10	2.568	.661	-2.478	.014	-3.641	.002	-4.148	.547	2.993	-1.882
11	2.503	.767	-2.424	.023	-3.505	.004	-3.974	.567	2.755	-1.918
12	2.448	.870	-2.378	.035	-3.390	.006	-3.829	.590	2.582	-1.946
13	2.402	.966	-2.339	.049	-3.294	.011	-3.706	.614	2.449	-1.969
14	2.363	1.055	-2.306	.066	-3.211	.016	-3.602	.637	2.346	-1.987
15	2.329	1.139	-2.277	.085	-3.139	.022	-3.511	.661	2.266	-2.002
16	2.299	1.218	-2.251	.105	-3.076	.030	-3.431	.684	2.202	-2.014
17	2.272	1.295	-2.228	.127	-3.019	.039	-3.359	.709	2.153	-2.023
18	2.249	1.363	-2.208	.149	-2.970	.049	-3.296	.731	2.110	-2.032
19	2.227	1.431	-2.189	.173	-2.923	.060	-3.238	.756	2.079	-2.038
20	2.208	1.493	-2.172	.197	-2.882	.072	-3.187	.778	2.052	-2.043
21	2.190	1.554	-2.156	.223	-2.844	.085	-3.139	.801	2.033	-2.047
22	2.174	1.610	-2.142	.248	-2.810	.098	-3.095	.823	2.015	-2.051
23	2.159	1.664	-2.129	.274	-2.778	.112	-3.055	.845	2.003	-2.053
24	2.145	1.716	-2.116	.300	-2.748	.127	-3.018	.868	1.993	-2.055
25	2.132	1.766	-2.105	.326	-2.720	.143	-2.983	.889	1.987	-2.057
26	2.120	1.814	-2.094	.352	-2.695	.159	-2.951	.911	1.981	-2.058
27	2.109	1.858	-2.084	.378	-2.671	.175	-2.921	.931	1.977	-2.058
28	2.099	1.899	-2.075	.404	-2.649	.191	-2.893	.950	1.974	-2.059
29	2.089	1.941	-2.066	.430	-2.628	.207	-2.867	.971	1.974	-2.059
30	2.080	1.980	-2.058	.455	-2.608	.224	-2.842	.990	1.973	-2.059
31	2.071	2.019	-2.050	.481	-2.589	.242	-2.818	1.010	1.976	-2.059
32	2.063	2.055	-2.043	.506	-2.571	.259	-2.796	1.028	1.977	-2.059
33	2.055	2.091	-2.035	.532	-2.554	.276	-2.775	1.048	1.980	-2.058
34	2.048	2.123	-2.029	.556	-2.539	.293	-2.755	1.065	1.982	-2.057
35	2.041	2.156	-2.023	.581	-2.524	.311	-2.736	1.083	1.986	-2.057
36	2.034	2.189	-2.016	.606	-2.509	.329	-2.718	1.101	1.991	-2.056
37	2.028	2.218	-2.011	.629	-2.495	.346	-2.701	1.118	1.994	-2.055
38	2.022	2.247	-2.005	.653	-2.482	.363	-2.685	1.135	1.999	-2.054
39	2.016	2.276	-2.000	.676	-2.470	.381	-2.669	1.152	2.005	-2.053
40	2.010	2.306	-1.994	.701	-2.457	.399	-2.653	1.170	2.013	-2.051
41	2.005	2.331	-1.990	.723	-2.446	.416	-2.639	1.185	2.017	-2.050
42	2.000	2.357	-1.985	.745	-2.435	.433	-2.625	1.201	2.023	-2.049
43	1.995	2.383	-1.980	.768	-2.424	.450	-2.612	1.217	2.029	-2.048
44	1.990	2.409	-1.976	.790	-2.413	.468	-2.599	1.234	2.037	-2.046
45	1.986	2.429	-1.972	.811	-2.404	.484	-2.587	1.247	2.041	-2.045
46	1.981	2.456	-1.968	.834	-2.394	.502	-2.574	1.264	2.050	-2.043
47	1.977	2.477	-1.964	.854	-2.385	.519	-2.563	1.278	2.056	-2.042
48	1.973	2.499	-1.960	.875	-2.376	.536	-2.552	1.293	2.062	-2.041
49	1.969	2.520	-1.956	.895	-2.368	.552	-2.541	1.307	2.069	-2.040
50	1.965	2.542	-1.953	.916	-2.359	.569	-2.531	1.322	2.077	-2.038
51	1.962	2.559	-1.950	.934	-2.352	.584	-2.521	1.334	2.081	-2.037
52	1.958	2.581	-1.946	.955	-2.343	.602	-2.511	1.349	2.090	-2.036
53	1.955	2.598	-1.944	.973	-2.336	.617	-2.502	1.361	2.095	-2.035
54	1.951	2.620	-1.940	.994	-2.328	.634	-2.492	1.377	2.105	-2.033

7.7 Variables Sampling Plans with LTPD = 5%

or K_{LTPD} = -1.64485 (Continued)

n	k	IQ		AQL		ML		AOQL		
55	1.948	2.637	-1.937	1.013	-2.322	.650	-2.484	1.390	2.111	-2.031
56	1.945	2.654	-1.934	1.031	-2.315	.665	-2.476	1.402	2.117	-2.030
57	1.942	2.671	-1.931	1.049	-2.308	.681	-2.467	1.415	2.124	-2.029
58	1.939	2.689	-1.929	1.067	-2.302	.696	-2.459	1.428	2.131	-2.027
59	1.936	2.706	-1.926	1.086	-2.295	.712	-2.451	1.441	2.138	-2.026
60	1.933	2.724	-1.923	1.104	-2.289	.728	-2.443	1.454	2.146	-2.024
61	1.931	2.735	-1.921	1.119	-2.284	.741	-2.437	1.463	2.150	-2.024
62	1.928	2.753	-1.918	1.137	-2.278	.757	-2.429	1.476	2.158	-2.022
63	1.925	2.771	-1.916	1.156	-2.272	.773	-2.422	1.490	2.167	-2.020
64	1.923	2.783	-1.914	1.171	-2.267	.786	-2.415	1.500	2.171	-2.020
65	1.920	2.801	-1.911	1.189	-2.261	.802	-2.408	1.513	2.181	-2.018
66	1.918	2.813	-1.909	1.204	-2.256	.816	-2.402	1.523	2.186	-2.017
67	1.916	2.825	-1.907	1.219	-2.251	.829	-2.396	1.533	2.191	-2.016
68	1.913	2.843	-1.904	1.238	-2.245	.845	-2.389	1.547	2.201	-2.014
69	1.911	2.856	-1.902	1.252	-2.241	.858	-2.383	1.557	2.207	-2.013
70	1.909	2.868	-1.901	1.267	-2.236	.872	-2.377	1.568	2.213	-2.012
71	1.907	2.880	-1.899	1.282	-2.232	.885	-2.372	1.578	2.219	-2.011
72	1.905	2.892	-1.897	1.297	-2.227	.899	-2.366	1.588	2.225	-2.009
73	1.903	2.905	-1.895	1.312	-2.223	.912	-2.361	1.599	2.231	-2.008
74	1.901	2.917	-1.893	1.327	-2.218	.926	-2.355	1.609	2.238	-2.007
75	1.899	2.930	-1.891	1.342	-2.214	.939	-2.350	1.620	2.245	-2.006
76	1.897	2.942	-1.889	1.356	-2.210	.953	-2.344	1.630	2.251	-2.004
77	1.895	2.955	-1.887	1.371	-2.205	.966	-2.339	1.641	2.259	-2.003
78	1.893	2.968	-1.886	1.386	-2.201	.980	-2.334	1.652	2.266	-2.002
79	1.892	2.974	-1.885	1.397	-2.198	.990	-2.330	1.658	2.268	-2.001
80	1.890	2.987	-1.883	1.411	-2.194	1.003	-2.325	1.669	2.276	-2.000
81	1.888	3.000	-1.881	1.426	-2.190	1.017	-2.320	1.680	2.283	-1.998
82	1.887	3.006	-1.880	1.437	-2.187	1.027	-2.316	1.686	2.286	-1.998
83	1.885	3.019	-1.878	1.451	-2.183	1.041	-2.311	1.697	2.294	-1.996
84	1.883	3.032	-1.876	1.466	-2.179	1.054	-2.306	1.708	2.302	-1.995
85	1.882	3.038	-1.875	1.477	-2.176	1.064	-2.303	1.715	2.305	-1.994
86	1.880	3.051	-1.873	1.491	-2.172	1.078	-2.298	1.726	2.313	-1.993
87	1.879	3.058	-1.872	1.502	-2.170	1.088	-2.295	1.733	2.317	-1.992
88	1.877	3.071	-1.870	1.516	-2.166	1.101	-2.290	1.744	2.325	-1.991
89	1.876	3.077	-1.870	1.527	-2.163	1.112	-2.286	1.751	2.329	-1.990
90	1.874	3.091	-1.868	1.541	-2.159	1.125	-2.282	1.762	2.337	-1.989
91	1.873	3.097	-1.867	1.552	-2.157	1.135	-2.278	1.769	2.341	-1.988
92	1.871	3.111	-1.865	1.566	-2.153	1.149	-2.274	1.780	2.350	-1.986
93	1.870	3.117	-1.864	1.577	-2.150	1.159	-2.271	1.787	2.354	-1.986
94	1.869	3.124	-1.863	1.587	-2.148	1.169	-2.267	1.794	2.358	-1.985
95	1.867	3.137	-1.861	1.601	-2.144	1.182	-2.263	1.805	2.367	-1.983
96	1.866	3.144	-1.860	1.612	-2.142	1.192	-2.260	1.812	2.371	-1.983
97	1.865	3.151	-1.859	1.622	-2.139	1.202	-2.257	1.819	2.375	-1.982
98	1.864	3.157	-1.858	1.632	-2.137	1.212	-2.253	1.826	2.379	-1.981
99	1.862	3.171	-1.856	1.646	-2.133	1.225	-2.249	1.837	2.389	-1.979

7.7 Variables Sampling Plans with LTPD = 5%

or K_{LTPD} = - 1.64485 (Continued)

n	k	IQ		AQL		ML		AOQL	
100	1.861	3.178	-1.855	1.656	-2.131	1.235	-2.246	1.844	2.393 -1.979
110	1.850	3.253	-1.845	1.760	-2.106	1.336	-2.216	1.919	2.445 -1.970
120	1.841	3.316	-1.836	1.851	-2.085	1.426	-2.190	1.985	2.490 -1.962
130	1.832	3.380	-1.828	1.940	-2.066	1.515	-2.166	2.051	2.539 -1.953
140	1.825	3.430	-1.821	2.017	-2.050	1.593	-2.146	2.107	2.579 -1.947
150	1.818	3.481	-1.814	2.092	-2.035	1.669	-2.128	2.164	2.621 -1.940
160	1.812	3.526	-1.809	2.160	-2.022	1.738	-2.111	2.215	2.659 -1.933
170	1.807	3.563	-1.804	2.220	-2.010	1.801	-2.097	2.261	2.693 -1.928
180	1.802	3.601	-1.799	2.279	-1.999	1.863	-2.083	2.306	2.727 -1.923
190	1.797	3.640	-1.794	2.337	-1.989	1.923	-2.070	2.351	2.762 -1.917
200	1.793	3.670	-1.790	2.388	-1.980	1.976	-2.059	2.390	2.791 -1.912
210	1.789	3.702	-1.786	2.437	-1.971	2.028	-2.048	2.429	2.821 -1.908
220	1.786	3.725	-1.784	2.479	-1.964	2.074	-2.039	2.461	2.845 -1.904
230	1.783	3.748	-1.781	2.521	-1.956	2.118	-2.030	2.494	2.870 -1.900
240	1.780	3.772	-1.778	2.561	-1.950	2.162	-2.021	2.526	2.894 -1.897
250	1.777	3.796	-1.775	2.600	-1.943	2.204	-2.013	2.557	2.919 -1.893
260	1.774	3.820	-1.772	2.639	-1.937	2.246	-2.005	2.589	2.944 -1.889
270	1.771	3.845	-1.769	2.677	-1.930	2.286	-1.998	2.620	2.969 -1.885
280	1.769	3.861	-1.767	2.708	-1.926	2.320	-1.992	2.645	2.988 -1.883
290	1.767	3.877	-1.765	2.738	-1.921	2.354	-1.986	2.669	3.006 -1.880
300	1.765	3.893	-1.763	2.768	-1.916	2.386	-1.980	2.693	3.025 -1.877
310	1.762	3.918	-1.760	2.804	-1.910	2.424	-1.973	2.723	3.051 -1.873
320	1.761	3.926	-1.759	2.826	-1.907	2.449	-1.969	2.740	3.063 -1.872
330	1.759	3.943	-1.757	2.854	-1.903	2.480	-1.963	2.764	3.084 -1.869
340	1.757	3.959	-1.755	2.881	-1.899	2.510	-1.958	2.787	3.100 -1.866
350	1.755	3.976	-1.753	2.909	-1.894	2.540	-1.953	2.810	3.119 -1.864
360	1.754	3.984	-1.753	2.929	-1.891	2.563	-1.949	2.826	3.131 -1.862
370	1.752	4.001	-1.751	2.955	-1.887	2.592	-1.945	2.849	3.150 -1.859
380	1.751	4.009	-1.750	2.974	-1.885	2.613	-1.941	2.864	3.161 -1.858
390	1.749	4.026	-1.748	3.000	-1.881	2.641	-1.936	2.887	3.180 -1.855
400	1.748	4.035	-1.747	3.018	-1.878	2.662	-1.933	2.902	3.192 -1.853
410	1.746	4.052	-1.745	3.044	-1.874	2.690	-1.929	2.924	3.211 -1.851
420	1.745	4.060	-1.744	3.061	-1.872	2.710	-1.925	2.939	3.222 -1.849
430	1.744	4.069	-1.743	3.079	-1.869	2.730	-1.922	2.954	3.234 -1.848
440	1.743	4.077	-1.742	3.096	-1.867	2.749	-1.919	2.968	3.245 -1.846
450	1.742	4.086	-1.741	3.113	-1.864	2.768	-1.916	2.983	3.257 -1.844
460	1.740	4.103	-1.739	3.137	-1.861	2.794	-1.912	3.004	3.275 -1.842
470	1.739	4.112	-1.738	3.153	-1.859	2.813	-1.909	3.018	3.287 -1.840
480	1.738	4.120	-1.737	3.170	-1.856	2.831	-1.906	3.033	3.298 -1.839
490	1.737	4.129	-1.736	3.186	-1.854	2.849	-1.903	3.047	3.310 -1.837
500	1.736	4.137	-1.735	3.202	-1.852	2.867	-1.901	3.060	3.321 -1.836
510	1.735	4.146	-1.734	3.217	-1.850	2.885	-1.898	3.074	3.332 -1.834
520	1.735	4.146	-1.734	3.225	-1.849	2.895	-1.896	3.081	3.336 -1.834
530	1.734	4.155	-1.733	3.241	-1.847	2.912	-1.894	3.094	3.347 -1.832
540	1.733	4.163	-1.732	3.256	-1.844	2.929	-1.891	3.108	3.358 -1.831

7.7 Variables Sampling Plans with LTPD = 5%

or K_{LTPD} = - 1.64485 (Continued)

n	k	IQ		AQL		ML		AOQL	
550	1.732	4.172	-1.731	3.271	-1.842	2.946	-1.889	3.121	3.369 -1.829
560	1.731	4.181	-1.730	3.286	-1.840	2.962	-1.886	3.134	3.381 -1.828
570	1.730	4.190	-1.729	3.300	-1.838	2.979	-1.884	3.147	3.392 -1.826
580	1.730	4.190	-1.729	3.307	-1.837	2.988	-1.883	3.153	3.395 -1.826
590	1.729	4.198	-1.728	3.321	-1.836	3.004	-1.880	3.166	3.406 -1.824
600	1.728	4.207	-1.727	3.336	-1.834	3.020	-1.878	3.179	3.417 -1.823
610	1.727	4.216	-1.726	3.350	-1.832	3.035	-1.876	3.192	3.428 -1.821
620	1.727	4.216	-1.726	3.356	-1.831	3.044	-1.874	3.197	3.431 -1.821
630	1.726	4.225	-1.725	3.370	-1.829	3.059	-1.872	3.210	3.442 -1.819
640	1.725	4.234	-1.724	3.384	-1.827	3.074	-1.870	3.222	3.453 -1.818
650	1.725	4.234	-1.724	3.390	-1.826	3.082	-1.869	3.227	3.456 -1.818
660	1.724	4.242	-1.723	3.403	-1.825	3.097	-1.867	3.240	3.467 -1.816
670	1.723	4.251	-1.722	3.417	-1.823	3.112	-1.865	3.252	3.478 -1.815
680	1.723	4.251	-1.722	3.422	-1.822	3.119	-1.864	3.257	3.481 -1.814
690	1.722	4.260	-1.721	3.436	-1.820	3.134	-1.862	3.269	3.492 -1.813
700	1.722	4.260	-1.721	3.441	-1.820	3.141	-1.861	3.274	3.495 -1.813
710	1.721	4.269	-1.720	3.454	-1.818	3.155	-1.858	3.286	3.505 -1.811
720	1.721	4.269	-1.720	3.459	-1.817	3.162	-1.858	3.290	3.508 -1.811
730	1.720	4.278	-1.719	3.472	-1.815	3.176	-1.856	3.302	3.519 -1.809
740	1.720	4.278	-1.719	3.477	-1.815	3.183	-1.855	3.307	3.522 -1.809
750	1.719	4.287	-1.718	3.490	-1.813	3.196	-1.853	3.319	3.532 -1.808
760	1.719	4.287	-1.718	3.495	-1.813	3.203	-1.852	3.323	3.535 -1.807
770	1.718	4.296	-1.717	3.508	-1.811	3.217	-1.850	3.335	3.545 -1.806
780	1.718	4.296	-1.717	3.512	-1.810	3.223	-1.849	3.339	3.548 -1.806
790	1.717	4.305	-1.716	3.525	-1.809	3.236	-1.847	3.351	3.559 -1.804
800	1.717	4.305	-1.716	3.529	-1.808	3.242	-1.846	3.355	3.561 -1.804
810	1.716	4.314	-1.715	3.542	-1.807	3.256	-1.844	3.366	3.572 -1.803
820	1.716	4.314	-1.715	3.546	-1.806	3.261	-1.844	3.370	3.574 -1.802
830	1.715	4.323	-1.714	3.558	-1.804	3.275	-1.842	3.382	3.585 -1.801
840	1.715	4.323	-1.714	3.562	-1.804	3.280	-1.841	3.385	3.587 -1.801
850	1.714	4.332	-1.713	3.575	-1.802	3.293	-1.839	3.397	3.598 -1.799
860	1.714	4.332	-1.713	3.579	-1.802	3.299	-1.839	3.401	3.600 -1.799
870	1.714	4.332	-1.713	3.583	-1.801	3.304	-1.838	3.404	3.602 -1.799
880	1.713	4.341	-1.712	3.595	-1.800	3.317	-1.836	3.416	3.613 -1.798
890	1.713	4.341	-1.712	3.599	-1.799	3.322	-1.835	3.419	3.615 -1.797
900	1.712	4.350	-1.711	3.610	-1.798	3.335	-1.834	3.430	3.625 -1.796
910	1.712	4.350	-1.711	3.614	-1.797	3.340	-1.833	3.434	3.628 -1.796
920	1.712	4.350	-1.711	3.618	-1.797	3.345	-1.832	3.437	3.630 -1.795
930	1.711	4.359	-1.710	3.630	-1.795	3.357	-1.831	3.448	3.640 -1.794
940	1.711	4.359	-1.710	3.633	-1.795	3.362	-1.830	3.452	3.642 -1.794
950	1.711	4.359	-1.710	3.637	-1.794	3.367	-1.829	3.455	3.645 -1.794
960	1.710	4.368	-1.709	3.648	-1.793	3.379	-1.828	3.466	3.655 -1.792
970	1.710	4.368	-1.709	3.652	-1.793	3.384	-1.827	3.469	3.657 -1.792
980	1.709	4.377	-1.708	3.663	-1.791	3.396	-1.826	3.480	3.667 -1.791
990	1.709	4.377	-1.708	3.667	-1.791	3.400	-1.825	3.483	3.669 -1.790
1000	1.709	4.377	-1.708	3.670	-1.790	3.405	-1.824	3.487	3.671 -1.790

7.8 Variables Sampling Plans with LTPD = 4%

or $K_{LTPD} = -1.75069$

n	k	IQ		AQL		ML		AOQL		
10	2.717	.438	-2.621	.006	-3.840	.001	-4.371	.420	2.672	-1.931
11	2.647	.518	-2.563	.011	-3.694	.001	-4.186	.434	2.431	-1.972
12	2.590	.594	-2.516	.018	-3.574	.003	-4.034	.448	2.251	-2.005
13	2.542	.666	-2.475	.026	-3.473	.005	-3.906	.463	2.112	-2.031
14	2.501	.733	-2.441	.035	-3.387	.007	-3.796	.479	2.005	-2.053
15	2.465	.798	-2.410	.046	-3.311	.011	-3.700	.495	1.920	-2.070
16	2.433	.861	-2.382	.059	-3.244	.015	-3.615	.512	1.854	-2.085
17	2.406	.916	-2.359	.072	-3.186	.020	-3.541	.528	1.798	-2.097
18	2.381	.971	-2.337	.087	-3.133	.026	-3.474	.545	1.754	-2.108
19	2.358	1.025	-2.317	.102	-3.084	.032	-3.413	.562	1.719	-2.116
20	2.338	1.073	-2.300	.118	-3.041	.039	-3.359	.578	1.688	-2.123
21	2.319	1.122	-2.283	.134	-3.001	.047	-3.309	.595	1.665	-2.128
22	2.302	1.167	-2.268	.151	-2.965	.055	-3.263	.611	1.645	-2.133
23	2.287	1.208	-2.255	.168	-2.932	.064	-3.222	.626	1.627	-2.138
24	2.272	1.250	-2.241	.186	-2.900	.073	-3.182	.643	1.615	-2.141
25	2.259	1.288	-2.230	.204	-2.872	.083	-3.147	.658	1.603	-2.144
26	2.246	1.327	-2.218	.222	-2.845	.093	-3.112	.674	1.595	-2.146
27	2.235	1.361	-2.208	.240	-2.821	.103	-3.082	.688	1.586	-2.148
28	2.224	1.396	-2.198	.258	-2.797	.114	-3.052	.703	1.581	-2.149
29	2.214	1.428	-2.190	.276	-2.775	.124	-3.025	.718	1.576	-2.150
30	2.204	1.461	-2.180	.294	-2.754	.136	-2.998	.733	1.574	-2.151
31	2.195	1.491	-2.172	.312	-2.734	.147	-2.974	.747	1.572	-2.151
32	2.186	1.522	-2.164	.331	-2.715	.159	-2.950	.762	1.572	-2.151
33	2.178	1.550	-2.157	.349	-2.698	.171	-2.928	.775	1.571	-2.152
34	2.170	1.579	-2.150	.367	-2.681	.183	-2.907	.790	1.573	-2.151
35	2.163	1.604	-2.143	.384	-2.666	.194	-2.887	.802	1.572	-2.151
36	2.156	1.630	-2.137	.402	-2.650	.206	-2.868	.816	1.574	-2.151
37	2.149	1.656	-2.131	.420	-2.636	.219	-2.850	.829	1.577	-2.150
38	2.143	1.679	-2.125	.437	-2.622	.230	-2.833	.842	1.578	-2.150
39	2.137	1.702	-2.120	.454	-2.609	.243	-2.817	.854	1.580	-2.149
40	2.131	1.725	-2.114	.471	-2.596	.255	-2.801	.867	1.583	-2.149
41	2.126	1.745	-2.110	.487	-2.585	.267	-2.786	.878	1.585	-2.148
42	2.120	1.769	-2.104	.505	-2.572	.279	-2.771	.892	1.590	-2.147
43	2.115	1.789	-2.099	.521	-2.561	.292	-2.757	.903	1.593	-2.146
44	2.110	1.809	-2.095	.538	-2.551	.304	-2.744	.915	1.597	-2.145
45	2.105	1.830	-2.090	.554	-2.540	.316	-2.730	.927	1.602	-2.144
46	2.101	1.846	-2.087	.569	-2.531	.328	-2.719	.937	1.604	-2.143
47	2.097	1.863	-2.083	.584	-2.522	.339	-2.707	.948	1.607	-2.143
48	2.092	1.884	-2.078	.601	-2.512	.352	-2.695	.961	1.614	-2.141
49	2.088	1.901	-2.075	.616	-2.503	.364	-2.684	.971	1.618	-2.140
50	2.084	1.918	-2.071	.632	-2.494	.376	-2.673	.982	1.622	-2.139
51	2.080	1.936	-2.067	.647	-2.485	.388	-2.662	.993	1.627	-2.138
52	2.077	1.949	-2.064	.660	-2.478	.399	-2.653	1.002	1.629	-2.137
53	2.073	1.966	-2.061	.676	-2.470	.411	-2.643	1.014	1.635	-2.136
54	2.070	1.979	-2.058	.689	-2.463	.422	-2.634	1.023	1.638	-2.135

7.8 Variables Sampling Plans with LTPD = 4%

or $K_{LTPD} = -1.75069$ (Continued)

n	k	IQ		AQL		ML		AOQL	
55	2.066	1.998	-2.054	.705	-2.455	.435	-2.624	1.034	1.645 -2.133
56	2.063	2.011	-2.051	.719	-2.448	.446	-2.615	1.044	1.649 -2.132
57	2.060	2.025	-2.049	.732	-2.441	.457	-2.607	1.053	1.653 -2.131
58	2.057	2.038	-2.046	.746	-2.434	.468	-2.598	1.062	1.658 -2.130
59	2.054	2.052	-2.043	.759	-2.428	.480	-2.590	1.072	1.663 -2.129
60	2.051	2.066	-2.040	.773	-2.421	.491	-2.582	1.082	1.668 -2.128
61	2.048	2.080	-2.038	.787	-2.415	.502	-2.574	1.091	1.673 -2.126
62	2.045	2.094	-2.035	.801	-2.409	.514	-2.566	1.101	1.679 -2.125
63	2.043	2.103	-2.033	.812	-2.404	.524	-2.560	1.109	1.681 -2.125
64	2.040	2.117	-2.030	.826	-2.397	.535	-2.552	1.119	1.687 -2.123
65	2.037	2.132	-2.027	.839	-2.391	.547	-2.545	1.129	1.694 -2.122
66	2.035	2.141	-2.025	.851	-2.386	.557	-2.539	1.136	1.697 -2.121
67	2.032	2.156	-2.023	.865	-2.380	.568	-2.531	1.147	1.704 -2.119
68	2.030	2.165	-2.021	.876	-2.376	.578	-2.525	1.154	1.707 -2.118
69	2.028	2.175	-2.019	.887	-2.371	.588	-2.519	1.162	1.711 -2.117
70	2.026	2.185	-2.017	.899	-2.366	.598	-2.513	1.169	1.715 -2.117
71	2.023	2.200	-2.014	.913	-2.360	.610	-2.506	1.180	1.723 -2.115
72	2.021	2.209	-2.012	.924	-2.356	.620	-2.501	1.188	1.727 -2.114
73	2.019	2.219	-2.010	.935	-2.351	.630	-2.495	1.196	1.731 -2.113
74	2.017	2.229	-2.009	.946	-2.347	.640	-2.489	1.204	1.736 -2.112
75	2.015	2.239	-2.007	.958	-2.343	.650	-2.484	1.211	1.740 -2.111
76	2.013	2.249	-2.005	.969	-2.338	.660	-2.479	1.219	1.745 -2.109
77	2.011	2.259	-2.003	.980	-2.334	.670	-2.473	1.227	1.750 -2.108
78	2.009	2.270	-2.001	.991	-2.330	.680	-2.468	1.235	1.755 -2.107
79	2.007	2.280	-1.999	1.003	-2.325	.690	-2.463	1.244	1.760 -2.106
80	2.006	2.285	-1.998	1.011	-2.322	.697	-2.459	1.248	1.762 -2.106
81	2.004	2.295	-1.996	1.022	-2.318	.707	-2.454	1.257	1.767 -2.104
82	2.002	2.305	-1.994	1.033	-2.314	.717	-2.448	1.265	1.773 -2.103
83	2.000	2.316	-1.993	1.045	-2.310	.727	-2.443	1.273	1.779 -2.102
84	1.999	2.321	-1.992	1.053	-2.307	.735	-2.440	1.278	1.780 -2.101
85	1.997	2.331	-1.990	1.064	-2.303	.745	-2.435	1.286	1.786 -2.100
86	1.995	2.342	-1.988	1.075	-2.299	.755	-2.430	1.295	1.792 -2.099
87	1.994	2.347	-1.987	1.083	-2.296	.763	-2.426	1.300	1.795 -2.098
88	1.992	2.357	-1.985	1.095	-2.292	.773	-2.421	1.308	1.801 -2.097
89	1.991	2.362	-1.984	1.103	-2.289	.781	-2.418	1.314	1.803 -2.096
90	1.989	2.373	-1.982	1.114	-2.286	.791	-2.413	1.322	1.810 -2.095
91	1.988	2.378	-1.981	1.122	-2.283	.798	-2.410	1.327	1.812 -2.094
92	1.986	2.389	-1.979	1.133	-2.279	.808	-2.405	1.336	1.819 -2.093
93	1.985	2.394	-1.978	1.141	-2.276	.816	-2.402	1.341	1.821 -2.092
94	1.984	2.399	-1.977	1.149	-2.274	.824	-2.398	1.346	1.824 -2.092
95	1.982	2.410	-1.976	1.160	-2.270	.834	-2.394	1.355	1.831 -2.090
96	1.981	2.415	-1.975	1.168	-2.267	.841	-2.391	1.360	1.833 -2.089
97	1.980	2.421	-1.974	1.176	-2.265	.849	-2.387	1.365	1.836 -2.089
98	1.978	2.432	-1.972	1.187	-2.261	.859	-2.383	1.374	1.843 -2.087
99	1.977	2.437	-1.971	1.195	-2.259	.866	-2.380	1.379	1.846 -2.087

7.8 Variables Sampling Plans with LTPD = 4%

or K_{LTPD} = - 1.75069 (Continued)

n	k	IQ		AQL		ML		AOQL		
100	1.976	2.442	-1.970	1.203	-2.256	.874	-2.377	1.385	1.849	-2.086
110	1.964	2.509	-1.959	1.287	-2.230	.953	-2.344	1.445	1.891	-2.077
120	1.954	2.565	-1.949	1.362	-2.208	1.026	-2.317	1.500	1.928	-2.069
130	1.945	2.617	-1.940	1.432	-2.188	1.094	-2.292	1.551	1.965	-2.061
140	1.938	2.657	-1.934	1.493	-2.172	1.154	-2.272	1.594	1.995	-2.055
150	1.931	2.699	-1.927	1.552	-2.157	1.213	-2.253	1.638	2.026	-2.048
160	1.925	2.735	-1.921	1.605	-2.143	1.268	-2.236	1.678	2.055	-2.043
170	1.919	2.771	-1.916	1.658	-2.130	1.321	-2.220	1.718	2.085	-2.037
180	1.914	2.802	-1.911	1.705	-2.119	1.369	-2.206	1.753	2.111	-2.031
190	1.909	2.833	-1.906	1.751	-2.108	1.416	-2.193	1.788	2.138	-2.026
200	1.905	2.858	-1.902	1.792	-2.099	1.459	-2.181	1.819	2.160	-2.022
210	1.901	2.883	-1.898	1.831	-2.090	1.500	-2.170	1.849	2.183	-2.017
220	1.897	2.909	-1.894	1.870	-2.081	1.540	-2.160	1.880	2.207	-2.013
230	1.894	2.928	-1.891	1.903	-2.074	1.576	-2.151	1.905	2.226	-2.009
240	1.891	2.947	-1.889	1.936	-2.067	1.610	-2.142	1.930	2.244	-2.006
250	1.888	2.967	-1.886	1.968	-2.060	1.644	-2.134	1.955	2.264	-2.002
260	1.885	2.986	-1.883	1.999	-2.054	1.677	-2.126	1.980	2.283	-1.999
270	1.882	3.006	-1.880	2.030	-2.048	1.710	-2.118	2.005	2.303	-1.995
280	1.880	3.019	-1.878	2.055	-2.043	1.737	-2.111	2.024	2.317	-1.992
290	1.877	3.039	-1.875	2.084	-2.037	1.769	-2.104	2.049	2.337	-1.989
300	1.875	3.053	-1.873	2.109	-2.032	1.795	-2.098	2.068	2.352	-1.986
310	1.873	3.066	-1.871	2.132	-2.027	1.820	-2.092	2.087	2.366	-1.983
320	1.871	3.080	-1.869	2.155	-2.023	1.846	-2.087	2.106	2.381	-1.981
330	1.869	3.093	-1.867	2.178	-2.018	1.870	-2.081	2.124	2.396	-1.978
340	1.867	3.107	-1.865	2.201	-2.014	1.895	-2.076	2.143	2.411	-1.975
350	1.865	3.120	-1.863	2.223	-2.010	1.919	-2.071	2.161	2.425	-1.973
360	1.864	3.127	-1.862	2.239	-2.007	1.937	-2.067	2.174	2.435	-1.971
370	1.862	3.141	-1.860	2.261	-2.003	1.960	-2.062	2.192	2.450	-1.969
380	1.860	3.155	-1.859	2.282	-1.999	1.983	-2.057	2.210	2.464	-1.966
390	1.859	3.162	-1.858	2.297	-1.996	2.001	-2.054	2.223	2.474	-1.964
400	1.858	3.168	-1.857	2.312	-1.993	2.018	-2.050	2.235	2.483	-1.963
410	1.856	3.182	-1.855	2.333	-1.989	2.040	-2.046	2.252	2.498	-1.960
420	1.855	3.189	-1.854	2.348	-1.987	2.056	-2.042	2.264	2.507	-1.959
430	1.854	3.196	-1.853	2.362	-1.984	2.073	-2.039	2.276	2.516	-1.957
440	1.852	3.210	-1.851	2.382	-1.981	2.094	-2.035	2.294	2.531	-1.955
450	1.851	3.217	-1.850	2.396	-1.978	2.109	-2.032	2.305	2.540	-1.953
460	1.850	3.224	-1.849	2.409	-1.976	2.125	-2.029	2.317	2.549	-1.952
470	1.849	3.232	-1.848	2.423	-1.973	2.140	-2.026	2.328	2.558	-1.950
480	1.848	3.239	-1.847	2.436	-1.971	2.155	-2.023	2.340	2.567	-1.949
490	1.847	3.246	-1.846	2.449	-1.969	2.170	-2.020	2.351	2.576	-1.947
500	1.846	3.253	-1.845	2.462	-1.966	2.184	-2.017	2.362	2.585	-1.946
510	1.845	3.260	-1.844	2.475	-1.964	2.199	-2.014	2.373	2.594	-1.944
520	1.844	3.267	-1.843	2.488	-1.962	2.213	-2.012	2.384	2.603	-1.943
530	1.843	3.274	-1.842	2.501	-1.960	2.227	-2.009	2.395	2.612	-1.941
540	1.842	3.281	-1.841	2.513	-1.958	2.241	-2.006	2.406	2.621	-1.940

7.8 Variables Sampling Plans with LTPD = 4%

or K_{LTPD} = - 1.75069 (Continued)

n	k	IQ		AQL		ML		AOQL	
550	1.841	3.289	-1.840	2.525	-1.956	2.254	-2.004	2.417	2.630 -1.938
560	1.840	3.296	-1.839	2.538	-1.954	2.268	-2.001	2.427	2.639 -1.937
570	1.839	3.303	-1.838	2.550	-1.952	2.281	-1.999	2.438	2.648 -1.935
580	1.839	3.303	-1.838	2.555	-1.951	2.289	-1.997	2.443	2.650 -1.935
590	1.838	3.310	-1.837	2.567	-1.949	2.302	-1.995	2.453	2.659 -1.933
600	1.837	3.317	-1.836	2.579	-1.947	2.315	-1.993	2.463	2.668 -1.932
610	1.836	3.325	-1.835	2.591	-1.945	2.328	-1.990	2.474	2.677 -1.931
620	1.836	3.325	-1.835	2.596	-1.944	2.335	-1.989	2.478	2.679 -1.930
630	1.835	3.332	-1.834	2.607	-1.942	2.347	-1.987	2.488	2.688 -1.929
640	1.834	3.339	-1.833	2.619	-1.940	2.360	-1.985	2.499	2.697 -1.927
650	1.834	3.339	-1.833	2.624	-1.939	2.366	-1.983	2.503	2.699 -1.927
660	1.833	3.346	-1.832	2.635	-1.937	2.378	-1.981	2.513	2.708 -1.926
670	1.832	3.354	-1.831	2.646	-1.936	2.390	-1.979	2.523	2.717 -1.924
680	1.832	3.354	-1.831	2.651	-1.935	2.397	-1.978	2.527	2.719 -1.924
690	1.831	3.361	-1.830	2.662	-1.933	2.408	-1.976	2.537	2.728 -1.922
700	1.831	3.361	-1.830	2.666	-1.932	2.414	-1.975	2.540	2.730 -1.922
710	1.830	3.368	-1.829	2.677	-1.931	2.426	-1.973	2.550	2.739 -1.921
720	1.829	3.376	-1.828	2.688	-1.929	2.438	-1.971	2.560	2.747 -1.919
730	1.829	3.376	-1.828	2.692	-1.928	2.443	-1.970	2.564	2.750 -1.919
740	1.828	3.383	-1.827	2.702	-1.926	2.455	-1.968	2.573	2.758 -1.918
750	1.828	3.383	-1.827	2.707	-1.926	2.460	-1.967	2.577	2.760 -1.917
760	1.827	3.390	-1.826	2.717	-1.924	2.472	-1.965	2.586	2.769 -1.916
770	1.827	3.390	-1.826	2.721	-1.923	2.477	-1.964	2.590	2.771 -1.916
780	1.826	3.398	-1.825	2.731	-1.922	2.488	-1.962	2.599	2.779 -1.914
790	1.826	3.398	-1.825	2.735	-1.921	2.493	-1.961	2.603	2.782 -1.914
800	1.825	3.405	-1.824	2.745	-1.920	2.504	-1.959	2.612	2.790 -1.913
810	1.825	3.405	-1.824	2.749	-1.919	2.509	-1.958	2.615	2.792 -1.912
820	1.824	3.413	-1.823	2.759	-1.917	2.520	-1.957	2.625	2.801 -1.911
830	1.824	3.413	-1.823	2.763	-1.917	2.525	-1.956	2.628	2.803 -1.911
840	1.823	3.420	-1.822	2.773	-1.915	2.535	-1.954	2.637	2.811 -1.909
850	1.823	3.420	-1.822	2.776	-1.915	2.540	-1.953	2.640	2.813 -1.909
860	1.822	3.428	-1.821	2.786	-1.913	2.551	-1.951	2.650	2.821 -1.908
870	1.822	3.428	-1.821	2.790	-1.913	2.555	-1.951	2.653	2.823 -1.907
880	1.822	3.428	-1.821	2.793	-1.912	2.559	-1.950	2.656	2.825 -1.907
890	1.821	3.435	-1.820	2.803	-1.911	2.570	-1.948	2.665	2.834 -1.906
900	1.821	3.435	-1.820	2.806	-1.910	2.574	-1.947	2.668	2.835 -1.906
910	1.820	3.443	-1.819	2.816	-1.909	2.585	-1.946	2.677	2.844 -1.904
920	1.820	3.443	-1.819	2.819	-1.908	2.589	-1.945	2.680	2.846 -1.904
930	1.820	3.442	-1.819	2.822	-1.908	2.593	-1.944	2.682	2.847 -1.904
940	1.819	3.450	-1.818	2.832	-1.906	2.603	-1.943	2.691	2.856 -1.902
950	1.819	3.450	-1.818	2.835	-1.906	2.607	-1.942	2.694	2.857 -1.902
960	1.818	3.458	-1.817	2.844	-1.904	2.617	-1.940	2.703	2.866 -1.901
970	1.818	3.458	-1.817	2.847	-1.904	2.621	-1.940	2.706	2.867 -1.901
980	1.818	3.457	-1.817	2.850	-1.903	2.625	-1.939	2.708	2.869 -1.900
990	1.817	3.465	-1.816	2.860	-1.902	2.635	-1.937	2.717	2.877 -1.899
1000	1.817	3.465	-1.816	2.862	-1.901	2.639	-1.937	2.720	2.879 -1.899

7.9 Variables Sampling Plans with LTPD = 3%

or $K_{LTPD} = -1.88079$

n	k	IQ		AQL		ML		AOQL		
10	2.900	.258	-2.797	.002	-4.084	.000	-4.646	.305	2.345	-1.987
11	2.826	.311	-2.736	.004	-3.930	.000	-4.450	.311	2.099	-2.034
12	2.765	.362	-2.685	.007	-3.802	.001	-4.287	.319	1.915	-2.072
13	2.714	.412	-2.642	.011	-3.695	.002	-4.151	.328	1.774	-2.103
14	2.671	.458	-2.606	.016	-3.604	.003	-4.035	.337	1.663	-2.129
15	2.633	.503	-2.574	.021	-3.523	.004	-3.934	.346	1.576	-2.151
16	2.599	.547	-2.544	.028	-3.452	.006	-3.844	.357	1.507	-2.168
17	2.570	.588	-2.519	.035	-3.390	.008	-3.765	.367	1.449	-2.184
18	2.544	.626	-2.497	.043	-3.335	.011	-3.695	.377	1.401	-2.197
19	2.520	.664	-2.476	.051	-3.284	.014	-3.631	.388	1.363	-2.208
20	2.498	.701	-2.457	.060	-3.237	.018	-3.572	.399	1.332	-2.217
21	2.479	.734	-2.440	.070	-3.196	.022	-3.521	.409	1.303	-2.225
22	2.461	.767	-2.424	.079	-3.158	.026	-3.472	.420	1.281	-2.232
23	2.444	.799	-2.409	.090	-3.122	.031	-3.427	.431	1.262	-2.238
24	2.429	.829	-2.396	.100	-3.089	.035	-3.386	.441	1.246	-2.243
25	2.415	.857	-2.384	.111	-3.059	.041	-3.348	.451	1.232	-2.247
26	2.402	.885	-2.372	.122	-3.031	.046	-3.313	.461	1.220	-2.251
27	2.389	.913	-2.360	.133	-3.004	.052	-3.279	.472	1.211	-2.253
28	2.378	.937	-2.351	.144	-2.980	.058	-3.248	.481	1.202	-2.256
29	2.367	.963	-2.341	.156	-2.956	.064	-3.219	.491	1.196	-2.259
30	2.357	.986	-2.332	.167	-2.935	.071	-3.192	.501	1.190	-2.260
31	2.347	1.010	-2.323	.179	-2.913	.078	-3.165	.511	1.186	-2.262
32	2.338	1.032	-2.315	.190	-2.894	.084	-3.141	.521	1.182	-2.263
33	2.330	1.052	-2.307	.201	-2.876	.091	-3.118	.529	1.178	-2.264
34	2.322	1.072	-2.300	.213	-2.859	.098	-3.096	.538	1.175	-2.265
35	2.314	1.093	-2.293	.224	-2.842	.105	-3.075	.548	1.174	-2.266
36	2.306	1.114	-2.286	.236	-2.825	.113	-3.054	.558	1.174	-2.266
37	2.299	1.133	-2.279	.248	-2.810	.120	-3.035	.567	1.173	-2.266
38	2.293	1.149	-2.274	.259	-2.796	.127	-3.018	.575	1.171	-2.266
39	2.286	1.169	-2.267	.271	-2.781	.135	-3.000	.584	1.173	-2.266
40	2.280	1.185	-2.262	.282	-2.768	.143	-2.983	.593	1.173	-2.266
41	2.274	1.202	-2.256	.293	-2.755	.150	-2.967	.601	1.173	-2.266
42	2.269	1.217	-2.252	.304	-2.744	.158	-2.953	.609	1.173	-2.266
43	2.263	1.234	-2.246	.315	-2.731	.166	-2.937	.618	1.176	-2.265
44	2.258	1.249	-2.242	.326	-2.720	.173	-2.923	.626	1.177	-2.265
45	2.253	1.264	-2.237	.337	-2.710	.181	-2.910	.634	1.178	-2.264
46	2.248	1.279	-2.233	.348	-2.699	.189	-2.896	.642	1.180	-2.263
47	2.244	1.291	-2.229	.358	-2.689	.196	-2.885	.649	1.181	-2.263
48	2.239	1.307	-2.224	.369	-2.679	.204	-2.872	.658	1.184	-2.262
49	2.235	1.319	-2.221	.379	-2.670	.212	-2.860	.665	1.185	-2.262
50	2.231	1.332	-2.217	.389	-2.661	.219	-2.849	.672	1.187	-2.261
51	2.227	1.344	-2.213	.400	-2.652	.227	-2.838	.680	1.189	-2.261
52	2.223	1.357	-2.210	.410	-2.644	.235	-2.827	.687	1.192	-2.260
53	2.219	1.370	-2.206	.420	-2.635	.242	-2.817	.695	1.195	-2.259
54	2.215	1.383	-2.202	.431	-2.627	.250	-2.807	.703	1.199	-2.258

7.9 Variables Sampling Plans with LTPD = 3%

or K_{LTPD} = - 1.88079 (Continued)

n	k	IQ	AQL	ML	AOQL
55	2.212	1.393 -2.199	.440 -2.620	.258 -2.797	.709 1.200 -2.257
56	2.208	1.406 -2.196	.451 -2.612	.266 -2.787	.717 1.204 -2.256
57	2.205	1.416 -2.193	.460 -2.605	.273 -2.779	.723 1.206 -2.255
58	2.202	1.426 -2.190	.469 -2.598	.280 -2.770	.730 1.208 -2.255
59	2.199	1.436 -2.187	.478 -2.591	.288 -2.762	.736 1.211 -2.254
60	2.196	1.446 -2.184	.488 -2.584	.295 -2.753	.743 1.213 -2.253
61	2.193	1.457 -2.182	.497 -2.578	.302 -2.745	.749 1.216 -2.252
62	2.190	1.467 -2.179	.506 -2.571	.310 -2.737	.756 1.220 -2.251
63	2.187	1.477 -2.176	.516 -2.565	.317 -2.729	.763 1.223 -2.250
64	2.184	1.488 -2.173	.525 -2.559	.325 -2.721	.770 1.227 -2.249
65	2.181	1.499 -2.170	.535 -2.552	.333 -2.714	.777 1.231 -2.247
66	2.179	1.505 -2.169	.543 -2.547	.339 -2.707	.782 1.232 -2.247
67	2.176	1.516 -2.166	.552 -2.541	.347 -2.700	.789 1.236 -2.246
68	2.174	1.523 -2.164	.560 -2.536	.353 -2.694	.794 1.238 -2.245
69	2.171	1.534 -2.161	.570 -2.530	.361 -2.686	.801 1.243 -2.244
70	2.169	1.541 -2.159	.577 -2.526	.368 -2.680	.807 1.245 -2.243
71	2.167	1.549 -2.157	.585 -2.521	.375 -2.674	.812 1.247 -2.242
72	2.164	1.560 -2.155	.595 -2.515	.383 -2.667	.819 1.252 -2.241
73	2.162	1.567 -2.153	.603 -2.510	.389 -2.661	.825 1.255 -2.240
74	2.160	1.574 -2.151	.611 -2.506	.396 -2.656	.830 1.257 -2.239
75	2.158	1.582 -2.149	.619 -2.501	.403 -2.650	.836 1.260 -2.238
76	2.156	1.589 -2.147	.626 -2.497	.409 -2.644	.841 1.263 -2.237
77	2.154	1.597 -2.145	.634 -2.492	.416 -2.639	.847 1.266 -2.237
78	2.152	1.604 -2.143	.642 -2.488	.423 -2.633	.852 1.269 -2.236
79	2.150	1.612 -2.141	.650 -2.484	.430 -2.628	.858 1.272 -2.235
80	2.148	1.619 -2.140	.658 -2.479	.436 -2.623	.863 1.275 -2.234
81	2.146	1.627 -2.138	.666 -2.475	.443 -2.617	.869 1.279 -2.233
82	2.144	1.635 -2.136	.674 -2.471	.450 -2.612	.875 1.283 -2.231
83	2.143	1.638 -2.135	.680 -2.468	.455 -2.608	.878 1.283 -2.231
84	2.141	1.646 -2.133	.687 -2.464	.462 -2.603	.884 1.287 -2.230
85	2.139	1.654 -2.131	.695 -2.460	.469 -2.598	.890 1.291 -2.229
86	2.137	1.662 -2.129	.703 -2.456	.476 -2.593	.896 1.295 -2.228
87	2.136	1.665 -2.128	.709 -2.453	.481 -2.589	.899 1.296 -2.227
88	2.134	1.673 -2.126	.717 -2.449	.488 -2.584	.905 1.300 -2.226
89	2.132	1.681 -2.125	.725 -2.445	.495 -2.579	.911 1.304 -2.225
90	2.131	1.685 -2.124	.731 -2.442	.500 -2.576	.915 1.305 -2.225
91	2.129	1.693 -2.122	.739 -2.438	.507 -2.571	.921 1.310 -2.223
92	2.128	1.697 -2.121	.744 -2.435	.512 -2.567	.924 1.311 -2.223
93	2.126	1.705 -2.119	.752 -2.431	.519 -2.563	.930 1.316 -2.222
94	2.125	1.709 -2.118	.758 -2.429	.524 -2.559	.934 1.317 -2.221
95	2.123	1.717 -2.116	.766 -2.425	.531 -2.555	.940 1.322 -2.220
96	2.122	1.721 -2.115	.771 -2.422	.537 -2.551	.944 1.323 -2.219
97	2.121	1.725 -2.114	.777 -2.420	.542 -2.548	.947 1.325 -2.219
98	2.119	1.733 -2.112	.785 -2.416	.549 -2.543	.953 1.330 -2.217
99	2.118	1.737 -2.111	.791 -2.413	.554 -2.540	.957 1.332 -2.217

7.9 Variables Sampling Plans with LTPD = 3%

or K_{LTPD} = - 1.88079 (Continued)

n	k	IQ	AQL	ML	AOQL
100	2.117	1.741 -2.110	.796 -2.411	.559 -2.537	.961 1.334 -2.216
110	2.105	1.791 -2.099	.856 -2.384	.615 -2.504	1.003 1.361 -2.208
120	2.094	1.837 -2.089	.913 -2.360	.668 -2.474	1.045 1.389 -2.200
130	2.085	1.876 -2.080	.964 -2.340	.716 -2.449	1.081 1.413 -2.194
140	2.077	1.911 -2.072	1.011 -2.322	.761 -2.427	1.115 1.437 -2.187
150	2.070	1.943 -2.066	1.055 -2.306	.804 -2.407	1.146 1.458 -2.181
160	2.063	1.975 -2.059	1.097 -2.291	.845 -2.389	1.178 1.482 -2.175
170	2.057	2.002 -2.053	1.136 -2.278	.884 -2.372	1.207 1.502 -2.169
180	2.052	2.026 -2.048	1.171 -2.267	.919 -2.358	1.232 1.521 -2.165
190	2.047	2.049 -2.044	1.205 -2.256	.953 -2.344	1.258 1.539 -2.160
200	2.042	2.073 -2.039	1.239 -2.245	.987 -2.331	1.284 1.559 -2.155
210	2.038	2.092 -2.035	1.268 -2.236	1.017 -2.320	1.306 1.575 -2.151
220	2.034	2.112 -2.031	1.297 -2.227	1.047 -2.309	1.328 1.592 -2.146
230	2.031	2.127 -2.028	1.322 -2.220	1.073 -2.300	1.347 1.605 -2.143
240	2.027	2.146 -2.024	1.350 -2.211	1.102 -2.290	1.369 1.622 -2.139
250	2.024	2.161 -2.022	1.374 -2.205	1.127 -2.281	1.387 1.636 -2.135
260	2.021	2.176 -2.019	1.398 -2.198	1.152 -2.273	1.405 1.650 -2.132
270	2.018	2.192 -2.016	1.421 -2.191	1.176 -2.265	1.423 1.664 -2.129
280	2.016	2.202 -2.014	1.440 -2.186	1.196 -2.258	1.438 1.675 -2.126
290	2.013	2.217 -2.011	1.463 -2.180	1.220 -2.251	1.456 1.689 -2.123
300	2.011	2.227 -2.009	1.481 -2.175	1.240 -2.245	1.470 1.700 -2.120
310	2.009	2.237 -2.007	1.499 -2.170	1.259 -2.239	1.484 1.710 -2.118
320	2.007	2.248 -2.005	1.516 -2.166	1.278 -2.233	1.498 1.721 -2.115
330	2.005	2.258 -2.003	1.534 -2.161	1.296 -2.227	1.512 1.731 -2.113
340	2.003	2.269 -2.001	1.551 -2.157	1.315 -2.222	1.526 1.742 -2.110
350	2.001	2.279 -1.999	1.568 -2.153	1.333 -2.217	1.539 1.753 -2.108
360	1.999	2.290 -1.997	1.584 -2.148	1.350 -2.211	1.553 1.764 -2.105
370	1.997	2.300 -1.995	1.601 -2.144	1.368 -2.206	1.566 1.775 -2.103
380	1.996	2.305 -1.994	1.613 -2.141	1.381 -2.203	1.576 1.782 -2.101
390	1.994	2.316 -1.992	1.629 -2.137	1.398 -2.198	1.589 1.793 -2.099
400	1.993	2.321 -1.991	1.640 -2.134	1.411 -2.194	1.598 1.799 -2.097
410	1.991	2.332 -1.990	1.656 -2.131	1.428 -2.189	1.611 1.810 -2.095
420	1.990	2.338 -1.989	1.667 -2.128	1.441 -2.186	1.620 1.817 -2.093
430	1.988	2.348 -1.987	1.683 -2.124	1.457 -2.182	1.633 1.828 -2.091
440	1.987	2.354 -1.986	1.694 -2.122	1.469 -2.178	1.642 1.835 -2.089
450	1.986	2.359 -1.985	1.704 -2.119	1.481 -2.175	1.651 1.841 -2.088
460	1.985	2.365 -1.984	1.715 -2.117	1.493 -2.172	1.660 1.848 -2.086
470	1.984	2.370 -1.983	1.725 -2.114	1.504 -2.169	1.668 1.855 -2.085
480	1.982	2.381 -1.981	1.740 -2.111	1.520 -2.165	1.681 1.866 -2.082
490	1.981	2.387 -1.980	1.750 -2.108	1.531 -2.162	1.689 1.873 -2.081
500	1.980	2.392 -1.979	1.760 -2.106	1.542 -2.159	1.698 1.879 -2.079
510	1.979	2.397 -1.978	1.770 -2.104	1.553 -2.156	1.706 1.886 -2.078
520	1.978	2.403 -1.977	1.780 -2.101	1.564 -2.153	1.714 1.893 -2.076
530	1.977	2.409 -1.976	1.790 -2.099	1.575 -2.151	1.723 1.899 -2.075
540	1.976	2.414 -1.975	1.799 -2.097	1.585 -2.148	1.731 1.906 -2.074

7.9 Variables Sampling Plans with LTPD = 3%

or K_{LTPD} = -1.88079 (Continued)

n	k	IQ	AQL	ML	AOQL
550	1.975	2.420 -1.974	1.809 -2.095	1.596 -2.145	1.739 1.913 -2.072
560	1.975	2.420 -1.974	1.813 -2.094	1.602 -2.144	1.743 1.915 -2.072
570	1.974	2.425 -1.973	1.823 -2.092	1.612 -2.141	1.751 1.921 -2.070
580	1.973	2.431 -1.972	1.832 -2.090	1.622 -2.139	1.759 1.928 -2.069
590	1.972	2.436 -1.971	1.841 -2.088	1.632 -2.136	1.767 1.934 -2.067
600	1.971	2.442 -1.970	1.850 -2.086	1.642 -2.134	1.774 1.941 -2.066
610	1.971	2.442 -1.970	1.854 -2.085	1.648 -2.133	1.778 1.943 -2.066
620	1.970	2.447 -1.969	1.863 -2.083	1.658 -2.130	1.786 1.950 -2.064
630	1.969	2.453 -1.968	1.872 -2.081	1.667 -2.128	1.793 1.956 -2.063
640	1.968	2.459 -1.967	1.881 -2.079	1.677 -2.126	1.801 1.963 -2.062
650	1.968	2.459 -1.967	1.885 -2.078	1.682 -2.124	1.804 1.964 -2.061
660	1.967	2.464 -1.966	1.894 -2.076	1.691 -2.122	1.812 1.971 -2.060
670	1.966	2.470 -1.965	1.902 -2.074	1.701 -2.120	1.819 1.977 -2.058
680	1.966	2.470 -1.965	1.906 -2.074	1.705 -2.119	1.822 1.979 -2.058
690	1.965	2.476 -1.964	1.914 -2.072	1.715 -2.117	1.830 1.986 -2.057
700	1.964	2.481 -1.963	1.923 -2.070	1.724 -2.115	1.837 1.992 -2.055
710	1.964	2.481 -1.963	1.926 -2.069	1.728 -2.113	1.840 1.994 -2.055
720	1.963	2.487 -1.962	1.934 -2.067	1.737 -2.111	1.848 2.000 -2.054
730	1.963	2.487 -1.962	1.938 -2.067	1.742 -2.110	1.850 2.002 -2.053
740	1.962	2.493 -1.961	1.946 -2.065	1.750 -2.108	1.858 2.009 -2.052
750	1.961	2.499 -1.960	1.954 -2.063	1.759 -2.106	1.865 2.015 -2.051
760	1.961	2.499 -1.960	1.957 -2.063	1.763 -2.105	1.868 2.017 -2.050
770	1.960	2.504 -1.959	1.965 -2.061	1.772 -2.103	1.875 2.023 -2.049
780	1.960	2.504 -1.959	1.969 -2.060	1.776 -2.102	1.878 2.025 -2.049
790	1.959	2.510 -1.958	1.977 -2.059	1.785 -2.100	1.885 2.031 -2.047
800	1.959	2.510 -1.958	1.980 -2.058	1.788 -2.100	1.887 2.033 -2.047
810	1.958	2.516 -1.957	1.987 -2.056	1.797 -2.098	1.895 2.039 -2.046
820	1.958	2.516 -1.957	1.990 -2.056	1.801 -2.097	1.897 2.040 -2.045
830	1.957	2.522 -1.956	1.998 -2.054	1.809 -2.095	1.904 2.047 -2.044
840	1.957	2.522 -1.956	2.001 -2.054	1.813 -2.094	1.907 2.048 -2.044
850	1.956	2.527 -1.955	2.009 -2.052	1.821 -2.092	1.914 2.055 -2.043
860	1.956	2.527 -1.955	2.011 -2.051	1.825 -2.091	1.916 2.056 -2.042
870	1.955	2.533 -1.954	2.019 -2.050	1.833 -2.090	1.923 2.063 -2.041
880	1.955	2.533 -1.954	2.022 -2.049	1.836 -2.089	1.925 2.064 -2.041
890	1.955	2.533 -1.954	2.024 -2.049	1.840 -2.088	1.927 2.065 -2.040
900	1.954	2.539 -1.953	2.032 -2.047	1.848 -2.086	1.934 2.072 -2.039
910	1.954	2.539 -1.953	2.034 -2.047	1.851 -2.086	1.937 2.073 -2.039
920	1.953	2.545 -1.952	2.042 -2.045	1.859 -2.084	1.944 2.079 -2.038
930	1.953	2.545 -1.952	2.044 -2.045	1.862 -2.083	1.946 2.081 -2.037
940	1.953	2.545 -1.952	2.047 -2.044	1.865 -2.082	1.948 2.082 -2.037
950	1.952	2.551 -1.951	2.054 -2.043	1.873 -2.081	1.955 2.088 -2.036
960	1.952	2.551 -1.951	2.057 -2.042	1.876 -2.080	1.957 2.090 -2.036
970	1.951	2.557 -1.950	2.064 -2.041	1.884 -2.078	1.964 2.096 -2.034
980	1.951	2.556 -1.950	2.066 -2.040	1.887 -2.078	1.966 2.097 -2.034
990	1.951	2.556 -1.950	2.069 -2.040	1.890 -2.077	1.968 2.098 -2.034
1000	1.950	2.562 -1.949	2.076 -2.038	1.898 -2.075	1.974 2.105 -2.033

7.10 Variables Sampling Plans with LTPD = 2.5%

or $K_{LTPD} = -1.95996$

n	k	IQ		AQL		ML		AOQL		
10	3.011	.184	-2.904	.001	-4.232	.000	-4.813	.251	2.176	-2.019
11	2.935	.225	-2.841	.002	-4.074	.000	-4.611	.255	1.928	-2.069
12	2.872	.264	-2.789	.004	-3.942	.000	-4.443	.260	1.743	-2.110
13	2.820	.302	-2.745	.006	-3.832	.001	-4.303	.265	1.600	-2.144
14	2.774	.340	-2.706	.009	-3.735	.001	-4.181	.272	1.492	-2.172
15	2.735	.376	-2.673	.013	-3.653	.002	-4.076	.279	1.402	-2.197
16	2.701	.410	-2.644	.017	-3.580	.003	-3.985	.286	1.331	-2.217
17	2.670	.443	-2.617	.022	-3.515	.005	-3.902	.294	1.274	-2.234
18	2.643	.474	-2.594	.027	-3.458	.006	-3.829	.301	1.226	-2.249
19	2.618	.505	-2.572	.033	-3.405	.008	-3.763	.309	1.187	-2.261
20	2.596	.534	-2.553	.039	-3.358	.011	-3.703	.317	1.154	-2.272
21	2.576	.562	-2.535	.046	-3.315	.013	-3.649	.325	1.125	-2.282
22	2.557	.589	-2.519	.053	-3.275	.016	-3.599	.333	1.103	-2.289
23	2.540	.615	-2.504	.060	-3.238	.019	-3.553	.341	1.082	-2.297
24	2.525	.638	-2.491	.067	-3.205	.022	-3.511	.349	1.064	-2.303
25	2.510	.662	-2.477	.075	-3.173	.026	-3.471	.357	1.050	-2.308
26	2.496	.686	-2.465	.083	-3.144	.030	-3.434	.365	1.038	-2.312
27	2.484	.706	-2.454	.091	-3.117	.034	-3.401	.372	1.026	-2.317
28	2.472	.728	-2.443	.100	-3.092	.038	-3.368	.380	1.017	-2.320
29	2.461	.748	-2.433	.108	-3.068	.042	-3.339	.388	1.009	-2.323
30	2.450	.768	-2.424	.117	-3.045	.047	-3.309	.396	1.003	-2.325
31	2.440	.788	-2.415	.125	-3.023	.051	-3.283	.403	.997	-2.327
32	2.431	.805	-2.406	.134	-3.003	.056	-3.258	.410	.992	-2.330
33	2.422	.823	-2.398	.142	-2.984	.061	-3.234	.418	.988	-2.331
34	2.414	.840	-2.391	.151	-2.966	.066	-3.211	.425	.984	-2.333
35	2.406	.857	-2.384	.159	-2.949	.071	-3.190	.432	.981	-2.334
36	2.398	.874	-2.377	.168	-2.932	.077	-3.168	.440	.979	-2.334
37	2.391	.889	-2.370	.177	-2.917	.082	-3.149	.446	.977	-2.335
38	2.384	.904	-2.364	.186	-2.902	.087	-3.130	.453	.976	-2.336
39	2.377	.920	-2.357	.195	-2.887	.093	-3.112	.461	.975	-2.336
40	2.371	.934	-2.352	.203	-2.874	.098	-3.095	.467	.974	-2.336
41	2.365	.947	-2.347	.211	-2.860	.104	-3.079	.474	.973	-2.336
42	2.359	.961	-2.341	.220	-2.848	.110	-3.063	.481	.974	-2.336
43	2.354	.973	-2.337	.228	-2.836	.115	-3.048	.487	.973	-2.337
44	2.348	.988	-2.331	.237	-2.824	.121	-3.033	.494	.974	-2.336
45	2.343	1.000	-2.326	.246	-2.813	.127	-3.019	.500	.974	-2.336
46	2.338	1.012	-2.322	.254	-2.802	.133	-3.006	.506	.976	-2.336
47	2.333	1.025	-2.317	.263	-2.791	.138	-2.992	.513	.977	-2.335
48	2.329	1.035	-2.314	.270	-2.782	.144	-2.980	.518	.977	-2.335
49	2.324	1.047	-2.309	.279	-2.772	.150	-2.968	.525	.979	-2.334
50	2.320	1.058	-2.305	.287	-2.763	.156	-2.956	.531	.980	-2.334
51	2.316	1.068	-2.302	.295	-2.754	.161	-2.945	.537	.981	-2.334
52	2.312	1.078	-2.298	.303	-2.745	.167	-2.934	.542	.982	-2.333
53	2.308	1.089	-2.294	.311	-2.736	.173	-2.923	.548	.984	-2.332
54	2.304	1.100	-2.290	.319	-2.728	.179	-2.913	.555	.986	-2.332

7.10 Variables Sampling Plans with LTPD = 2.5%

or K_{LTPD} = - 1.95996 (Continued)

n	k	IQ	AQL	ML	AOQL
55	2.301	1.108 -2.288	.326 -2.721	.184 -2.904	.559 .986 -2.332
56	2.297	1.119 -2.284	.334 -2.712	.191 -2.893	.566 .989 -2.331
57	2.294	1.127 -2.281	.341 -2.705	.196 -2.885	.570 .990 -2.330
58	2.290	1.138 -2.278	.350 -2.697	.202 -2.875	.577 .993 -2.329
59	2.287	1.146 -2.275	.357 -2.690	.208 -2.866	.582 .994 -2.328
60	2.284	1.154 -2.272	.364 -2.684	.213 -2.858	.587 .996 -2.328
61	2.281	1.163 -2.269	.372 -2.677	.219 -2.849	.592 .998 -2.327
62	2.278	1.171 -2.266	.379 -2.670	.225 -2.841	.598 1.000 -2.326
63	2.275	1.180 -2.264	.386 -2.664	.231 -2.833	.603 1.002 -2.325
64	2.272	1.189 -2.261	.394 -2.657	.236 -2.825	.608 1.005 -2.324
65	2.269	1.197 -2.258	.401 -2.651	.242 -2.817	.614 1.008 -2.323
66	2.267	1.203 -2.256	.407 -2.646	.247 -2.811	.618 1.008 -2.323
67	2.264	1.212 -2.253	.415 -2.640	.253 -2.803	.623 1.012 -2.322
68	2.261	1.221 -2.251	.422 -2.634	.259 -2.795	.629 1.015 -2.321
69	2.259	1.227 -2.249	.428 -2.629	.264 -2.789	.633 1.016 -2.320
70	2.256	1.236 -2.246	.436 -2.623	.270 -2.782	.639 1.019 -2.319
71	2.254	1.242 -2.244	.442 -2.618	.275 -2.776	.643 1.021 -2.319
72	2.252	1.248 -2.242	.448 -2.613	.280 -2.770	.647 1.022 -2.318
73	2.249	1.257 -2.239	.456 -2.607	.287 -2.763	.653 1.026 -2.317
74	2.247	1.263 -2.237	.462 -2.603	.292 -2.757	.657 1.028 -2.316
75	2.245	1.269 -2.236	.469 -2.598	.297 -2.751	.662 1.030 -2.315
76	2.243	1.275 -2.234	.475 -2.594	.302 -2.745	.666 1.032 -2.314
77	2.241	1.281 -2.232	.481 -2.589	.307 -2.740	.670 1.034 -2.314
78	2.239	1.287 -2.230	.487 -2.585	.313 -2.734	.675 1.036 -2.313
79	2.237	1.294 -2.228	.494 -2.580	.318 -2.729	.679 1.039 -2.312
80	2.235	1.300 -2.226	.500 -2.576	.323 -2.723	.684 1.041 -2.311
81	2.233	1.306 -2.224	.506 -2.572	.328 -2.718	.688 1.044 -2.310
82	2.231	1.313 -2.222	.512 -2.567	.334 -2.713	.693 1.046 -2.309
83	2.229	1.319 -2.221	.519 -2.563	.339 -2.707	.697 1.049 -2.308
84	2.227	1.325 -2.219	.525 -2.559	.344 -2.702	.702 1.052 -2.307
85	2.226	1.328 -2.218	.530 -2.556	.349 -2.698	.705 1.052 -2.307
86	2.224	1.335 -2.216	.536 -2.552	.354 -2.693	.709 1.055 -2.306
87	2.222	1.341 -2.214	.542 -2.548	.359 -2.688	.714 1.058 -2.305
88	2.220	1.348 -2.212	.549 -2.544	.365 -2.683	.719 1.061 -2.304
89	2.219	1.351 -2.211	.553 -2.541	.369 -2.679	.721 1.062 -2.304
90	2.217	1.358 -2.209	.560 -2.537	.374 -2.675	.726 1.065 -2.302
91	2.216	1.361 -2.208	.564 -2.534	.378 -2.671	.729 1.066 -2.302
92	2.214	1.368 -2.206	.570 -2.530	.384 -2.666	.734 1.070 -2.301
93	2.213	1.371 -2.206	.575 -2.527	.388 -2.662	.737 1.071 -2.301
94	2.211	1.377 -2.204	.581 -2.523	.393 -2.658	.742 1.074 -2.299
95	2.210	1.381 -2.203	.586 -2.520	.397 -2.654	.744 1.075 -2.299
96	2.208	1.387 -2.201	.592 -2.517	.403 -2.650	.749 1.079 -2.298
97	2.207	1.391 -2.200	.597 -2.514	.407 -2.646	.752 1.080 -2.297
98	2.205	1.398 -2.198	.603 -2.510	.413 -2.642	.757 1.084 -2.296
99	2.204	1.401 -2.197	.608 -2.508	.417 -2.638	.760 1.085 -2.296

7.10 Variables Sampling Plans with LTPD = 2.5%

or K_{LTPD} = - 1.95996 (Continued)

n	k	IQ	AQL	ML	AOQL
100	2.203	1.404 -2.196	.612 -2.505	.421 -2.635	.763 1.086 -2.295
110	2.190	1.449 -2.184	.663 -2.477	.466 -2.600	.799 1.110 -2.287
120	2.179	1.488 -2.173	.709 -2.453	.508 -2.570	.832 1.131 -2.280
130	2.170	1.520 -2.165	.750 -2.432	.547 -2.545	.862 1.150 -2.273
140	2.161	1.553 -2.156	.791 -2.413	.585 -2.521	.891 1.171 -2.267
150	2.154	1.580 -2.150	.827 -2.397	.620 -2.501	.917 1.188 -2.261
160	2.147	1.606 -2.143	.862 -2.382	.653 -2.482	.942 1.206 -2.255
170	2.141	1.630 -2.137	.893 -2.368	.685 -2.465	.966 1.223 -2.250
180	2.136	1.649 -2.132	.922 -2.357	.713 -2.451	.987 1.237 -2.245
190	2.131	1.669 -2.128	.950 -2.345	.741 -2.437	1.007 1.252 -2.241
200	2.126	1.689 -2.123	.978 -2.335	.769 -2.423	1.028 1.267 -2.236
210	2.122	1.705 -2.119	1.003 -2.325	.794 -2.412	1.046 1.280 -2.232
220	2.118	1.721 -2.115	1.027 -2.316	.818 -2.401	1.064 1.294 -2.228
230	2.114	1.738 -2.111	1.050 -2.308	.842 -2.390	1.083 1.308 -2.224
240	2.111	1.750 -2.108	1.071 -2.301	.863 -2.381	1.098 1.318 -2.221
250	2.107	1.767 -2.104	1.094 -2.293	.886 -2.371	1.116 1.333 -2.217
260	2.104	1.780 -2.102	1.113 -2.286	.907 -2.363	1.131 1.344 -2.213
270	2.101	1.793 -2.099	1.133 -2.279	.927 -2.355	1.146 1.355 -2.210
280	2.099	1.801 -2.097	1.148 -2.274	.944 -2.348	1.158 1.364 -2.208
290	2.096	1.814 -2.094	1.167 -2.268	.963 -2.340	1.172 1.375 -2.204
300	2.094	1.823 -2.092	1.183 -2.263	.979 -2.334	1.184 1.384 -2.202
310	2.091	1.836 -2.089	1.201 -2.257	.998 -2.327	1.199 1.396 -2.198
320	2.089	1.844 -2.087	1.216 -2.252	1.014 -2.321	1.210 1.405 -2.196
330	2.087	1.853 -2.085	1.230 -2.248	1.029 -2.315	1.222 1.413 -2.194
340	2.085	1.862 -2.083	1.245 -2.243	1.045 -2.310	1.233 1.422 -2.191
350	2.083	1.871 -2.081	1.259 -2.239	1.060 -2.305	1.244 1.431 -2.189
360	2.081	1.880 -2.079	1.273 -2.234	1.074 -2.299	1.256 1.440 -2.186
370	2.080	1.884 -2.078	1.283 -2.231	1.086 -2.295	1.263 1.445 -2.185
380	2.078	1.893 -2.076	1.297 -2.227	1.100 -2.290	1.275 1.454 -2.182
390	2.076	1.902 -2.074	1.310 -2.223	1.115 -2.285	1.286 1.463 -2.180
400	2.075	1.907 -2.073	1.320 -2.220	1.125 -2.282	1.293 1.469 -2.178
410	2.073	1.916 -2.071	1.333 -2.216	1.139 -2.277	1.304 1.478 -2.176
420	2.072	1.920 -2.070	1.342 -2.214	1.150 -2.273	1.312 1.483 -2.174
430	2.071	1.925 -2.070	1.352 -2.211	1.160 -2.270	1.319 1.489 -2.173
440	2.069	1.934 -2.068	1.365 -2.207	1.174 -2.266	1.330 1.498 -2.171
450	2.068	1.939 -2.067	1.374 -2.205	1.184 -2.262	1.337 1.504 -2.169
460	2.067	1.943 -2.066	1.383 -2.202	1.194 -2.259	1.344 1.509 -2.168
470	2.066	1.948 -2.065	1.391 -2.200	1.203 -2.256	1.351 1.514 -2.166
480	2.064	1.957 -2.063	1.404 -2.196	1.216 -2.252	1.362 1.524 -2.164
490	2.063	1.962 -2.062	1.412 -2.194	1.226 -2.249	1.369 1.529 -2.162
500	2.062	1.966 -2.061	1.421 -2.191	1.235 -2.246	1.376 1.535 -2.161
510	2.061	1.971 -2.060	1.429 -2.189	1.244 -2.243	1.383 1.540 -2.160
520	2.060	1.976 -2.059	1.437 -2.187	1.253 -2.240	1.390 1.546 -2.158
530	2.059	1.980 -2.058	1.446 -2.185	1.262 -2.238	1.397 1.551 -2.157
540	2.058	1.985 -2.057	1.454 -2.182	1.271 -2.235	1.404 1.557 -2.155

7.10 Variables Sampling Plans with LTPD = 2.5%

or K_{LTPD} = -1.95996 (Continued)

n	k	IQ	AQL	ML	AOQL
550	2.057	1.990 -2.056	1.462 -2.180	1.280 -2.232	1.410 1.562 -2.154
560	2.056	1.995 -2.055	1.470 -2.178	1.289 -2.230	1.417 1.568 -2.153
570	2.055	1.999 -2.054	1.478 -2.176	1.298 -2.227	1.424 1.573 -2.151
580	2.055	1.999 -2.054	1.482 -2.175	1.303 -2.225	1.427 1.575 -2.151
590	2.054	2.004 -2.053	1.489 -2.173	1.311 -2.223	1.433 1.580 -2.149
600	2.053	2.009 -2.052	1.497 -2.171	1.319 -2.220	1.440 1.586 -2.148
610	2.052	2.014 -2.051	1.505 -2.169	1.328 -2.218	1.447 1.591 -2.147
620	2.051	2.018 -2.050	1.512 -2.167	1.336 -2.216	1.453 1.597 -2.145
630	2.051	2.018 -2.050	1.516 -2.166	1.340 -2.214	1.456 1.598 -2.145
640	2.050	2.023 -2.049	1.523 -2.164	1.348 -2.212	1.462 1.604 -2.144
650	2.049	2.028 -2.048	1.530 -2.162	1.356 -2.210	1.469 1.609 -2.142
660	2.048	2.033 -2.047	1.538 -2.160	1.364 -2.207	1.475 1.614 -2.141
670	2.048	2.033 -2.047	1.541 -2.159	1.368 -2.206	1.478 1.616 -2.140
680	2.047	2.037 -2.046	1.548 -2.158	1.376 -2.204	1.484 1.621 -2.139
690	2.046	2.042 -2.045	1.555 -2.156	1.384 -2.202	1.490 1.627 -2.138
700	2.046	2.042 -2.045	1.558 -2.155	1.388 -2.201	1.493 1.628 -2.137
710	2.045	2.047 -2.044	1.565 -2.153	1.396 -2.199	1.499 1.633 -2.136
720	2.045	2.047 -2.044	1.568 -2.152	1.399 -2.197	1.501 1.635 -2.136
730	2.044	2.052 -2.043	1.575 -2.151	1.407 -2.195	1.507 1.640 -2.134
740	2.043	2.057 -2.042	1.582 -2.149	1.414 -2.193	1.514 1.646 -2.133
750	2.043	2.057 -2.042	1.585 -2.148	1.418 -2.192	1.516 1.647 -2.133
760	2.042	2.062 -2.041	1.592 -2.146	1.425 -2.190	1.522 1.652 -2.132
770	2.042	2.062 -2.041	1.595 -2.146	1.429 -2.189	1.524 1.654 -2.131
780	2.041	2.067 -2.040	1.601 -2.144	1.436 -2.187	1.530 1.659 -2.130
790	2.041	2.066 -2.040	1.604 -2.143	1.439 -2.186	1.532 1.660 -2.130
800	2.040	2.071 -2.039	1.611 -2.142	1.447 -2.184	1.538 1.666 -2.128
810	2.040	2.071 -2.039	1.613 -2.141	1.450 -2.184	1.541 1.667 -2.128
820	2.039	2.076 -2.038	1.620 -2.139	1.457 -2.182	1.547 1.672 -2.127
830	2.039	2.076 -2.038	1.622 -2.139	1.460 -2.181	1.549 1.673 -2.126
840	2.038	2.081 -2.037	1.629 -2.137	1.467 -2.179	1.555 1.679 -2.125
850	2.038	2.081 -2.037	1.631 -2.137	1.470 -2.178	1.557 1.680 -2.125
860	2.037	2.086 -2.036	1.638 -2.135	1.477 -2.176	1.563 1.685 -2.124
870	2.037	2.086 -2.036	1.640 -2.134	1.480 -2.175	1.564 1.686 -2.123
880	2.036	2.091 -2.035	1.647 -2.133	1.487 -2.173	1.570 1.692 -2.122
890	2.036	2.091 -2.035	1.649 -2.132	1.490 -2.173	1.572 1.693 -2.122
900	2.035	2.096 -2.034	1.655 -2.131	1.497 -2.171	1.578 1.698 -2.120
910	2.035	2.096 -2.034	1.658 -2.130	1.500 -2.170	1.580 1.699 -2.120
920	2.034	2.101 -2.033	1.664 -2.129	1.506 -2.168	1.586 1.705 -2.119
930	2.034	2.101 -2.033	1.666 -2.128	1.509 -2.168	1.588 1.706 -2.119
940	2.034	2.101 -2.033	1.668 -2.128	1.512 -2.167	1.589 1.707 -2.118
950	2.033	2.106 -2.032	1.675 -2.126	1.519 -2.165	1.595 1.712 -2.117
960	2.033	2.106 -2.032	1.677 -2.126	1.521 -2.165	1.597 1.713 -2.117
970	2.032	2.111 -2.031	1.683 -2.124	1.528 -2.163	1.603 1.719 -2.116
980	2.032	2.111 -2.031	1.685 -2.124	1.530 -2.162	1.604 1.720 -2.115
990	2.032	2.111 -2.031	1.687 -2.123	1.533 -2.161	1.606 1.721 -2.115
1000	2.031	2.116 -2.030	1.693 -2.122	1.540 -2.160	1.612 1.726 -2.114

7.11 Variables Sampling Plans with LTPD = 2%

or $K_{LTPD} = -2.05375$

n	k	IQ		AQL		ML		AOQL		
10	3.144	.122	-3.032	.001	-4.411	.000	-5.014	.200	1.998	-2.054
11	3.065	.150	-2.967	.001	-4.245	.000	-4.803	.201	1.749	-2.109
12	3.000	.179	-2.913	.002	-4.109	.000	-4.629	.203	1.563	-2.154
13	2.945	.207	-2.867	.003	-3.993	.000	-4.482	.206	1.422	-2.191
14	2.898	.235	-2.827	.005	-3.894	.001	-4.357	.210	1.311	-2.223
15	2.857	.262	-2.792	.007	-3.808	.001	-4.247	.215	1.223	-2.250
16	2.821	.288	-2.761	.010	-3.732	.002	-4.151	.220	1.154	-2.272
17	2.789	.313	-2.734	.012	-3.664	.002	-4.066	.225	1.096	-2.292
18	2.761	.337	-2.710	.016	-3.604	.003	-3.990	.230	1.048	-2.309
19	2.736	.360	-2.688	.019	-3.551	.004	-3.922	.235	1.008	-2.323
20	2.712	.383	-2.667	.023	-3.500	.006	-3.859	.241	.976	-2.336
21	2.691	.404	-2.648	.027	-3.456	.007	-3.802	.247	.947	-2.347
22	2.672	.425	-2.632	.032	-3.415	.009	-3.751	.252	.923	-2.356
23	2.654	.445	-2.616	.037	-3.376	.011	-3.703	.258	.903	-2.364
24	2.638	.464	-2.602	.042	-3.342	.013	-3.659	.264	.884	-2.372
25	2.623	.482	-2.589	.047	-3.310	.015	-3.618	.269	.869	-2.379
26	2.609	.500	-2.576	.052	-3.279	.017	-3.580	.275	.855	-2.384
27	2.596	.517	-2.565	.057	-3.251	.020	-3.545	.280	.844	-2.389
28	2.583	.534	-2.553	.063	-3.224	.022	-3.511	.287	.835	-2.393
29	2.572	.549	-2.543	.069	-3.200	.025	-3.480	.292	.825	-2.398
30	2.561	.565	-2.533	.075	-3.176	.028	-3.451	.297	.818	-2.401
31	2.551	.580	-2.524	.080	-3.154	.031	-3.423	.303	.811	-2.404
32	2.541	.595	-2.515	.087	-3.133	.034	-3.396	.308	.805	-2.407
33	2.532	.609	-2.507	.092	-3.113	.037	-3.372	.314	.800	-2.409
34	2.523	.623	-2.499	.099	-3.094	.041	-3.348	.319	.796	-2.411
35	2.515	.636	-2.492	.105	-3.077	.044	-3.326	.324	.792	-2.413
36	2.507	.649	-2.485	.111	-3.059	.048	-3.304	.330	.789	-2.414
37	2.499	.662	-2.477	.117	-3.043	.051	-3.283	.336	.787	-2.415
38	2.492	.674	-2.471	.123	-3.027	.055	-3.264	.341	.784	-2.416
39	2.485	.686	-2.465	.130	-3.012	.059	-3.245	.346	.783	-2.417
40	2.479	.696	-2.459	.136	-2.999	.062	-3.228	.350	.780	-2.418
41	2.473	.707	-2.454	.142	-2.985	.066	-3.211	.355	.778	-2.419
42	2.467	.718	-2.448	.148	-2.972	.070	-3.195	.360	.777	-2.419
43	2.461	.729	-2.443	.154	-2.960	.074	-3.179	.365	.777	-2.420
44	2.455	.740	-2.437	.160	-2.947	.078	-3.163	.371	.777	-2.419
45	2.450	.750	-2.433	.166	-2.936	.082	-3.149	.375	.776	-2.420
46	2.445	.759	-2.428	.172	-2.925	.086	-3.135	.380	.776	-2.420
47	2.440	.769	-2.423	.179	-2.914	.090	-3.122	.384	.776	-2.420
48	2.435	.779	-2.419	.185	-2.903	.094	-3.109	.389	.776	-2.420
49	2.431	.786	-2.415	.190	-2.894	.098	-3.097	.393	.775	-2.420
50	2.426	.796	-2.411	.197	-2.883	.102	-3.084	.398	.777	-2.420
51	2.422	.805	-2.407	.202	-2.874	.106	-3.073	.403	.777	-2.420
52	2.418	.813	-2.403	.208	-2.866	.110	-3.061	.407	.777	-2.419
53	2.414	.821	-2.399	.214	-2.857	.114	-3.050	.411	.778	-2.419
54	2.410	.829	-2.396	.220	-2.848	.118	-3.040	.416	.779	-2.419

7.11 Variables Sampling Plans with LTPD = 2%

or K_{LTPD} = - 2.05375 (Continued)

n	k	IQ	AQL	ML	AOQL
55	2.406	.838 -2.392	.226 -2.840	.123 -3.029	.420 .780 -2.418
56	2.402	.846 -2.388	.232 -2.831	.127 -3.019	.425 .781 -2.417
57	2.399	.853 -2.386	.237 -2.824	.131 -3.010	.428 .781 -2.417
58	2.395	.861 -2.382	.243 -2.816	.135 -2.999	.433 .783 -2.417
59	2.392	.868 -2.379	.249 -2.809	.139 -2.991	.437 .784 -2.416
60	2.389	.874 -2.376	.254 -2.802	.143 -2.982	.441 .785 -2.416
61	2.385	.883 -2.373	.260 -2.794	.148 -2.972	.446 .787 -2.415
62	2.382	.890 -2.370	.266 -2.787	.152 -2.964	.450 .788 -2.414
63	2.379	.897 -2.367	.271 -2.781	.156 -2.956	.454 .790 -2.414
64	2.376	.903 -2.364	.277 -2.774	.160 -2.948	.458 .791 -2.413
65	2.373	.910 -2.361	.282 -2.768	.164 -2.940	.462 .793 -2.412
66	2.371	.915 -2.360	.287 -2.763	.168 -2.933	.465 .793 -2.412
67	2.368	.922 -2.357	.292 -2.756	.172 -2.925	.469 .795 -2.411
68	2.365	.929 -2.354	.298 -2.750	.176 -2.918	.473 .797 -2.410
69	2.363	.933 -2.352	.302 -2.745	.180 -2.911	.476 .797 -2.410
70	2.360	.940 -2.349	.308 -2.739	.184 -2.904	.480 .799 -2.409
71	2.358	.945 -2.348	.313 -2.734	.188 -2.897	.483 .800 -2.409
72	2.355	.952 -2.345	.318 -2.728	.193 -2.890	.488 .803 -2.408
73	2.353	.957 -2.343	.323 -2.723	.196 -2.884	.491 .804 -2.407
74	2.351	.962 -2.341	.328 -2.719	.200 -2.878	.494 .805 -2.407
75	2.348	.969 -2.338	.333 -2.713	.205 -2.871	.499 .808 -2.405
76	2.346	.974 -2.336	.338 -2.708	.208 -2.865	.502 .809 -2.405
77	2.344	.979 -2.334	.343 -2.704	.212 -2.860	.505 .810 -2.404
78	2.342	.984 -2.333	.348 -2.699	.216 -2.854	.508 .812 -2.404
79	2.340	.989 -2.331	.352 -2.695	.220 -2.848	.512 .813 -2.403
80	2.338	.994 -2.329	.357 -2.690	.224 -2.843	.515 .815 -2.402
81	2.336	.998 -2.327	.362 -2.686	.228 -2.837	.518 .817 -2.401
82	2.334	1.004 -2.325	.366 -2.682	.231 -2.832	.522 .818 -2.401
83	2.332	1.009 -2.323	.371 -2.677	.235 -2.827	.525 .820 -2.400
84	2.330	1.014 -2.321	.376 -2.673	.239 -2.821	.529 .822 -2.399
85	2.328	1.019 -2.319	.381 -2.669	.243 -2.816	.532 .824 -2.398
86	2.326	1.024 -2.317	.385 -2.665	.247 -2.811	.536 .826 -2.397
87	2.325	1.026 -2.317	.389 -2.661	.250 -2.807	.538 .826 -2.397
88	2.323	1.031 -2.315	.394 -2.657	.254 -2.802	.541 .828 -2.396
89	2.321	1.037 -2.313	.399 -2.653	.258 -2.797	.545 .831 -2.395
90	2.320	1.039 -2.312	.402 -2.650	.261 -2.793	.547 .831 -2.395
91	2.318	1.044 -2.310	.407 -2.646	.265 -2.788	.551 .833 -2.394
92	2.316	1.050 -2.308	.412 -2.642	.269 -2.783	.554 .836 -2.393
93	2.315	1.052 -2.307	.415 -2.639	.272 -2.779	.556 .836 -2.393
94	2.313	1.058 -2.305	.420 -2.636	.276 -2.775	.560 .839 -2.392
95	2.312	1.060 -2.304	.423 -2.633	.279 -2.771	.562 .839 -2.391
96	2.310	1.066 -2.302	.428 -2.629	.283 -2.766	.566 .842 -2.390
97	2.309	1.068 -2.302	.432 -2.626	.286 -2.763	.568 .843 -2.390
98	2.307	1.074 -2.300	.437 -2.622	.291 -2.758	.572 .846 -2.389
99	2.306	1.076 -2.299	.440 -2.620	.294 -2.755	.574 .846 -2.388

7.11 Variables Sampling Plans with LTPD = 2%

or K_{LTPD} = -2.05375 (Continued)

n	k	IQ		AQL		ML		AOQL		
100	2.304	1.082	-2.297	.445	-2.616	.298	-2.750	.578	.849	-2.387
110	2.291	1.117	-2.284	.484	-2.587	.332	-2.715	.605	.866	-2.380
120	2.280	1.148	-2.274	.519	-2.563	.364	-2.684	.631	.881	-2.373
130	2.271	1.174	-2.266	.551	-2.542	.393	-2.658	.653	.895	-2.368
140	2.262	1.201	-2.257	.583	-2.522	.422	-2.634	.676	.910	-2.362
150	2.254	1.225	-2.249	.612	-2.505	.450	-2.612	.697	.925	-2.356
160	2.247	1.246	-2.243	.640	-2.489	.476	-2.593	.717	.938	-2.350
170	2.241	1.265	-2.237	.665	-2.476	.500	-2.576	.735	.950	-2.345
180	2.235	1.284	-2.231	.689	-2.463	.524	-2.560	.753	.964	-2.340
190	2.230	1.300	-2.226	.712	-2.451	.545	-2.546	.769	.975	-2.336
200	2.225	1.316	-2.222	.733	-2.440	.567	-2.532	.786	.987	-2.331
210	2.221	1.329	-2.218	.753	-2.431	.586	-2.520	.800	.996	-2.328
220	2.217	1.342	-2.214	.772	-2.422	.605	-2.509	.814	1.007	-2.324
230	2.213	1.355	-2.210	.791	-2.413	.624	-2.498	.828	1.017	-2.320
240	2.209	1.369	-2.206	.809	-2.405	.643	-2.488	.842	1.028	-2.316
250	2.206	1.379	-2.203	.825	-2.398	.659	-2.479	.854	1.036	-2.313
260	2.203	1.389	-2.200	.841	-2.391	.675	-2.470	.866	1.045	-2.310
270	2.200	1.399	-2.197	.856	-2.384	.691	-2.462	.877	1.054	-2.307
280	2.197	1.410	-2.195	.871	-2.378	.706	-2.454	.889	1.063	-2.303
290	2.194	1.420	-2.192	.886	-2.371	.721	-2.446	.901	1.072	-2.300
300	2.192	1.427	-2.190	.899	-2.366	.734	-2.440	.910	1.078	-2.298
310	2.190	1.434	-2.188	.911	-2.361	.747	-2.434	.919	1.085	-2.296
320	2.187	1.445	-2.185	.925	-2.355	.762	-2.427	.931	1.094	-2.292
330	2.185	1.452	-2.183	.937	-2.351	.774	-2.421	.940	1.101	-2.290
340	2.183	1.459	-2.181	.948	-2.346	.786	-2.415	.949	1.108	-2.288
350	2.181	1.466	-2.179	.960	-2.342	.798	-2.410	.958	1.115	-2.285
360	2.179	1.474	-2.177	.971	-2.337	.810	-2.404	.967	1.122	-2.283
370	2.177	1.481	-2.175	.982	-2.333	.822	-2.399	.975	1.129	-2.281
380	2.176	1.484	-2.174	.990	-2.330	.831	-2.395	.982	1.133	-2.279
390	2.174	1.492	-2.172	1.001	-2.326	.842	-2.390	.990	1.140	-2.277
400	2.172	1.499	-2.170	1.012	-2.322	.853	-2.385	.999	1.147	-2.274
410	2.171	1.503	-2.169	1.019	-2.319	.862	-2.382	1.005	1.151	-2.273
420	2.169	1.510	-2.167	1.030	-2.315	.873	-2.377	1.014	1.159	-2.271
430	2.168	1.514	-2.166	1.037	-2.313	.881	-2.373	1.020	1.163	-2.269
440	2.167	1.518	-2.165	1.045	-2.310	.889	-2.370	1.025	1.167	-2.268
450	2.165	1.525	-2.164	1.055	-2.306	.900	-2.366	1.034	1.174	-2.265
460	2.164	1.529	-2.163	1.062	-2.304	.908	-2.362	1.040	1.179	-2.264
470	2.163	1.533	-2.162	1.069	-2.301	.916	-2.359	1.045	1.183	-2.263
480	2.162	1.536	-2.161	1.077	-2.299	.923	-2.356	1.051	1.187	-2.261
490	2.160	1.544	-2.159	1.086	-2.295	.934	-2.352	1.059	1.195	-2.259
500	2.159	1.548	-2.158	1.093	-2.293	.941	-2.349	1.065	1.199	-2.257
510	2.158	1.551	-2.157	1.100	-2.290	.949	-2.346	1.071	1.203	-2.256
520	2.157	1.555	-2.156	1.107	-2.288	.956	-2.343	1.076	1.208	-2.255
530	2.156	1.559	-2.155	1.114	-2.286	.963	-2.340	1.082	1.212	-2.253
540	2.155	1.563	-2.154	1.120	-2.283	.970	-2.338	1.087	1.216	-2.252

7.11 Variables Sampling Plans with LTPD = 2%

or K_{LTPD} = -2.05375 (Continued)

n	k	IQ	AQL	ML	AOQL
550	2.154	1.567 -2.153	1.127 -2.281	.978 -2.335	1.092 1.221 -2.251
560	2.153	1.571 -2.152	1.133 -2.279	.985 -2.332	1.098 1.225 -2.249
570	2.152	1.574 -2.151	1.139 -2.277	.992 -2.330	1.103 1.229 -2.248
580	2.151	1.578 -2.150	1.146 -2.275	.998 -2.327	1.108 1.234 -2.246
590	2.151	1.578 -2.150	1.149 -2.274	1.002 -2.325	1.111 1.235 -2.246
600	2.150	1.582 -2.149	1.155 -2.272	1.009 -2.323	1.116 1.239 -2.245
610	2.149	1.586 -2.148	1.161 -2.270	1.016 -2.320	1.121 1.243 -2.243
620	2.148	1.590 -2.147	1.168 -2.268	1.022 -2.318	1.127 1.248 -2.242
630	2.147	1.594 -2.146	1.174 -2.266	1.029 -2.316	1.132 1.252 -2.241
640	2.147	1.594 -2.146	1.176 -2.265	1.033 -2.314	1.134 1.253 -2.240
650	2.146	1.598 -2.145	1.182 -2.263	1.039 -2.312	1.139 1.258 -2.239
660	2.145	1.602 -2.144	1.188 -2.261	1.046 -2.310	1.144 1.262 -2.238
670	2.144	1.606 -2.143	1.194 -2.259	1.052 -2.307	1.149 1.266 -2.236
680	2.144	1.606 -2.143	1.197 -2.258	1.055 -2.306	1.151 1.267 -2.236
690	2.143	1.610 -2.142	1.203 -2.256	1.062 -2.304	1.156 1.272 -2.235
700	2.142	1.613 -2.141	1.209 -2.254	1.068 -2.302	1.161 1.276 -2.233
710	2.142	1.613 -2.141	1.211 -2.254	1.071 -2.301	1.163 1.277 -2.233
720	2.141	1.617 -2.140	1.217 -2.252	1.077 -2.298	1.168 1.281 -2.232
730	2.140	1.621 -2.139	1.222 -2.250	1.083 -2.296	1.173 1.286 -2.230
740	2.140	1.621 -2.139	1.225 -2.249	1.086 -2.295	1.175 1.287 -2.230
750	2.139	1.625 -2.138	1.230 -2.248	1.092 -2.293	1.180 1.291 -2.229
760	2.139	1.625 -2.138	1.233 -2.247	1.095 -2.292	1.182 1.292 -2.229
770	2.138	1.629 -2.137	1.238 -2.245	1.101 -2.290	1.187 1.296 -2.227
780	2.138	1.629 -2.137	1.240 -2.244	1.104 -2.289	1.188 1.297 -2.227
790	2.137	1.633 -2.136	1.246 -2.243	1.110 -2.287	1.193 1.302 -2.226
800	2.136	1.637 -2.135	1.251 -2.241	1.116 -2.285	1.198 1.306 -2.224
810	2.136	1.637 -2.135	1.253 -2.240	1.118 -2.284	1.200 1.307 -2.224
820	2.135	1.641 -2.134	1.259 -2.239	1.124 -2.282	1.205 1.311 -2.223
830	2.135	1.641 -2.134	1.261 -2.238	1.127 -2.281	1.206 1.312 -2.223
840	2.134	1.645 -2.133	1.266 -2.236	1.132 -2.279	1.211 1.317 -2.221
850	2.134	1.645 -2.133	1.268 -2.236	1.135 -2.278	1.213 1.317 -2.221
860	2.133	1.649 -2.132	1.274 -2.234	1.140 -2.277	1.218 1.322 -2.220
870	2.133	1.649 -2.132	1.276 -2.234	1.143 -2.276	1.219 1.323 -2.219
880	2.132	1.653 -2.131	1.281 -2.232	1.149 -2.274	1.224 1.327 -2.218
890	2.132	1.653 -2.131	1.283 -2.231	1.151 -2.273	1.225 1.328 -2.218
900	2.132	1.653 -2.131	1.285 -2.231	1.153 -2.272	1.227 1.329 -2.218
910	2.131	1.657 -2.130	1.290 -2.229	1.159 -2.271	1.232 1.333 -2.216
920	2.131	1.657 -2.130	1.292 -2.229	1.161 -2.270	1.233 1.334 -2.216
930	2.130	1.661 -2.129	1.297 -2.227	1.167 -2.268	1.238 1.338 -2.215
940	2.130	1.661 -2.129	1.298 -2.227	1.169 -2.267	1.239 1.339 -2.215
950	2.129	1.666 -2.128	1.304 -2.225	1.174 -2.265	1.244 1.343 -2.213
960	2.129	1.666 -2.128	1.305 -2.225	1.176 -2.265	1.245 1.344 -2.213
970	2.129	1.666 -2.128	1.307 -2.224	1.179 -2.264	1.247 1.345 -2.213
980	2.128	1.670 -2.127	1.312 -2.223	1.184 -2.262	1.251 1.349 -2.212
990	2.128	1.670 -2.127	1.314 -2.222	1.186 -2.262	1.253 1.350 -2.211
1000	2.127	1.674 -2.126	1.319 -2.221	1.191 -2.260	1.257 1.354 -2.210

7.12 Variables Sampling Plans with LTPD = 1.5%

or $K_{LTPD} = -2.17009$

n	k	IQ		AQL		ML		AOQL		
10	3.309	.071	-3.191	.000	-4.632	.000	-5.263	.000	.000	-4.912
11	3.226	.090	-3.122	.000	-4.459	.000	-5.042	.000	50.000	.000
12	3.158	.109	-3.066	.001	-4.316	.000	-4.860	.150	1.374	-2.205
13	3.100	.128	-3.017	.001	-4.194	.000	-4.706	.151	1.236	-2.246
14	3.051	.146	-2.976	.002	-4.090	.000	-4.574	.153	1.126	-2.281
15	3.008	.164	-2.939	.003	-4.000	.000	-4.459	.155	1.040	-2.311
16	2.971	.182	-2.908	.004	-3.921	.001	-4.359	.158	.970	-2.338
17	2.937	.200	-2.878	.006	-3.850	.001	-4.269	.161	.914	-2.360
18	2.908	.216	-2.854	.008	-3.788	.001	-4.191	.164	.866	-2.380
19	2.881	.233	-2.830	.010	-3.730	.002	-4.118	.168	.828	-2.397
20	2.857	.248	-2.809	.012	-3.679	.003	-4.054	.171	.794	-2.412
21	2.835	.264	-2.790	.014	-3.632	.003	-3.994	.174	.766	-2.425
22	2.815	.278	-2.772	.017	-3.589	.004	-3.940	.178	.742	-2.436
23	2.796	.293	-2.756	.019	-3.549	.005	-3.890	.182	.722	-2.446
24	2.779	.307	-2.741	.022	-3.513	.006	-3.844	.185	.704	-2.455
25	2.763	.320	-2.727	.025	-3.478	.007	-3.801	.189	.689	-2.463
26	2.749	.332	-2.714	.028	-3.448	.008	-3.762	.193	.674	-2.471
27	2.735	.345	-2.702	.032	-3.418	.010	-3.724	.196	.663	-2.477
28	2.722	.357	-2.690	.035	-3.390	.011	-3.689	.200	.652	-2.483
29	2.710	.369	-2.679	.038	-3.364	.013	-3.657	.204	.643	-2.487
30	2.698	.381	-2.669	.042	-3.339	.014	-3.625	.208	.636	-2.492
31	2.688	.391	-2.660	.046	-3.316	.016	-3.597	.211	.628	-2.496
32	2.678	.402	-2.651	.049	-3.295	.018	-3.570	.215	.621	-2.500
33	2.668	.412	-2.642	.053	-3.274	.020	-3.543	.219	.616	-2.503
34	2.659	.422	-2.634	.057	-3.254	.022	-3.519	.222	.611	-2.506
35	2.650	.433	-2.625	.061	-3.235	.024	-3.495	.226	.607	-2.508
36	2.642	.442	-2.618	.065	-3.217	.026	-3.473	.230	.603	-2.510
37	2.634	.451	-2.611	.069	-3.200	.028	-3.451	.233	.600	-2.512
38	2.627	.460	-2.605	.072	-3.185	.030	-3.431	.236	.596	-2.515
39	2.620	.468	-2.598	.076	-3.169	.032	-3.412	.240	.593	-2.516
40	2.613	.477	-2.592	.080	-3.154	.035	-3.393	.243	.591	-2.517
41	2.606	.486	-2.585	.085	-3.139	.037	-3.375	.247	.589	-2.518
42	2.600	.494	-2.580	.089	-3.126	.039	-3.358	.250	.587	-2.520
43	2.594	.502	-2.575	.093	-3.113	.042	-3.342	.254	.586	-2.521
44	2.588	.510	-2.569	.097	-3.100	.044	-3.326	.257	.585	-2.521
45	2.583	.517	-2.565	.101	-3.089	.046	-3.311	.260	.583	-2.522
46	2.577	.525	-2.559	.105	-3.076	.049	-3.296	.264	.583	-2.522
47	2.572	.532	-2.554	.109	-3.065	.052	-3.282	.267	.582	-2.523
48	2.567	.539	-2.550	.113	-3.054	.054	-3.269	.270	.581	-2.523
49	2.562	.546	-2.545	.117	-3.044	.057	-3.255	.274	.581	-2.524
50	2.558	.552	-2.542	.121	-3.034	.059	-3.243	.276	.579	-2.525
51	2.553	.559	-2.537	.125	-3.024	.062	-3.230	.280	.580	-2.524
52	2.549	.565	-2.533	.129	-3.015	.064	-3.219	.283	.579	-2.524
53	2.545	.571	-2.530	.132	-3.006	.067	-3.208	.285	.579	-2.525
54	2.541	.577	-2.526	.136	-2.997	.070	-3.197	.288	.579	-2.525

7.12 Variables Sampling Plans with LTPD = 1.5%

or K_{LTPD} = -2.17009 (Continued)

n	k	IQ	AQL	ML	AOQL
55	2.537	.583 -2.522	.140 -2.988	.072 -3.186	.292 .579 -2.525
56	2.533	.589 -2.519	.144 -2.980	.075 -3.175	.295 .580 -2.524
57	2.529	.595 -2.515	.148 -2.971	.078 -3.165	.298 .580 -2.524
58	2.525	.602 -2.511	.152 -2.963	.080 -3.154	.301 .581 -2.524
59	2.522	.606 -2.508	.156 -2.956	.083 -3.145	.304 .581 -2.524
60	2.519	.611 -2.506	.159 -2.949	.085 -3.136	.306 .581 -2.524
61	2.515	.618 -2.502	.164 -2.941	.088 -3.127	.310 .582 -2.523
62	2.512	.623 -2.499	.167 -2.934	.091 -3.118	.312 .582 -2.523
63	2.509	.627 -2.496	.171 -2.927	.094 -3.110	.315 .583 -2.522
64	2.506	.632 -2.494	.175 -2.921	.096 -3.101	.318 .583 -2.522
65	2.503	.637 -2.491	.178 -2.914	.099 -3.093	.320 .584 -2.522
66	2.500	.642 -2.488	.182 -2.908	.102 -3.085	.323 .585 -2.521
67	2.497	.647 -2.485	.186 -2.901	.105 -3.077	.326 .586 -2.521
68	2.494	.653 -2.482	.190 -2.895	.107 -3.069	.329 .587 -2.520
69	2.492	.656 -2.481	.193 -2.890	.110 -3.063	.331 .587 -2.520
70	2.489	.661 -2.478	.197 -2.883	.113 -3.055	.334 .588 -2.519
71	2.486	.666 -2.475	.201 -2.877	.115 -3.047	.337 .589 -2.518
72	2.484	.670 -2.473	.204 -2.872	.118 -3.041	.339 .590 -2.518
73	2.481	.675 -2.470	.208 -2.866	.121 -3.034	.342 .591 -2.517
74	2.479	.679 -2.468	.211 -2.862	.123 -3.028	.344 .591 -2.517
75	2.477	.682 -2.467	.214 -2.857	.126 -3.022	.346 .592 -2.517
76	2.474	.688 -2.464	.218 -2.851	.129 -3.014	.350 .594 -2.516
77	2.472	.691 -2.462	.221 -2.846	.131 -3.009	.352 .594 -2.515
78	2.470	.695 -2.460	.224 -2.842	.134 -3.003	.354 .595 -2.515
79	2.468	.698 -2.458	.228 -2.837	.136 -2.997	.356 .596 -2.515
80	2.466	.702 -2.456	.231 -2.833	.139 -2.991	.359 .597 -2.514
81	2.464	.706 -2.454	.234 -2.828	.141 -2.986	.361 .598 -2.514
82	2.462	.709 -2.452	.237 -2.824	.144 -2.980	.363 .598 -2.513
83	2.460	.713 -2.451	.241 -2.819	.147 -2.975	.366 .599 -2.512
84	2.458	.717 -2.449	.244 -2.815	.149 -2.969	.368 .601 -2.512
85	2.456	.721 -2.447	.247 -2.811	.152 -2.964	.370 .602 -2.511
86	2.454	.724 -2.445	.251 -2.806	.154 -2.959	.373 .603 -2.510
87	2.452	.728 -2.443	.254 -2.802	.157 -2.953	.375 .604 -2.510
88	2.450	.732 -2.441	.257 -2.798	.160 -2.948	.378 .606 -2.509
89	2.448	.736 -2.439	.261 -2.794	.162 -2.943	.380 .607 -2.508
90	2.447	.738 -2.438	.263 -2.791	.165 -2.939	.382 .607 -2.508
91	2.445	.741 -2.437	.266 -2.787	.167 -2.934	.384 .608 -2.507
92	2.443	.745 -2.435	.270 -2.783	.170 -2.929	.387 .610 -2.506
93	2.442	.747 -2.434	.272 -2.780	.172 -2.925	.388 .610 -2.506
94	2.440	.751 -2.432	.276 -2.776	.175 -2.920	.391 .612 -2.505
95	2.438	.755 -2.430	.279 -2.772	.177 -2.916	.393 .613 -2.504
96	2.437	.757 -2.429	.281 -2.769	.180 -2.912	.395 .614 -2.504
97	2.435	.761 -2.427	.285 -2.765	.182 -2.907	.397 .616 -2.503
98	2.434	.763 -2.426	.287 -2.762	.184 -2.904	.399 .616 -2.503
99	2.432	.767 -2.424	.291 -2.758	.187 -2.899	.402 .618 -2.502

7.12 Variables Sampling Plans with LTPD = 1.5%

or K_{LTPD} = - 2.17009 (Continued)

n	k	IQ	AQL	ML	AOQL
100	2.431	.769 -2.423	.293 -2.756	.189 -2.895	.403 .618 -2.502
110	2.417	.797 -2.410	.321 -2.725	.213 -2.858	.424 .630 -2.495
120	2.406	.820 -2.400	.347 -2.700	.235 -2.826	.441 .640 -2.489
130	2.396	.842 -2.390	.371 -2.678	.257 -2.799	.458 .650 -2.484
140	2.387	.862 -2.382	.393 -2.658	.277 -2.774	.474 .660 -2.478
150	2.379	.880 -2.374	.415 -2.640	.296 -2.752	.490 .670 -2.473
160	2.371	.898 -2.366	.436 -2.623	.316 -2.731	.505 .681 -2.467
170	2.365	.912 -2.361	.454 -2.609	.333 -2.713	.518 .689 -2.463
180	2.359	.926 -2.355	.472 -2.596	.350 -2.697	.531 .698 -2.458
190	2.353	.941 -2.349	.489 -2.583	.367 -2.681	.544 .707 -2.453
200	2.348	.953 -2.344	.506 -2.572	.382 -2.667	.556 .716 -2.449
210	2.344	.963 -2.341	.520 -2.562	.396 -2.655	.566 .722 -2.446
220	2.340	.973 -2.337	.534 -2.553	.410 -2.644	.576 .729 -2.442
230	2.336	.983 -2.333	.548 -2.544	.424 -2.633	.587 .737 -2.439
240	2.332	.993 -2.329	.561 -2.536	.437 -2.622	.597 .744 -2.435
250	2.328	1.003 -2.325	.575 -2.527	.450 -2.612	.607 .752 -2.431
260	2.325	1.011 -2.322	.586 -2.520	.462 -2.603	.616 .758 -2.428
270	2.322	1.019 -2.319	.598 -2.513	.474 -2.595	.624 .765 -2.425
280	2.319	1.027 -2.316	.609 -2.507	.485 -2.586	.633 .771 -2.422
290	2.316	1.035 -2.314	.620 -2.500	.496 -2.578	.641 .777 -2.419
300	2.314	1.040 -2.312	.630 -2.495	.506 -2.572	.648 .782 -2.417
310	2.311	1.048 -2.309	.640 -2.489	.517 -2.564	.657 .789 -2.414
320	2.309	1.053 -2.307	.649 -2.484	.526 -2.558	.663 .794 -2.412
330	2.307	1.059 -2.305	.658 -2.479	.535 -2.552	.670 .798 -2.410
340	2.305	1.064 -2.303	.667 -2.475	.544 -2.547	.676 .803 -2.407
350	2.302	1.073 -2.300	.677 -2.469	.555 -2.540	.685 .810 -2.404
360	2.301	1.075 -2.299	.684 -2.466	.562 -2.535	.690 .813 -2.403
370	2.299	1.081 -2.297	.692 -2.461	.570 -2.530	.696 .818 -2.401
380	2.297	1.086 -2.295	.700 -2.457	.579 -2.525	.703 .823 -2.398
390	2.295	1.092 -2.293	.708 -2.453	.587 -2.520	.709 .829 -2.396
400	2.293	1.098 -2.291	.716 -2.449	.595 -2.515	.715 .834 -2.394
410	2.292	1.100 -2.290	.722 -2.446	.602 -2.511	.720 .837 -2.392
420	2.290	1.106 -2.288	.730 -2.442	.610 -2.506	.726 .842 -2.390
430	2.289	1.109 -2.287	.736 -2.439	.616 -2.503	.731 .845 -2.389
440	2.287	1.115 -2.285	.744 -2.435	.624 -2.498	.737 .850 -2.386
450	2.286	1.117 -2.284	.749 -2.433	.630 -2.495	.741 .854 -2.385
460	2.285	1.120 -2.283	.755 -2.430	.636 -2.491	.746 .857 -2.384
470	2.283	1.126 -2.281	.762 -2.426	.644 -2.487	.752 .862 -2.382
480	2.282	1.129 -2.281	.768 -2.424	.650 -2.484	.756 .865 -2.380
490	2.281	1.132 -2.280	.773 -2.421	.656 -2.481	.760 .868 -2.379
500	2.280	1.135 -2.279	.778 -2.419	.661 -2.478	.764 .872 -2.378
510	2.279	1.137 -2.278	.783 -2.417	.667 -2.475	.769 .875 -2.376
520	2.278	1.140 -2.277	.789 -2.414	.673 -2.472	.773 .878 -2.375
530	2.277	1.143 -2.276	.794 -2.412	.678 -2.469	.777 .881 -2.374
540	2.276	1.146 -2.275	.799 -2.410	.683 -2.466	.781 .884 -2.372

7.12 Variables Sampling Plans with LTPD = 1.5%

or K_{LTPD} = - 2.17009 (Continued)

n	k	IQ	AQL	ML	AOQL
550	2.275	1.149 -2.274	.804 -2.407	.689 -2.463	.785 .887 -2.371
560	2.274	1.152 -2.273	.808 -2.405	.694 -2.460	.789 .891 -2.370
570	2.273	1.155 -2.272	.813 -2.403	.699 -2.458	.793 .894 -2.368
580	2.272	1.158 -2.271	.818 -2.401	.705 -2.455	.797 .897 -2.367
590	2.271	1.161 -2.270	.823 -2.399	.710 -2.452	.801 .900 -2.366
600	2.270	1.164 -2.269	.828 -2.396	.715 -2.450	.805 .903 -2.364
610	2.269	1.167 -2.268	.832 -2.394	.720 -2.447	.809 .907 -2.363
620	2.268	1.170 -2.267	.837 -2.392	.725 -2.445	.813 .910 -2.362
630	2.267	1.173 -2.266	.842 -2.390	.730 -2.442	.816 .913 -2.360
640	2.267	1.173 -2.266	.844 -2.389	.733 -2.441	.818 .914 -2.360
650	2.266	1.176 -2.265	.848 -2.387	.738 -2.438	.822 .917 -2.359
660	2.265	1.179 -2.264	.853 -2.385	.742 -2.436	.826 .920 -2.357
670	2.264	1.182 -2.263	.857 -2.383	.747 -2.434	.830 .923 -2.356
680	2.264	1.182 -2.263	.860 -2.383	.750 -2.432	.831 .924 -2.356
690	2.263	1.185 -2.262	.864 -2.381	.754 -2.430	.835 .927 -2.354
700	2.262	1.188 -2.261	.868 -2.379	.759 -2.428	.839 .931 -2.353
710	2.262	1.188 -2.261	.870 -2.378	.762 -2.427	.840 .931 -2.353
720	2.261	1.191 -2.260	.875 -2.376	.766 -2.425	.844 .935 -2.352
730	2.260	1.194 -2.259	.879 -2.374	.771 -2.422	.848 .938 -2.350
740	2.260	1.194 -2.259	.881 -2.374	.773 -2.421	.849 .939 -2.350
750	2.259	1.197 -2.258	.885 -2.372	.778 -2.419	.853 .942 -2.349
760	2.258	1.200 -2.257	.889 -2.370	.782 -2.417	.856 .945 -2.347
770	2.258	1.200 -2.257	.891 -2.369	.785 -2.416	.858 .946 -2.347
780	2.257	1.203 -2.256	.895 -2.368	.789 -2.414	.861 .949 -2.346
790	2.257	1.203 -2.256	.897 -2.367	.791 -2.413	.863 .950 -2.346
800	2.256	1.206 -2.255	.901 -2.365	.796 -2.411	.866 .953 -2.344
810	2.255	1.209 -2.254	.905 -2.363	.800 -2.409	.870 .956 -2.343
820	2.255	1.209 -2.254	.907 -2.363	.802 -2.408	.871 .957 -2.343
830	2.254	1.212 -2.253	.911 -2.361	.806 -2.406	.875 .960 -2.342
840	2.254	1.212 -2.253	.913 -2.360	.808 -2.405	.876 .961 -2.341
850	2.253	1.216 -2.252	.917 -2.359	.813 -2.403	.880 .964 -2.340
860	2.253	1.216 -2.252	.918 -2.358	.815 -2.402	.881 .965 -2.340
870	2.252	1.219 -2.251	.922 -2.357	.819 -2.400	.885 .968 -2.339
880	2.252	1.219 -2.251	.924 -2.356	.821 -2.400	.886 .968 -2.338
890	2.251	1.222 -2.250	.928 -2.354	.825 -2.398	.889 .972 -2.337
900	2.251	1.222 -2.250	.929 -2.354	.827 -2.397	.891 .972 -2.337
910	2.250	1.225 -2.249	.933 -2.352	.831 -2.395	.894 .976 -2.336
920	2.250	1.225 -2.249	.935 -2.352	.833 -2.394	.895 .976 -2.335
930	2.250	1.225 -2.249	.936 -2.351	.835 -2.393	.896 .977 -2.335
940	2.249	1.228 -2.248	.940 -2.349	.839 -2.392	.900 .980 -2.334
950	2.249	1.228 -2.248	.941 -2.349	.840 -2.391	.901 .981 -2.334
960	2.248	1.231 -2.247	.945 -2.347	.845 -2.389	.904 .984 -2.332
970	2.248	1.231 -2.247	.947 -2.347	.846 -2.388	.906 .984 -2.332
980	2.247	1.234 -2.246	.951 -2.345	.850 -2.387	.909 .988 -2.331
990	2.247	1.234 -2.246	.952 -2.345	.852 -2.386	.910 .988 -2.331
1000	2.247	1.234 -2.246	.953 -2.344	.854 -2.385	.911 .989 -2.331

7.13 Variables Sampling Plans with LTPD = 1%

or $K_{LTPD} = -2.32635$

n	k	IQ		AQL		ML		AOQL		
10	3.532	.033078	-3.405	.000041	-4.932	.000001	-5.602	.104243	1.59626	-2.145
11	3.443	.043138	-3.332	.000103	-4.747	.000004	-5.365	.101904	1.35143	-2.211
12	3.371	.053352	-3.272	.000216	-4.595	.000012	-5.172	.100453	1.16982	-2.267
13	3.309	.064037	-3.220	.000400	-4.465	.000028	-5.007	.100118	1.03357	-2.314
14	3.257	.074536	-3.176	.000664	-4.355	.000056	-4.868	.100163	.92729	-2.355
15	3.212	.084949	-3.138	.001022	-4.260	.000103	-4.746	.100641	.84335	-2.390
16	3.172	.095398	-3.104	.001486	-4.176	.000175	-4.639	.101583	.77642	-2.420
17	3.137	.105534	-3.074	.002055	-4.101	.000274	-4.545	.102686	.72157	-2.446
18	3.105	.115742	-3.047	.002746	-4.034	.000410	-4.460	.104174	.67694	-2.469
19	3.077	.125414	-3.022	.003536	-3.974	.000582	-4.384	.105622	.63908	-2.490
20	3.052	.134690	-3.001	.004427	-3.920	.000794	-4.316	.107106	.60688	-2.508
21	3.028	.144283	-2.980	.005455	-3.869	.001057	-4.252	.109024	.58049	-2.524
22	3.007	.153165	-2.961	.006560	-3.824	.001362	-4.195	.110750	.55713	-2.538
23	2.987	.162153	-2.944	.007787	-3.782	.001722	-4.142	.112738	.53753	-2.551
24	2.969	.170650	-2.928	.009090	-3.743	.002128	-4.093	.114637	.52016	-2.562
25	2.952	.179088	-2.913	.010495	-3.707	.002589	-4.047	.116671	.50525	-2.572
26	2.937	.186819	-2.900	.011939	-3.674	.003087	-4.006	.118484	.49152	-2.582
27	2.922	.194937	-2.886	.013518	-3.642	.003653	-3.966	.120642	.48023	-2.590
28	2.909	.202185	-2.875	.015100	-3.614	.004247	-3.930	.122478	.46942	-2.598
29	2.896	.209747	-2.863	.016803	-3.586	.004908	-3.895	.124598	.46046	-2.604
30	2.884	.216955	-2.852	.018551	-3.560	.005611	-3.863	.126647	.45230	-2.610
31	2.872	.224446	-2.842	.020417	-3.535	.006383	-3.831	.128942	.44560	-2.615
32	2.862	.230796	-2.833	.022208	-3.512	.007154	-3.803	.130759	.43853	-2.621
33	2.852	.237358	-2.824	.024096	-3.491	.007986	-3.775	.132773	.43260	-2.626
34	2.842	.244136	-2.815	.026084	-3.469	.008882	-3.749	.134976	.42770	-2.629
35	2.833	.250362	-2.807	.028054	-3.450	.009796	-3.724	.136985	.42290	-2.633
36	2.824	.256773	-2.798	.030114	-3.431	.010770	-3.700	.139156	.41893	-2.636
37	2.816	.262565	-2.791	.032128	-3.413	.011750	-3.678	.141091	.41489	-2.640
38	2.808	.268510	-2.784	.034222	-3.396	.012785	-3.656	.143166	.41154	-2.642
39	2.800	.274610	-2.777	.036397	-3.379	.013878	-3.635	.145376	.40883	-2.645
40	2.793	.280012	-2.770	.038491	-3.363	.014959	-3.616	.147301	.40584	-2.647
41	2.786	.285539	-2.764	.040654	-3.348	.016090	-3.597	.149341	.40339	-2.649
42	2.780	.290309	-2.759	.042707	-3.335	.017192	-3.580	.151062	.40057	-2.652
43	2.773	.296073	-2.752	.045001	-3.320	.018424	-3.562	.153315	.39906	-2.653
44	2.767	.301051	-2.747	.047171	-3.307	.019618	-3.545	.155229	.39710	-2.655
45	2.761	.306128	-2.741	.049397	-3.294	.020858	-3.529	.157234	.39554	-2.656
46	2.756	.310365	-2.737	.051470	-3.282	.022042	-3.514	.158870	.39346	-2.658
47	2.750	.315625	-2.731	.053802	-3.270	.023368	-3.499	.161043	.39259	-2.658
48	2.745	.320020	-2.727	.055966	-3.259	.024629	-3.485	.162829	.39115	-2.660
49	2.740	.324488	-2.722	.058173	-3.248	.025927	-3.471	.164686	.39001	-2.661
50	2.735	.329030	-2.717	.060423	-3.237	.027263	-3.457	.166610	.38913	-2.661
51	2.730	.333644	-2.713	.062717	-3.226	.028637	-3.444	.168602	.38851	-2.662
52	2.726	.337321	-2.709	.064797	-3.217	.029915	-3.432	.170163	.38724	-2.663
53	2.721	.342070	-2.704	.067173	-3.207	.031361	-3.420	.172279	.38709	-2.663
54	2.717	.345859	-2.701	.069319	-3.197	.032700	-3.408	.173949	.38625	-2.664

7.13 Variables Sampling Plans with LTPD = 1%

or K_{LTPD} = -2.32635 (Continued)

n	k	IQ		AQL		ML		AOQL	
55	2.713	.349699	-2.697	.071496	-3.189	.034069	-3.397	.175670	.38561 -2.664
56	2.709	.353589	-2.693	.073702	-3.180	.035465	-3.386	.177440	.38516 -2.665
57	2.705	.357531	-2.690	.075940	-3.171	.036891	-3.375	.179257	.38489 -2.665
58	2.701	.361523	-2.686	.078208	-3.163	.038346	-3.364	.181123	.38478 -2.665
59	2.697	.365566	-2.682	.080507	-3.154	.039830	-3.354	.183035	.38483 -2.665
60	2.694	.368564	-2.680	.082518	-3.147	.041166	-3.345	.184449	.38411 -2.666
61	2.690	.372699	-2.676	.084874	-3.139	.042703	-3.335	.186446	.38446 -2.665
62	2.687	.375769	-2.673	.086926	-3.132	.044082	-3.326	.187933	.38402 -2.666
63	2.683	.379995	-2.669	.089338	-3.124	.045673	-3.316	.190013	.38463 -2.665
64	2.680	.383137	-2.667	.091432	-3.117	.047095	-3.307	.191570	.38444 -2.665
65	2.677	.386310	-2.664	.093544	-3.110	.048536	-3.299	.193158	.38436 -2.666
66	2.674	.389516	-2.661	.095675	-3.103	.049996	-3.291	.194778	.38440 -2.665
67	2.671	.392753	-2.658	.097823	-3.097	.051475	-3.282	.196428	.38453 -2.665
68	2.668	.396021	-2.655	.099990	-3.090	.052973	-3.274	.198108	.38477 -2.665
69	2.665	.399321	-2.653	.102176	-3.084	.054491	-3.266	.199818	.38511 -2.665
70	2.662	.402652	-2.650	.104380	-3.077	.056028	-3.258	.201558	.38554 -2.664
71	2.660	.404822	-2.648	.106204	-3.072	.057348	-3.252	.202723	.38510 -2.665
72	2.657	.408207	-2.645	.108439	-3.066	.058918	-3.244	.204515	.38570 -2.664
73	2.654	.411624	-2.642	.110694	-3.060	.060509	-3.236	.206335	.38638 -2.664
74	2.652	.413856	-2.641	.112547	-3.055	.061865	-3.230	.207564	.38618 -2.664
75	2.649	.417327	-2.638	.114834	-3.049	.063489	-3.223	.209434	.38702 -2.663
76	2.647	.419597	-2.636	.116706	-3.044	.064868	-3.217	.210703	.38696 -2.663
77	2.644	.423122	-2.633	.119025	-3.038	.066527	-3.209	.212623	.38794 -2.662
78	2.642	.425430	-2.631	.120917	-3.033	.067930	-3.203	.213931	.38801 -2.662
79	2.640	.427755	-2.629	.122815	-3.029	.069342	-3.197	.215255	.38814 -2.662
80	2.638	.430096	-2.627	.124720	-3.024	.070763	-3.192	.216596	.38833 -2.662
81	2.635	.433719	-2.625	.127098	-3.018	.072484	-3.185	.218606	.38957 -2.661
82	2.633	.436099	-2.623	.129024	-3.014	.073929	-3.179	.219984	.38988 -2.661
83	2.631	.438494	-2.621	.130956	-3.009	.075383	-3.173	.221377	.39024 -2.660
84	2.629	.440905	-2.619	.132896	-3.005	.076847	-3.168	.222787	.39065 -2.660
85	2.627	.443331	-2.617	.134844	-3.000	.078320	-3.162	.224211	.39111 -2.660
86	2.625	.445774	-2.615	.136798	-2.996	.079802	-3.157	.225651	.39162 -2.659
87	2.623	.448232	-2.613	.138761	-2.992	.081294	-3.151	.227107	.39217 -2.659
88	2.621	.450707	-2.612	.140731	-2.987	.082795	-3.146	.228577	.39277 -2.658
89	2.619	.453197	-2.610	.142710	-2.983	.084306	-3.141	.230062	.39342 -2.658
90	2.618	.454378	-2.609	.144174	-2.980	.085489	-3.136	.230868	.39309 -2.658
91	2.616	.456893	-2.607	.146162	-2.976	.087014	-3.131	.232378	.39382 -2.657
92	2.614	.459423	-2.605	.148159	-2.972	.088549	-3.126	.233902	.39459 -2.657
93	2.612	.461969	-2.603	.150163	-2.967	.090093	-3.121	.235441	.39539 -2.656
94	2.611	.463184	-2.602	.151631	-2.964	.091290	-3.117	.236283	.39521 -2.656
95	2.609	.465755	-2.600	.153646	-2.960	.092848	-3.112	.237845	.39609 -2.655
96	2.607	.468341	-2.598	.155670	-2.956	.094416	-3.107	.239421	.39701 -2.655
97	2.606	.469579	-2.597	.157140	-2.953	.095622	-3.104	.240289	.39692 -2.655
98	2.604	.472190	-2.596	.159175	-2.949	.097205	-3.099	.241888	.39791 -2.654
99	2.602	.474816	-2.594	.161219	-2.945	.098797	-3.094	.243501	.39892 -2.653

7.13 Variables Sampling Plans with LTPD = 1%

or K_{LTPD} = -2.32635 (Continued)

n	k	IQ		AQL		ML		AOQL	
100	2.601	.476078	-2.593	.162692	-2.943	.100013	-3.090	.244392	.39893 -2.653
110	2.587	.494660	-2.580	.179850	-2.911	.113920	-3.051	.256680	.40461 -2.648
120	2.574	.512611	-2.567	.196613	-2.884	.127775	-3.017	.268933	.41146 -2.643
130	2.564	.526747	-2.558	.211440	-2.861	.140430	-2.988	.279307	.41672 -2.638
140	2.554	.541352	-2.548	.226291	-2.839	.153217	-2.961	.290093	.42331 -2.633
150	2.546	.553252	-2.541	.239594	-2.821	.164966	-2.938	.299463	.42867 -2.629
160	2.538	.565467	-2.533	.252850	-2.803	.176740	-2.917	.309088	.43489 -2.624
170	2.531	.576350	-2.526	.265212	-2.788	.187896	-2.898	.317999	.44064 -2.619
180	2.525	.585813	-2.521	.276608	-2.774	.198351	-2.881	.326112	.44576 -2.615
190	2.519	.595462	-2.515	.287914	-2.761	.208758	-2.865	.334352	.45137 -2.611
200	2.514	.603586	-2.510	.298181	-2.750	.218377	-2.850	.341689	.45614 -2.607
210	2.509	.611844	-2.505	.308346	-2.739	.227923	-2.837	.349105	.46126 -2.604
220	2.505	.618488	-2.501	.317402	-2.729	.236599	-2.825	.355530	.46540 -2.601
230	2.501	.625223	-2.498	.326342	-2.720	.245178	-2.813	.361991	.46978 -2.597
240	2.497	.632047	-2.494	.335184	-2.711	.253673	-2.802	.368490	.47438 -2.594
250	2.493	.638958	-2.490	.343943	-2.703	.262095	-2.792	.375027	.47919 -2.590
260	2.489	.645955	-2.486	.352631	-2.694	.270456	-2.782	.381602	.48417 -2.587
270	2.486	.651210	-2.483	.360113	-2.687	.277835	-2.773	.387060	.48796 -2.584
280	2.483	.656517	-2.480	.367505	-2.681	.285127	-2.764	.392524	.49188 -2.581
290	2.480	.661876	-2.477	.374815	-2.674	.292341	-2.756	.397997	.49591 -2.579
300	2.477	.667286	-2.474	.382052	-2.668	.299484	-2.748	.403479	.50005 -2.576
310	2.475	.670870	-2.472	.388005	-2.662	.305556	-2.742	.407757	.50287 -2.574
320	2.472	.676367	-2.470	.395102	-2.656	.312559	-2.734	.413246	.50719 -2.571
330	2.470	.680013	-2.468	.400895	-2.651	.318469	-2.728	.417506	.51016 -2.569
340	2.468	.683685	-2.466	.406611	-2.647	.324299	-2.722	.421754	.51319 -2.567
350	2.466	.687383	-2.464	.412255	-2.642	.330055	-2.716	.425991	.51628 -2.565
360	2.464	.691105	-2.462	.417833	-2.637	.335742	-2.711	.430217	.51942 -2.563
370	2.462	.694852	-2.460	.423351	-2.633	.341365	-2.705	.434435	.52260 -2.561
380	2.460	.698623	-2.458	.428813	-2.628	.346929	-2.700	.438645	.52583 -2.558
390	2.458	.702418	-2.456	.434223	-2.624	.352438	-2.695	.442848	.52910 -2.556
400	2.456	.706236	-2.454	.439586	-2.620	.357895	-2.689	.447046	.53241 -2.554
410	2.454	.710078	-2.452	.444906	-2.616	.363305	-2.684	.451239	.53576 -2.552
420	2.453	.711963	-2.451	.448805	-2.613	.367494	-2.681	.454085	.53763 -2.551
430	2.451	.715841	-2.449	.454033	-2.609	.372804	-2.676	.458261	.54104 -2.548
440	2.450	.717749	-2.448	.457824	-2.606	.376874	-2.672	.461072	.54294 -2.547
450	2.448	.721662	-2.446	.462973	-2.602	.382097	-2.667	.465234	.54641 -2.545
460	2.447	.723590	-2.445	.466668	-2.600	.386061	-2.664	.468014	.54835 -2.544
470	2.446	.725526	-2.444	.470314	-2.597	.389971	-2.661	.470777	.55031 -2.543
480	2.444	.729487	-2.442	.475358	-2.593	.395075	-2.656	.474918	.55384 -2.540
490	2.443	.731443	-2.441	.478923	-2.591	.398894	-2.653	.477653	.55582 -2.539
500	2.442	.733406	-2.440	.482446	-2.588	.402665	-2.650	.480374	.55782 -2.538
510	2.441	.735377	-2.440	.485930	-2.586	.406392	-2.647	.483079	.55983 -2.537
520	2.439	.739395	-2.438	.490859	-2.582	.411366	-2.643	.487199	.56343 -2.534
530	2.438	.741385	-2.437	.494278	-2.580	.415018	-2.640	.489883	.56547 -2.533
540	2.437	.743381	-2.436	.497662	-2.577	.418632	-2.637	.492554	.56751 -2.532

7.13 Variables Sampling Plans with LTPD = 1%

or K_{LTPD} = -2.32635 (Continued)

n	k	IQ		AQL		ML		AOQL	
550	2.436	.745384	-2.435	.501014	-2.575	.422208	-2.634	.495213	.56955 -2.530
560	2.435	.747394	-2.434	.504335	-2.573	.425749	-2.631	.497860	.57161 -2.529
570	2.434	.749410	-2.433	.507626	-2.571	.429255	-2.628	.500495	.57367 -2.528
580	2.433	.751433	-2.432	.510889	-2.568	.432729	-2.625	.503120	.57574 -2.527
590	2.432	.753463	-2.431	.514126	-2.566	.436171	-2.623	.505734	.57782 -2.525
600	2.431	.755498	-2.430	.517336	-2.564	.439584	-2.620	.508339	.57990 -2.524
610	2.430	.757541	-2.429	.520522	-2.562	.442967	-2.617	.510934	.58199 -2.523
620	2.430	.757498	-2.429	.522119	-2.561	.444944	-2.616	.512021	.58244 -2.523
630	2.429	.759548	-2.428	.525252	-2.559	.448265	-2.613	.514592	.58453 -2.521
640	2.428	.761604	-2.427	.528363	-2.557	.451561	-2.611	.517155	.58663 -2.520
650	2.427	.763666	-2.426	.531454	-2.555	.454833	-2.608	.519710	.58873 -2.519
660	2.426	.765734	-2.425	.534525	-2.553	.458081	-2.606	.522258	.59084 -2.518
670	2.425	.767809	-2.424	.537578	-2.551	.461308	-2.604	.524799	.59295 -2.516
680	2.425	.767773	-2.424	.539005	-2.550	.463087	-2.602	.525798	.59340 -2.516
690	2.424	.769855	-2.423	.542015	-2.548	.466263	-2.600	.528319	.59551 -2.515
700	2.423	.771942	-2.422	.545009	-2.546	.469420	-2.598	.530835	.59764 -2.514
710	2.423	.771910	-2.422	.546362	-2.545	.471111	-2.596	.531793	.59807 -2.513
720	2.422	.774004	-2.421	.549319	-2.543	.474223	-2.594	.534291	.60020 -2.512
730	2.421	.776104	-2.420	.552261	-2.541	.477317	-2.592	.536784	.60233 -2.511
740	2.420	.778209	-2.419	.555189	-2.539	.480395	-2.590	.539273	.60446 -2.510
750	2.420	.778180	-2.419	.556454	-2.539	.481982	-2.588	.540183	.60489 -2.509
760	2.419	.780293	-2.418	.559350	-2.537	.485021	-2.586	.542656	.60703 -2.508
770	2.419	.780265	-2.418	.560574	-2.536	.486559	-2.585	.543543	.60745 -2.508
780	2.418	.782384	-2.417	.563440	-2.534	.489561	-2.583	.546002	.60959 -2.507
790	2.417	.784508	-2.416	.566295	-2.532	.492549	-2.581	.548458	.61174 -2.505
800	2.417	.784483	-2.416	.567461	-2.532	.494020	-2.580	.549313	.61215 -2.505
810	2.416	.786614	-2.415	.570289	-2.530	.496975	-2.578	.551755	.61430 -2.504
820	2.416	.786589	-2.415	.571420	-2.529	.498403	-2.577	.552590	.61471 -2.504
830	2.415	.788726	-2.414	.574223	-2.528	.501327	-2.575	.555021	.61686 -2.502
840	2.414	.790869	-2.413	.577016	-2.526	.504241	-2.573	.557449	.61901 -2.501
850	2.414	.790846	-2.413	.578098	-2.525	.505610	-2.572	.558255	.61942 -2.501
860	2.413	.792996	-2.412	.580869	-2.524	.508495	-2.570	.560673	.62157 -2.500
870	2.413	.792974	-2.412	.581920	-2.523	.509826	-2.569	.561461	.62197 -2.499
880	2.412	.795129	-2.411	.584669	-2.521	.512685	-2.567	.563869	.62413 -2.498
890	2.412	.795108	-2.411	.585690	-2.521	.513980	-2.566	.564639	.62453 -2.498
900	2.411	.797269	-2.410	.588420	-2.519	.516814	-2.564	.567038	.62668 -2.497
910	2.411	.797249	-2.410	.589412	-2.518	.518075	-2.564	.567790	.62708 -2.497
920	2.410	.799417	-2.409	.592124	-2.517	.520886	-2.562	.570181	.62924 -2.495
930	2.410	.799397	-2.409	.593089	-2.516	.522115	-2.561	.570917	.62962 -2.495
940	2.409	.801571	-2.408	.595783	-2.515	.524904	-2.559	.573300	.63179 -2.494
950	2.409	.801552	-2.408	.596723	-2.514	.526101	-2.558	.574021	.63217 -2.494
960	2.409	.801534	-2.408	.597649	-2.514	.527282	-2.557	.574733	.63255 -2.493
970	2.408	.803714	-2.407	.600316	-2.512	.530038	-2.556	.577103	.63471 -2.492
980	2.408	.803696	-2.407	.601219	-2.511	.531190	-2.555	.577800	.63509 -2.492
990	2.407	.805882	-2.406	.603871	-2.510	.533926	-2.553	.580163	.63725 -2.491
1000	2.407	.805865	-2.406	.604751	-2.509	.535051	-2.552	.580847	.63762 -2.491

8. DERIVATION OF THE MATHEMATICAL RELATIONSHIPS.

8.1 The noncentral t-distribution.

Let X have a normal distribution with mean zero and variance one and let Y be independent of X and have a chi-square distribution with f degrees of freedom and let δ be any constant. Then $T_f(\delta) = (X + \delta)/\sqrt{Y/f}$ has a noncentral t-distribution with noncentrality parameter δ and f degrees of freedom. Note that if $\delta = 0$ then $T_f(\delta)$ has a (central) Student t-distribution with f degrees of freedom.

The joint density of X and Y is then given by

$$\frac{1}{\sqrt{2\pi}} e^{-X^2/2} \frac{1}{\Gamma(f/2)2^{f/2}} y^{(f-2)/2} e^{-y/2}$$

If the change in variables given by $X = (ZU/\sqrt{f}) - \delta$ and $y = U^2$ is made in this last expression and U is integrated out, then the density of $Z = T_f$ is obtained. That result is then integrated with respect to Z from minus infinity to t to give the cumulative distribution function,

$$\Pr\left\{T_f \leq t\right\} = \frac{\sqrt{2\pi}}{\Gamma\left(\frac{f}{2}\right)2^{(f-2)/2}} \int_0^\infty G\left(\frac{tU}{\sqrt{f}} - \delta\right) U^{f-1} G'(U)\, dU,$$

where

$$G'(X) = \frac{1}{\sqrt{2\pi}} e^{-X^2/2},$$

and

$$G(X) = \int_{-\infty}^{X} G'(t)\, dt.$$

If this cumulative distribution function is integrated by parts repeatedly, one obtains for odd values of f

$$\Pr\left\{T_f \leq t\right\} = G(-\delta\sqrt{B}) + 2T(\delta\sqrt{B}, A) + 2\left[M_1 + M_3 + \ldots + M_{f-2}\right]$$

where

$$A = \frac{t}{\sqrt{f}} \text{ and } B = \frac{f}{f + t^2}$$

and

$$T(h, a) = \frac{1}{2\pi} \int_0^a \frac{\exp\left[-\frac{h^2}{2}(1 + X^2)\right]}{1 + X^2}\, dX$$

is a function discussed and tabulated in [48] and [49]. The M's are defined below. For even values of f,

$$\Pr\left\{T_f \le t\right\} = G(-\delta) + \sqrt{2\pi}\left[M_o + M_2 + \ldots + M_{f-2}\right]$$

where

$$M_{-1} = 0$$

$$M_o = A\sqrt{B}\, G'(\delta\sqrt{B})\, G(\delta A\sqrt{B})$$

$$M_1 = B\left[\delta A M_o + \frac{A}{\sqrt{2\pi}} G'(\delta)\right]$$

$$M_2 = \frac{1}{2} B\left[\delta A M_1 + M_o\right]$$

$$M_3 = \frac{2}{3} B\left[\delta A M_2 + M_1\right]$$

$$M_4 = \frac{3}{4} B\left[\frac{1}{2}\delta A M_3 + M_2\right]$$

$$\cdot \qquad \cdot \qquad \cdot$$

$$\cdot \qquad \cdot \qquad \cdot$$

$$\cdot \qquad \cdot \qquad \cdot$$

$$M_k = \frac{k-1}{k} B\left[a_k \delta A M_{k-1} + M_{k-2}\right]$$

and where

$$a_k = \frac{1}{(k-2)a_{k-1}} \qquad \text{for } k \ge 3 \qquad \text{and} \qquad a_2 = 1.$$

Some special properties of the noncentral t-distribution are now immediately obvious from the above formulas:

$$\Pr\left\{T_f \le t \mid \delta\right\} = 1 - \Pr\left\{T_f \le -t \mid -\delta\right\}$$

$$\Pr\left\{T_f \le 0 \mid \delta\right\} = G(-\delta)$$

If $f = 1$, $t = 1$ and $G\left(\frac{\delta}{\sqrt{2}}\right) = P$, then $\Pr\left\{T_1 \le 1\right\} = 1 - P$.

Also if $\delta = 0$, the above noncentral t-distribution reduces to the Student t-distribution. Note that $T(0, A) = (\arctan A)/(2\pi)$. Note also that in this case the M's with odd subscripts can be computed independently of the M's with even subscripts and vice versa.

For odd values of f, therefore, the Student t-cumulative distribution function reduces to

$$\Pr\left\{\text{Student-t} \le t\right\} = \frac{1}{2} + (\arctan A)/(\pi) + (AB)/(\pi)\left[b_o + b_1 B + b_2 B^2 + \ldots + b_{(f-3)/2} B^{(f-3)/2}\right]$$

where, $b_o = 1$ and $b_r = \frac{2r}{2r+1} b_{r-1}$; and for even values of f

$$\Pr\left\{\text{Student-t} \le t\right\} = \frac{1}{2} + \frac{A\sqrt{B}}{2}\left[c_o + c_1 B + c_2 B^2 + \ldots + c_{(f-2)/2} B^{(f-2)/2}\right]$$

where $c_o = 1$ and $c_r = \frac{2r-1}{2r} c_{r-1}$ and, as before,

$$A = t/(\sqrt{f}) \text{ and } B = f/(f+t^2).$$

8.2 <u>One-sided tolerance limits.</u>

A method for finding a one-sided tolerance limit will now be given such that at least a proportion P of a normal population will be above (or below) the tolerance limit with probability γ (i.e., if the experimental procedure as described below were repeated an infinite number of times and all of the hypotheses were met exactly, then $100\gamma\%$ of the tolerance limits would cover at least a proportion P of the population).

A sample of n observations is taken at random from a normal distribution with unknown mean μ and unknown standard deviation σ. The sample values are denoted by $x_1, x_2, \ldots, x_n$ and

$$\bar{x} = \frac{1}{n}\sum_{i=1}^{n} x_i$$

and

$$s^2 = \frac{1}{n-1}\sum_{i=1}^{n} (x_i - \bar{x})^2$$

are computed from these sample values.

In more complicated problems the estimate of σ may be obtained from an analysis of variance computation and be based on f degrees of freedom. The quantity s as defined above has $f = n - 1$ degrees of freedom. In what follows, s will be used for either the analysis of variance estimate or the estimate above. How s or $\bar{x}$ are computed is not important to the problem here so long as fs^2/σ^2 has a chi-square distribution with f degrees of freedom and $\bar{x}$ has a normal distribution with mean μ and standard deviation equal to $\sigma/\sqrt{n}$ (μ and σ are unknown). The problem then becomes a problem in finding k so that either $\bar{x} + ks$ or $\bar{x} - ks$ is the required tolerance limit.

Mathematically, the problem is to find k such that

$$\Pr\left\{\Pr(X \le \bar{x} + ks) \ge P\right\} = \gamma$$

where X has a normal distribution with mean μ and standard deviation σ, and P and γ are specified

probabilities. Define K_p by:

$$\frac{1}{\sqrt{2\pi}} \int_{-\infty}^{K_p} e^{-t^2/2}\, dt = P,$$

and then,

$$\Pr\left\{ \Pr(X \leq \bar{x} + ks) \geq P \right\} = \Pr\left\{ \frac{\bar{x} + ks - \mu}{\sigma} \geq K_p \right\}.$$

Rewriting once more this becomes

$$\Pr\left\{ \frac{\frac{\bar{X} - \mu}{\sigma}\sqrt{n} - K_p\sqrt{n}}{\frac{s}{\sigma}} \geq -k\sqrt{n} \right\} = \gamma.$$

This is now in the form of the noncentral t-distribution with f degrees of freedom and with $\delta = -K_p\sqrt{n}$ and $t = -k\sqrt{n}$.

Or equivalently, this may be written

$$\Pr\left\{ T_f \leq k\sqrt{n} \,\middle|\, \delta = K_p\sqrt{n} \right\} = \gamma,$$

where T_f is a noncentral t random variable. Hence the quantity k which is desired may be computed from the percentage points of the noncentral t-distribution.

8.3 The sampling plan procedure.

The problem is to find a value of k such that the $\Pr\{\bar{x} + ks \leq U\} = 1 - \gamma$, i.e., the probability of accepting a lot is $1 - \gamma$. (The quantity γ is usually equal to 0.90.) This is equivalent to

$$\Pr\left\{ \left(\frac{\bar{x} - \mu}{\sigma}\right)\sqrt{n} - \left(\frac{U - \mu}{\sigma}\right)\sqrt{n} \leq -\frac{ks}{\sigma}\sqrt{n} \right\} = 1 - \gamma.$$

Next we divide both sides of the inequality by s/σ and the quantity on the left is of the form of the noncentral t. Hence, we have

$$\Pr\left\{ T_f \leq -k\sqrt{n} \,\middle|\, \delta = -\left(\frac{U - \mu}{\sigma}\right)\sqrt{n} \right\} = 1 - \gamma,$$

where T_f is a noncentral t variable with f degrees of freedom (the number of degrees of freedom of s^2). In most applications $f = n - 1$. We want to accept a lot with no more than $100(1 - P)\%$ of the population above U only $100(1 - \gamma)\%$ of the time and hence $K_p = \frac{U - \mu}{\sigma}$. Then we have

$$\Pr\left\{ T_f \leq k\sqrt{n} \,\middle|\, \delta = K_p\sqrt{n} \right\} = \gamma.$$

This equation is identical with the one given for the tolerance limit problem.

8.4 The density of noncentral t in terms of the cumulative.

The value of k, as defined in Section 8.2, may now be obtained by using Newton's method for interpolating for a root of an equation. To implement this method, the derivative of the distribution

function is needed. Let

$$H_f(t) = \Pr\left\{T_f \le t\right\},$$

$$= \frac{\sqrt{2\pi}}{\Gamma\left(\frac{f}{2}\right)2^{(f-2)/2}} \int_0^\infty G\left(\frac{tx}{\sqrt{f}} - \delta\right) x^{f-1} G'(x)\, dx.$$

Then the derivative with respect to t is given by:

$$H_f'(t) = \frac{f}{t}\left[H_{f+2}\left(\frac{\sqrt{f+2}\, t}{\sqrt{f}}\right) - H_f(t)\right] = \frac{f}{t} M_f(t)\sqrt{2\pi} \qquad \text{if f is even}$$

$$= \frac{2f}{t} M_f(t) \qquad \text{if f is odd}$$

where $M_f(t) = M_k$ is defined in Section 8.1 by a recursion formula and for this derivative means that the recursion formula must be applied two steps more than would be necessary to get the cumulative distribution function. Newton's method as applied to the problem of finding k is to start with an approximate value of k, say k_o, and then obtain k_1, k_2, k_3, ... from

$$k_{r+1} = k_r - \frac{H_f(k_r\sqrt{n}) - \gamma}{H_f'(k_r\sqrt{n})}, \qquad r = 0, 1, 2, \ldots$$

where

$$H_f'(k\sqrt{n}) = \frac{f}{k}\left[H_{f+2}\left(\frac{\sqrt{f+2}}{\sqrt{f}} k\sqrt{n}\right) - H_f(k\sqrt{n})\right].$$

This process was repeated until two consecutive values of k were equal to 8 decimal places or until $H_f(k_r\sqrt{n}) - \gamma$ was zero to 8 decimal places. This is the value of k given in the table.

8.5 The derivative of the cumulative with respect to δ.

It is convenient to have the derivative of the cumulative distribution function of noncentral t with respect to δ when computing the tables of Section 6. Again let

$$H(\delta) = H_f(t \mid \delta) = \Pr\left\{T_f \le t \mid \delta\right\} = \frac{\sqrt{2\pi}}{\Gamma\left(\frac{f}{2}\right) 2^{(f-2)/2}} \int_0^\infty G\left(\frac{tx}{\sqrt{f}} - \delta\right) x^{f-1}\, G'(x)\, dx.$$

Putting f = 1, the derivative with respect to δ is given by

$$H'(\delta) = H_1'(t \mid \delta) = -2G'\left(\frac{\delta}{\sqrt{1+t^2}}\right) G\left(\frac{\delta t}{\sqrt{1+t^2}}\right) \frac{1}{\sqrt{1+t^2}} = \frac{-2}{t} M_o(t),$$

where M_o is defined in Section 8.1.

For f = 1 the quantity δ was then computed by iterating, using the formula

$$\delta_{r+1} = \frac{\delta_{r-1} H_1(\delta_r) H_1'(\delta_{r-1}) - \delta_r H_1(\delta_{r-1}) H_1'(\delta_r)}{H_1(\delta_r) H_1'(\delta_{r-1}) - H_1(\delta_{r-1}) H_1'(\delta_r)}$$

for r = 1, 2, ...

The iteration was stopped and the value of δ accepted when two consecutive δ's differed by less than 10^{-8} or when $|H_1(\delta) - \gamma|$ was less than 10^{-8}.

For $f \geq 2$, the derivative was not needed for the iteration to get δ. In this case

$$\delta_{r+1} = \frac{\delta_{r-1} H_f(\delta_r) - \delta_r H_f(\delta_{r-1})}{H_f(\delta_r) - H_f(\delta_{r-1})} ;$$

$r = 1, 2, \ldots$; i.e., linear interpolation was used to obtain the tables of Section 6. The same rules were used as for $f = 1$ for stopping the iteration.

For possible future use the derivative with respect to δ is given for $f \geq 2$ and is:

$$\frac{dH_f(t|\delta)}{d\delta} = \frac{\sqrt{2f}}{t} \frac{\Gamma\left(\frac{f+1}{2}\right)}{\Gamma\left(\frac{f}{2}\right)} \left[H_{f-1}\left(t\sqrt{\frac{f-1}{f}}\right) - H_{f+1}\left(t\sqrt{\frac{f+1}{f}}\right)\right]$$

$$= \frac{-\sqrt{2f}}{t} \frac{\Gamma\left(\frac{f+1}{2}\right)}{\Gamma\left(\frac{f}{2}\right)} M_{f-1}(t)\sqrt{2\pi} \qquad \text{if } f \text{ is odd}$$

$$= \frac{-2\sqrt{2f}}{t} \frac{\Gamma\left(\frac{f+1}{2}\right)}{\Gamma\left(\frac{f}{2}\right)} M_{f-1}(t) \qquad \text{if } f \text{ is even}$$

where $M_{f-1}(t) = M_k$ is defined in Section 8.1 by a recursion formula and for this derivative means that the recursion formula must be applied one step more than would be necessary to get the cumulative distribution function. Note that $H_f(t|\delta) = H_f(t)$ and hence $H_{f-1}\left(t\sqrt{\frac{f-1}{f}}\right)$ indicates a change in the argument t, but no change in δ. Also note that this derivative is for $f \geq 2$ and that it is always negative.

8.6 <u>The derivative of t with respect to δ.</u>

$$\text{Let} \quad H_f(t|\delta) = \epsilon = \frac{\sqrt{2\pi}}{\Gamma\left(\frac{f}{2}\right) 2^{(f-2)/2}} \int_0^\infty G\left(\frac{tx}{\sqrt{f}} - \delta\right) x^{f-1} G'(x)\, dx,$$

i.e., hold the value of the integral constant and now differentiate t with respect to δ. The result is:

$$\frac{dt}{d\delta} = \frac{\sqrt{f} \int_0^\infty G'\left(\frac{tx}{\sqrt{f}} - \delta\right) x^{f-1} G'(x)\, dx}{\int_0^\infty G'\left(\frac{tx}{\sqrt{f}} - \delta\right) x^{f} G'(x)\, dx} .$$

Integration by parts yields

$$\text{For} \quad f = 1, \quad \frac{dt}{d\delta} = \frac{+G'\left(\frac{\delta}{\sqrt{1+t^2}}\right) G\left(\frac{\delta t}{\sqrt{1+t^2}}\right)\sqrt{1+t^2}}{\frac{\delta t}{\sqrt{1+t^2}} G'\left(\frac{\delta}{\sqrt{1+t^2}}\right) G\left(\frac{\delta t}{\sqrt{1+t^2}}\right) + \frac{1}{\sqrt{2\pi}} G'(\delta)} = \frac{M_o(t)}{M_1(t)}$$

$$\text{For} \quad f \geq 2, \quad \frac{dt}{d\delta} = \frac{\sqrt{f}\,\Gamma\left(\frac{f+1}{2}\right) H_{f+1}\left(t\sqrt{\frac{f+1}{f}}\right) - H_{f-1}\left(t\sqrt{\frac{f-1}{f}}\right)}{\sqrt{2}\,\Gamma\left(\frac{f+2}{2}\right) H_{f+2}\left(t\sqrt{\frac{f+2}{f}}\right) - H_f(t)}$$

$$= \frac{\sqrt{\pi f}\,\Gamma\left(\frac{f+1}{2}\right)}{\Gamma\left(\frac{f}{2}\right)} \frac{M_{f-1}(t)}{M_f(t)} \qquad \text{if } f \text{ is odd}$$

$$= \frac{2}{\sqrt{\pi f}} \frac{\Gamma\left(\frac{f+1}{2}\right)}{\Gamma\left(\frac{f}{2}\right)} \frac{M_{f-1}(t)}{M_f(t)} \qquad \text{if } f \text{ is even}$$

where $M_f(t) = M_k$ is defined in Section 8.1 by a recursion formula. Note that $\frac{dt}{d\delta}$ is positive. This is most easily seen in the integral form above.

8.7 The derivative of k with respect to n for f = 1 and a check on k for f = 1.

For most values of f the values of k decrease with increasing values of n. However, for f = 1, k decreases for the smallest values of P, decreases and then increases for slightly larger values of P, and strictly increases with n for the largest values of P contained in the table. To check this out the derivative of k with respect to n was computed with P, γ and f = 1, fixed for all the table entries from the following formula:

$$\frac{\partial k}{\partial n} = \frac{T_1\, G(T_1) - n\, k^2\, G'(T_1)}{2n^2\, k\left[T_1\, G(T_1) + G'(T_1)\right]}$$

where $T_1 = \frac{nk\,K_p}{\sqrt{1 + n\,k^2}}$. The values obtained for the derivative were, in every case, consistent with the values of k found in the table. That is, $\partial k/\partial n$ was positive in the regions where k increases with n and negative where k decreases with n.

As a further check the derivative of k with respect to n for f = 2 was calculated. The following formula was computed for every value given in the tables:

$$\frac{\partial k}{\partial n} = \frac{\left[2\,T_2^2 - n\,k^2\right] G(T_2) + 2\,T_2\, G'(T_2)}{2n^2\, k\left\{\left[T_2^2 + 1\right] G(T_2) + T_2\, G'(T_2)\right\}}$$

where $T_2 = \frac{nk\,K_p}{\sqrt{2 + n\,k^2}}$. The values obtained for this derivative for the entries in the tables were all negative, which was consistent with those table entries.

As a further check on the f = 1 case, the problem of finding k was reformulated in terms of the bivariate normal probability distribution. Let

$$B(h, k; \rho) = \frac{1}{2\pi\sqrt{1 - \rho^2}} \int_{-\infty}^{h} \int_{-\infty}^{k} \exp\left[-\frac{1}{2}\left(\frac{x^2 - 2\rho\, xy + y^2}{1 - \rho^2}\right)\right] dx\, dy.$$

Then our problem reduces first to finding ρ such that

$$B\left(\frac{\delta\sqrt{1+\rho}}{\sqrt{2}}, \frac{\delta\sqrt{1+\rho}}{\sqrt{2}}; \rho\right) = 1 - \gamma$$

and then obtaining k from

$$k = \frac{1}{\sqrt{n}}\sqrt{\frac{1-\rho}{1+\rho}}.$$

In order to get a value of ρ close to the value needed, an approximate value of ρ was computed from

$$\rho \approx \frac{K^2_{1-\gamma/2} - n K^2_p}{K^2_{1-\gamma/2} + n K^2_p}$$

and then the computer iterated on ρ until the value of

$$B\left(\frac{\delta\sqrt{1+\rho}}{\sqrt{2}}, \frac{\delta\sqrt{1+\rho}}{\sqrt{2}}; \rho\right)$$

was within 10^{-8} of being equal to $1 - \gamma$. The resulting k values agreed with those computed by the formulas of Section 8.1. For the γ's and ρ's in the table the values of ρ were less than -0.95 and some came very close to minus one.

8.8 Limiting values of k.

When the value of f becomes infinite the value of σ is then known and the tolerance limit becomes $\bar{x} + k\sigma$ and k may be obtained from

$$k = K_p + \frac{K_\gamma}{\sqrt{n}}.$$

When the value of n becomes infinite the value of μ is then known and the tolerance limit becomes $\mu + ks$ and k may be obtained from

$$k = K_p\sqrt{\frac{f}{\chi^2_{1-\gamma}}}$$

where $\chi^2_{1-\gamma}$ is a percentage point of the chi-square distribution with f degrees of freedom, i.e.,

$$\Pr\left\{\chi^2 \le \chi^2_{1-\gamma}\right\} = 1 - \gamma.$$

When both n and f are infinite the tolerance limit becomes $\mu + k\sigma$ where

$$k = K_p$$

and the result holds with probability $\gamma = 1$.

For $n = \infty$ and $f = 1$, the formula specializes to

$$k = \frac{K_p}{K_{(1-\frac{\gamma}{2})}}, \text{ i.e., is the ratio of two normal deviates;}$$

and for $n = \infty$ and $f = 2$,

$$k = \frac{K_p}{\sqrt{-\log_e \gamma}}.$$

These last two formulas were often used to start the iterations described in Sections 8.4 and 8.5. Other start values were obtained by use of the approximations given in Section 12.

8.9 The moments of the noncentral t-distribution.

The moments of the noncentral t-distribution have been given by Hogben, Pinkham, and Wilk [26] and by others previously, e.g., [40], and are polynomial functions of δ whose coefficients are functions of f. The mean and second, third, and fourth moments about the mean are as follows:

$$\mu = c_{11}\,\delta$$

$$\mu_2 = c_{22}\,\delta^2 + c_{20}$$

$$\mu_3 = c_{33}\,\delta^3 + c_{31}\,\delta$$

$$\mu_4 = c_{44}\,\delta^4 + c_{42}\,\delta^2 + c_{40}$$

where

$$c_{11} = \frac{\sqrt{\frac{f}{2}}\;\Gamma\left(\frac{f-1}{2}\right)}{\Gamma\left(\frac{f}{2}\right)}$$

$$c_{22} = \frac{f}{f-2} - c_{11}^2$$

$$c_{20} = \frac{f}{f-2}$$

$$c_{33} = c_{11}\left[\frac{f(7-2f)}{(f-2)(f-3)} + 2c_{11}^2\right]$$

$$c_{31} = \frac{3f}{(f-2)(f-3)}\,c_{11}$$

$$c_{44} = \frac{f^2}{(f-2)(f-4)} - \frac{2f(5-f)\,c_{11}^2}{(f-2)(f-3)} - 3c_{11}^4$$

$$c_{42} = \frac{6f}{f-2}\left[\frac{f}{f-4} - \frac{(f-1)\,c_{11}^2}{f-3}\right]$$

$$c_{40} = \frac{3f^2}{(f-2)(f-4)}\,.$$

Hogben, Pinkham, and Wilk table the exact values of the c's. See Section 12.3 for approximations to the c's. See Sections 3.7 and 3.8 for tabulations of means and standard deviations of the noncentral t- and

noncentral $\frac{t}{\sqrt{n}}$ -distributions. Merrington and Pearson [40] give the following formula for finding the rth moment about the origin for the noncentral t-distribution:

$$\mu_r' = E(t^r) = \frac{f^{r/2}}{2} \frac{\Gamma[(f-r)/2]}{\Gamma(f/2)} e^{-\frac{1}{2}\delta^2} D^r e^{\frac{1}{2}\delta^2}$$

where D^r indicates the rth derivative of the function following it. Hence,

$$\mu_5' = c_{11}\left[\delta^5 + 10\delta^3 + 15\delta\right]\left[f^2/\left\{(f-3)(f-5)\right\}\right]$$

and

$$\mu_6' = \left[\delta^6 + 15\delta^4 + 45\delta^2 + 15\right]\left[f^3/\left\{(f-2)(f-4)(f-6)\right\}\right].$$

8.10 An alternative expression for the noncentral t-distribution.

On page 387 of the article by Johnson and Welch [32] a formula is given for even values of f for the cumulative distribution function of noncentral t in terms of Hh functions. This formula has f/2 terms, i.e., is a finite sum and it is easily convertible into a finite sum of confluent hypergeometric functions. Owen and Amos [53] have another expression involving the hypergeometric function which holds for odd and even values of f.

As before, let

$$H_f(t) = \Pr\left\{T_f \le t\right\} = \frac{\sqrt{2\pi}}{\Gamma\left(\frac{f}{2}\right)2^{(f-2)/2}} \int_0^\infty G\left(\frac{tx}{\sqrt{f}} - \delta\right) x^{f-1} G'(x)\, dx,$$

and let $A = \frac{t}{\sqrt{f}}$ and $B = \frac{f}{f+t^2}$. Then Owen and Amos [53] give

$$H_f(t) = 1 - G(\delta\sqrt{B}) + \sqrt{2}\, G'(\delta\sqrt{B})\left[\frac{\Gamma\left(\frac{f-1}{2}\right)}{\Gamma\left(\frac{f-2}{2}\right)} A\sqrt{B}\, S_1 - \frac{\delta}{\sqrt{2}}\sqrt{B}\, S_2\right]$$

where

$$S_1 = \sum_{k=0}^{\infty} a_k\, \phi\left(-k, \frac{1}{2}; \frac{\delta^2 B}{2}\right)$$

and

$$S_2 = \sum_{k=0}^{\infty} b_{k+1}\, \phi\left(-k, \frac{3}{2}; \frac{\delta^2 B}{2}\right),$$

and where

$$a_0 = 1, \quad a_k = a_{k-1} A^2 B \frac{(2k-f)(2k-1)}{(2k)(2k+1)};$$

$$b_0 = 1, \quad b_k = b_{k-1} A^2 B\left(\frac{2k-1-f}{2k}\right).$$

One series will always terminate when f is an integer; S_1 when f is even and S_2 when f is odd.

The quantity ϕ is a confluent hypergeometric function defined by the series

$$\phi(a, c; x) = \sum_{k=0}^{\infty} \frac{\Gamma(a + k)\ \Gamma(c)}{\Gamma(a)\ \Gamma(c + k)} \frac{x^k}{k!}$$

See references [13] and [14] for the properties of the confluent hypergeometric function. The values of ϕ may be generated by the following recurrence relations. See [13, p. 254].

$$\phi(-k - 1, c; x) = \left(1 + \frac{k - x}{k + c}\right) \phi(-k, c; x) - \frac{k}{k + c} \phi(-k + 1, c; x)$$

$$\phi(0, c; x) = 1, \quad \phi(-1, c; x) = 1 - \frac{x}{c} \text{ with } c = 1/2 \text{ or } 3/2.$$

Both the formula for noncentral t given in this Section (8.10) and the one given in Section 8.1 were programmed to give the values of k in the tables of Sections 2 and 4. The values printed in the tables of Sections 2 and 4 were obtained from the formula of Section 8.1. The formula of Section 8.10 above was run for all values where n = 3 (1) 10 (5) 45 in Section 2 and over the values in Section 4 for all n's and all values where f = 2 (1) 45. The discrepancies are shown in Table 8.10.1 below.

The program using the formula of 8.1 was set up to iterate until the value of γ was obtained to within 10^{-8} of the value wanted and then the value of k was rounded to three decimal places and printed. The program using the formula of 8.10 started with a three-decimal-place value of k and increased it by 0.001 until γ was obtained or surpassed, then k was chosen as that (3-decimal-place) value which came closest to giving the value of γ wanted. Hence, some of the discrepancies of Table 8.10.1 are due only to the different rounding procedures used, and both programs were giving exactly the same values for the computed γ. In other cases, however, the two programs got slightly different results. Every entry where there was any discrepancy in the value of k obtained is shown in Table 8.10.1.

Craig [8] expresses the noncentral t-distribution in terms of Incomplete Beta functions as follows:

$$H_f(t) = e^{-\frac{1}{2}\delta^2} \sum_{k=0}^{\infty} \left(\frac{\delta^2}{2}\right)^k \frac{1}{k!} I_{A^2B}\left(k + \frac{1}{2}, \frac{1}{2}\right)$$

where

$$I_x(p, q) = \frac{\Gamma(p + q)}{\Gamma(p)\ \Gamma(q)} \int_0^x y^{p-1} (1 - y)^{q-1}\, dy.$$

TABLE 8.10.1

Discrepancies Between Values of k Obtained From the Formulas of Sections 8.1 and 8.10

				k Values Computed by formula of		Program using formula of Section 8.1		Program using formula of Section 8.10	
γ	n	f	P	8.1	8.10	γ for k Value of 8.1	γ for k Value of 8.10	γ for k Value of 8.1	γ for k Value of 8.10
.95	6	4	.99990	8.943	8.942	.95000982	.94999019	.95000982	.94999018
.95	17	2	.99999	18.858	18.859	.94999746	.95000263	.94999727	.95000244
.95	145	2	.99999	18.834	18.835	.94999802	.95000319	.94999730	.95000248
.95	500	2	.99000	10.273	10.274	.94999572	.95000520	.94999502	.95000451
.99	2	2	.99990	37.748	37.749	.98999974	.99000027	.98999970	.99000023
.99	2	21	.95000	3.791	3.792	.98998829	.99001170	.98998829	.99001170
.99	3	2	.99999	42.922	42.923	.98999986	.99000032	.98999968	.99000015
.99	4	7	.99900	7.767	7.766	.99000380	.98999620	.99000380	.98999620
.99	5	2	.99999	42.770	42.771	.98999974	.99000020	.98999947	.98999993
.99	6	2	.99900	31.087	31.088	.98999977	.99000041	.98999959	.99000023
.99	6	2	.99990	37.315	37.316	.98999983	.99000036	.98999958	.99000011
.99	7	2	.99000	23.503	23.504	.98999964	.99000048	.98999955	.99000039
.99	7	2	.99990	37.284	37.285	.98999990	.99000043	.98999962	.99000015
.99	7	2	.99999	42.705	42.706	.98999983	.99000029	.98999952	.98999998
.99	8	2	.99999	42.685	42.686	.99000001	.99000048	.98999969	.99000015
.99	8	3	.99990	19.169	19.170	.98999923	.99000076	.98999923	.99000076
.99	9	2	.99000	23.437	23.438	.98999961	.99000046	.98999947	.99000031
.99	9	2	.99999	42.669	42.670	.98999995	.99000042	.98999962	.99000008
.99	10	2	.99000	23.414	23.415	.98999972	.99000057	.98999955	.99000040
.99	10	2	.99990	37.228	37.229	.98999994	.99000048	.98999963	.99000016
.99	10	2	.99999	42.656	42.657	.98999981	.99000028	.98999947	.98999994
.99	10	4	.99900	11.496	11.497	.98999832	.99000162	.98999832	.99000162
.99	17	2	.99000	23.328	23.329	.98999965	.99000050	.98999938	.99000023
.99	17	2	.99990	37.174	37.175	.98999992	.99000046	.98999958	.99000011
.99	17	2	.99999	42.609	42.610	.98999985	.99000032	.98999949	.98999996
.99	37	32	.90000	1.966	1.967	.98996315	.99003678	.98996315	.99003678
.99	37	33	.90000	1.957	1.958	.98996251	.99003745	.98996251	.99003745
.99	145	2	.99990	37.106	37.107	.99000001	.99000055	.98999966	.99000019
.99	145	2	.99999	42.550	42.551	.99000006	.99000053	.98999971	.99000017
.99	500	2	.75000	6.742	6.743	.98999863	.99000159	.98999829	.99000124
.99	500	2	.95000	16.413	16.414	.98999971	.99000093	.98999936	.99000057
.99	500	2	.97500	19.555	19.556	.98999951	.99000053	.98999916	.99000017
.99	500	2	.99000	23.209	23.210	.98999970	.99000056	.98999935	.99000020
.99	500	2	.99900	30.828	30.829	.99000000	.99000064	.98999965	.99000029
.99	500	2	.99999	42.544	42.545	.98999988	.99000035	.98999953	.98999999
.995	3	2	.99000	33.846	33.845	.99500012	.99499983	.99500024	.99499995
.995	3	2	.99900	44.396	44.393	.99500008	.99499941	.99500058	.99499990
.995	3	2	.99990	53.152	53.147	.99500000	.99499906	.99500087	.99499993
.995	3	2	.99999	60.783	60.776	.99499997	.99499882	.99500114	.99499999

8.11 The expected value and the variance of estimates of P where the variance of the normal distribution is known and the mean is unknown.

The problem is to estimate P by $G(A\bar{x} + B)$ where $P = G(K_p)$ and $\bar{x}$ is normally distributed with mean μ and variance σ^2/n. The expected value of the estimate should be equal to P to obtain an unbiased estimate. Therefore,

$$E\left[G(A\bar{x} + B)\right] = P,$$

or

$$\int_{-\infty}^{+\infty} G\left(\frac{A\sigma y}{\sqrt{n}} + A\mu + B\right) G'(y)\, dy = P,$$

or

$$G\left(\frac{A\mu + B}{\sqrt{1 + \frac{A^2\sigma^2}{n}}}\right) = G(K_p).$$

This implies

$$\frac{A\mu + B}{\sqrt{1 + \frac{A^2\sigma^2}{n}}} = K_p,$$

or

$$B = K_p\sqrt{1 + \frac{A^2\sigma^2}{n}} - A\mu.$$

This then is the condition to be met to guarantee unbiasedness.

The variance of the estimate of P is given by

$$\mathrm{Var}\left[G(A\bar{x} + B)\right] = G\left(\frac{A\mu + B}{\sqrt{1 + \frac{A^2\sigma^2}{n}}}\right) - 2T\left(\frac{A\mu + B}{\sqrt{1 + \frac{A^2\sigma^2}{n}}}, \frac{1}{\sqrt{1 + \frac{2A^2\sigma^2}{n}}}\right) - \left\{G\left(\frac{A\mu + B}{\sqrt{1 + \frac{A^2\sigma^2}{n}}}\right)\right\}^2$$

where $T(h, a)$ is discussed and tabulated in [48], [49], and [52].
Now, unbiasedness requires that

$$B = K_p\sqrt{1 + \frac{A^2\sigma^2}{n}} - A\mu$$

and hence

$$\mathrm{Var}[G(A\bar{x} + B) \mid \text{unbiased estimate of } P] = \mathrm{Var}\left[G\left(A(\bar{x} - \mu) + K_p\sqrt{1 + \frac{A^2\sigma^2}{n}}\right)\right] = P - P^2 - 2T\left(K_p, \frac{1}{\sqrt{1 + \frac{2A^2\sigma^2}{n}}}\right).$$

If this variance is to be a minimum with respect to A, the derivative

$$-2\,\frac{G'(K_p)\,G'\left(\dfrac{K_p}{\sqrt{1+\dfrac{2A^2\sigma^2}{n}}}\right)}{1+\dfrac{1}{1+\dfrac{2A^2\sigma^2}{n}}}\left(-\frac{1}{2}\right)\left(1+\frac{2A^2\sigma^2}{n}\right)^{-3/2}\left(\frac{4A\sigma^2}{n}\right)=\frac{2A\sigma^2}{n}\,\frac{G'(K_p)}{1+\dfrac{A^2\sigma^2}{n}}\,\frac{G'\left(\dfrac{K_p}{\sqrt{1+\dfrac{2A^2\sigma^2}{n}}}\right)}{\sqrt{1+\dfrac{2A^2\sigma^2}{n}}}$$

is set equal to zero. But $A = 0$ is the only solution corresponding to a minimum, and this solution is of no practical use since if $A = 0$, $B = K_p$ and the estimate is independent of the sample and is always the same.

Wilks [77], Proschan [58], and Fraser and Guttman [15] give a solution to the problem based on choosing $A = \frac{1}{\sigma}$. This gives

$$B = K_p\sqrt{1+\frac{1}{n}} - \frac{\mu}{\sigma}.$$

and hence the estimate of P is given by

$$\hat{P} = G\left(\frac{1}{\sigma}(\bar{x}-\mu) + K_p\sqrt{1+\frac{1}{n}}\right).$$

The problem now is to find k to use in $\bar{x} + k\sigma$ so that $\hat{P}$ estimates P where X is normal with mean μ and standard deviation σ, i.e.,

$$\hat{P} = G\left(\frac{\bar{x}+k\sigma-\mu}{\sigma}\right).$$

Note that $\hat{P}$ cannot be explicitly computed since it depends on the unknown μ. This implies

$$\frac{\bar{x}+k\sigma-\mu}{\sigma} = \frac{\bar{x}+\sigma K_p\sqrt{1+\frac{1}{n}}-\mu}{\sigma}$$

and hence

$$k = K_p\sqrt{1+\frac{1}{n}},$$

which is the quantity tabulated in Section 3.5.

The variance of this estimate is then

$$\text{Variance}\left(\hat{P}\,\middle|\,A=\frac{1}{\sigma}\right) = P - P^2 - 2T\left(K_p, \frac{1}{\sqrt{1+\frac{2}{n}}}\right).$$

Note that if $n = \infty$, this variance is $P - P^2 - (P - P^2)$ or is zero, as it should be and if $n = 0$, it is $P - P^2 - 0$.

On the other hand, Lieberman and Resnikoff [36] choose $A = -\frac{b}{\sigma}$ and $B = \frac{bU}{\sigma}$ which implies

$$\frac{bU}{\sigma} = K_p\sqrt{1+\frac{b^2}{n}} + \frac{b\mu}{\sigma}$$

and since $\frac{U-\mu}{\sigma} = K_p$, we have

$$bK_p = K_p\sqrt{1+\frac{b^2}{n}},$$

or

$$b = \sqrt{\frac{n}{n-1}} .$$

Lieberman and Resnikoff therefore estimate P by

$$\hat{P} = G\left\{\sqrt{\frac{n}{n-1}}\left(\frac{U-\bar{x}}{\sigma}\right)\right\}$$

and the variance of this estimate is

$$\text{Variance}\left(\hat{P} \,\middle|\, A = \frac{-b}{\sigma} \text{ and } B = \frac{bU}{\sigma}\right) = P - P^2 - 2T\left(K_p, \frac{1}{\sqrt{1+\frac{2}{n-1}}}\right).$$

If the estimate

$$\hat{P} = G\left\{\sqrt{\frac{n}{n-1}}\left(\frac{U-\bar{x}}{\sigma}\right)\right\}$$

were set equal to P (i.e., the sample mean were set equal to the population mean), then

$$\sqrt{\frac{n}{n-1}}\left(\frac{U-\bar{x}}{\sigma}\right) = K_p,$$

or

$$\bar{x} + \sqrt{\frac{n-1}{n}}\, K_p \sigma = U.$$

Hence $k = \sqrt{\frac{n-1}{n}}\, K_p$ for the Lieberman and Resnikoff [36] estimate while $k = \sqrt{\frac{n+1}{n}}\, K_p$ for the Wilks [77] estimate, and both are unbiased estimates of P! There are two differences, however. The Wilks estimate will not give a specific estimate of P while the Lieberman and Resnikoff one will. The Lieberman and Resnikoff estimate is based on a fixed number U and the average of these estimates gives P. The Wilks estimate has no such fixed number involved but one is striving to find a number for which the average value of the normal integral from minus infinity to that (variable) number is P.

Since T(h, a) is a strictly increasing function of a, it follows that the variance of the result with $k = K_p\sqrt{(n+1)/n}$ is smaller than the variance for the result with $k = K_p\sqrt{(n-1)/n}$, i.e., the Wilks result has a smaller variance than the Lieberman and Resnikoff result. Strictly speaking, however, the two should not be compared this way as they are intended for different things. The Lieberman and Resnikoff result should be used whenever an estimate of P is needed, where P is the proportion of a normal population below a given number U. It should not be used to compute $\bar{x} + k\sigma$. The Wilks result will not give an estimate of P as such (since the estimate depends on unknown μ), but should be used to compute $\bar{x} + k\sigma$. One can then say that on the average 100P% of the normal population is below $\bar{x} + k\sigma$ where $k = K_p\sqrt{(n+1)/n}$. Note that if $\bar{x} + k\sigma$ were required to give an unbiased estimate of $\mu + K_p\sigma$, then k would have to be equal to K_p.

It should be instructive to compute the standard deviation of a binomial estimate, $\sqrt{P(1-P)/n}$ and compare this result with the standard deviation of the Wilks estimate, $P(1-P) - 2T\left(K_p, \frac{1}{\sqrt{1+2/n}}\right)$. This has been done for P = 0.9 and P = 0.99 for various values of n in Table 8.11.1. Note that by moving up the column for the Wilks estimate one unit on n, it is possible to obtain the standard deviation of the Lieberman and Resnikoff estimate.

TABLE 8.11.1

Standard Deviations of a Binomial Estimate and the Wilks Estimate of a Proportion

n	P = 0.9 Binomial	Wilks	n	P = 0.99 Binomial	Wilks
1	0.300	0.150	1	0.099	0.035
2	0.212	0.115	2	0.070	0.023
3	0.173	0.097	3	0.057	0.018
4	0.150	0.085	4	0.050	0.015
5	0.134	0.077	5	0.044	0.014
6	0.122	0.070	6	0.041	0.012
7	0.113	0.065	7	0.038	0.011
8	0.106	0.061	8	0.035	0.010
9	0.100	0.058	9	0.033	0.010
10	0.095	0.055	10	0.031	0.009
15	0.077	0.045	15	0.026	0.007
30	0.055	0.032	30	0.018	0.005
50	0.042	0.025	50	0.014	0.004

The Wilks estimate of P and the Lieberman and Resnikoff estimate, as expected, both have standard deviations less than the standard deviation of the binomial estimate, i.e., less than the estimate for which the proportion of defective items is computed in the sample.

The question of what sample size should be used in obtaining estimates of P using Wilks procedure will now be discussed. If we want to know that $\Pr\left\{\hat{P} < P + d\right\} \geq \alpha$, then we have to solve the equation

$$\Pr\left\{G\left(\frac{\bar{x} - \mu}{\sigma} + K_p\sqrt{\frac{n+1}{n}}\right) \leq P + d\right\} \geq \alpha$$

for n, or equivalently

$$\Pr\left\{X \leq K_{p+d}\sqrt{n} - K_p\sqrt{n+1}\right\} \geq \alpha,$$

where X is normal with mean zero and variance one, and hence

$$K_{p+d}\sqrt{n} - K_p\sqrt{n+1} \geq K_\alpha.$$

An approximate value of n is then given by (good when P is near 0.5)

$$n \approx \frac{K_\alpha^2}{(K_{p+d} - K_p)^2}$$

and n is given exactly by

$$n = \left[\frac{K_\alpha K_{p+d} + K_p\sqrt{K_{p+d}^2 - K_p^2 + K_\alpha^2}}{K_{p+d}^2 - K_p^2}\right]^2.$$

Some typical values of n are given in Table 8.11.2.

TABLE 8.11.2

Values of Sample Size for Various Values of P, α, and d

	P = 0.50				P = 0.75				P = 0.95			
d	α= 0.99	α= 0.95	α= 0.90	α= 0.80	α= 0.99	α= 0.95	α= 0.90	α= 0.80	α= 0.99	α= 0.95	α= 0.90	α= 0.80
0.010	8612	4306	2614	1128	5369	2695	1644	721	499	257	162	78
0.020	2152	1076	653	282	1318	664	407	182	105	56	37	19
0.025	1377	689	418	181	835	422	260	117	60	33	22	12
0.035	702	351	213	92	418	212	131	60	23	13	9	6
0.050	343	172	105	45	198	101	63	30				
0.075	152	76	46	20	83	43	27	13				
0.100	85	43	26	12	44	23	15	8				

Similarly if we wanted to bound P on the other side, i.e., if $\Pr\left\{\hat{P} > P - d\right\} \geq \alpha$, or

$$\Pr\left\{P - d \leq G\left(\frac{\bar{x} - \mu}{\sigma} + K_p\sqrt{\frac{n+1}{n}}\right)\right\} \geq \alpha,$$

then

$$n \approx \frac{K_\alpha^2}{(K_p - K_{p-d})^2}$$

and n may be obtained exactly from

$$n = \left[\frac{K_\alpha K_{p-d} + K_p\sqrt{K_{p-d}^2 - K_p^2 + K_\alpha^2}}{K_p^2 - K_{p-d}^2}\right]^2.$$

Table 8.11.3 gives values of n obtained from this formula.

TABLE 8.11.3

Values of Sample Size for Various Values of P, α, and d

	P = 0.50				P = 0.75				P = 0.95			
d	α= 0.99	α= 0.95	α= 0.90	α= 0.80	α= 0.99	α= 0.95	α= 0.90	α= 0.80	α= 0.99	α= 0.95	α= 0.90	α= 0.80
0.010	8612	4306	2614	1128	5558	2768	1672	709	649	315	184	68
0.020	2152	1076	653	282	1412	701	421	176	180	85	48	14
0.025	1377	689	418	181	911	451	271	112	121	56	31	7
0.035	702	351	213	92	472	233	139	57	67	31	16	
0.050	343	172	105	45	236	116	69	27	37	16	8	
0.075	152	76	46	20	109	53	31	12	19	8	3	
0.100	85	43	26	12	63	30	18	7	12	5	1	

8.12 The expected value of estimates of P where the variance and the mean of the normal distribution are unknown.

The problem is to estimate P by $G\left(\frac{A\bar{x} + Bs - \mu}{\sigma}\right)$ where $P = G(K_p)$ and $\bar{x}$ is normally distributed with mean μ and variance σ^2/n and fs^2/σ^2 has a chi-square distribution with f degrees of freedom independent of $\bar{x}$. Proceeding as in Section 8.11,

$$E\left[G\left(\frac{A\bar{x} + Bs - \mu}{\sigma}\right)\right] = P$$

or

$$\frac{\sqrt{2\pi}}{\Gamma\left(\frac{f}{2}\right)2^{(f-2)/2}} \int_{-\infty}^{+\infty}\int_{0}^{\infty} G\left(\frac{Ax}{\sqrt{n}} + \frac{\mu(A-1)}{\sigma} + \frac{B}{\sqrt{f}}\,y\right) G'(y)\, y^{f-1}\, dy\, G'(x)\, dx = P,$$

or

$$\frac{\sqrt{2\pi}}{\Gamma\left(\frac{f}{2}\right)2^{(f-2)/2}} \int_{0}^{\infty} G\left(\frac{\frac{\mu(A-1)}{\sigma} + \frac{B}{\sqrt{f}}\,y}{\sqrt{1+\frac{A^2}{n}}}\right) y^{f-1}\, G'(y)\, dy = P.$$

This is now one of the forms for the noncentral t-distribution as given in Section 8.1 with

$$t_p = \frac{B}{\sqrt{1+\frac{A^2}{n}}}$$

and

$$\delta = \frac{-\mu(A-1)}{\sigma\sqrt{1+\frac{A^2}{n}}}$$

where t_p is found so that $\Pr\left\{T_f \le t_p \mid \delta\right\} = P$, i.e., is a percentage point of the noncentral t-distribution with f degrees of freedom.

If $A = 1$, then $\delta = 0$ and

$$t_p = \frac{B}{\sqrt{1+\frac{1}{n}}}$$

and $k = B = t_p\sqrt{1+\frac{1}{n}}$ where t_p can be read from tables of the Student t-distribution. This gives $\bar{x} + st_p\sqrt{1+\frac{1}{n}}$ as the average (upper) tolerance limit which is the solution given by Wilks [77], Proschan [58], and Fraser and Guttman [15]. This value of k is given in the table of Section 3.4.

Lieberman and Resnikoff [36] give as their estimate of the value P (with $f = n - 1$) the following

$$\hat{P} = \frac{\Gamma(n-2)}{\left\{\Gamma\left(\frac{n-2}{2}\right)\right\}^2} \int_0^{\mathrm{Max}\left[0,\,\frac{1}{2}-\frac{1}{2}\left(\frac{U-\bar{x}}{s}\right)\frac{\sqrt{n}}{n-1}\right]} z^{(n/2)-2}\,(1-z)^{(n/2)-2}\, dz$$

where again the expectation of $\hat{P}$ is P. That is,

$$C \int\int\int_{z=0}^{\mathrm{Max}\left[0,\,\frac{1}{2}-\frac{1}{2}\left(\frac{U-\bar{x}}{s}\right)\frac{\sqrt{n}}{n-1}\right]} z^{(n/2)-2}\,(1-z)^{(n/2)-2}\, G'\left(\frac{\bar{x}-\mu}{\sigma}\sqrt{n}\right) s^{f-1}\, G'\left(\frac{s\sqrt{f}}{\sigma}\right) dz\, ds\, d\bar{x} = P,$$

where $-\infty < \bar{x} < +\infty$, $0 \le s \le \infty$ and $-1 \le \frac{U - \bar{x}}{s} \frac{\sqrt{n}}{n-1} \le +1$ and C is some constant which makes the probability distribution function equal to one when the $\bar{x}$ and s are equal to $+\infty$.

If an explicit estimate of P is needed where a limit U is given, then the Lieberman and Resnikoff estimate should be used. If, on the other hand, the value of P is given and a limit $\bar{x} + ks$ is needed such that on the average $G\left(\frac{\bar{x} + ks - \mu}{\sigma}\right)$ estimates P, then the Wilks estimate should be used. Note that in this latter case an explicit estimate of P cannot be found since the estimator depends on the unknown values, μ and σ.

As a third alternative we could find k so that the expected value of $\bar{x} + ks$ is equal to $\mu + K_p\sigma$. The expected value of $\bar{x} + ks$ is

$$\mu + k \frac{\sqrt{2}}{\sqrt{f}} \frac{\Gamma\left(\frac{f+1}{2}\right)}{\Gamma\left(\frac{f}{2}\right)} \sigma$$

and hence we choose k as

$$k = \frac{\sqrt{f}}{\sqrt{2}} \frac{\Gamma\left(\frac{f}{2}\right)}{\Gamma\left(\frac{f+1}{2}\right)} K_p = \frac{f}{(f-1)c_{11}} K_p .$$

The variance of the estimate of $\mu + K_p\sigma$ obtained this way is

$$V(\bar{x} + ks) = \frac{\sigma^2}{n} + K_p^2 \left[\frac{f}{2} \left\{ \frac{\Gamma\left(\frac{f}{2}\right)}{\Gamma\left(\frac{f+1}{2}\right)} \right\}^2 - 1 \right] \sigma^2$$

$$= \sigma^2 \left[k^2 - K_p^2 + \frac{1}{n} \right] .$$

The value

$$k = \frac{\sqrt{f}}{\sqrt{2}} \frac{\Gamma\left(\frac{f}{2}\right)}{\Gamma\left(\frac{f+1}{2}\right)} K_p$$

is given in the table of Section 3.6.1 and the standard deviation of estimates using this k with $\sigma = 1$ is given in the table of Section 3.6.2.

The question of what sample size should be used to obtain estimates of P using the Wilks formula for k $\left(\text{i.e., } k = t_p\sqrt{1 + \frac{1}{n}}\right)$ will now be discussed. If we want to know that $\Pr\left\{\hat{P} < P + d\right\} \ge \alpha$, then we have to solve the equation

$$\Pr\left\{G\left(\frac{\bar{x} + ks - \mu}{\sigma}\right) \le P + d\right\} \ge \alpha$$

for n. This leads to the equation

$$\Pr\left\{T_f \le t_p\sqrt{n+1} \mid \delta = K_{p+d}\sqrt{n}\right\} = 1 - \alpha$$

where T_f has a noncentral t-distribution with $f = n - 1$ degrees of freedom and noncentrality parameter $K_{p+d}\sqrt{n}$. This equation may be solved by trial and error to give the required value of n. If P + d is equal to one of the P's in the table of Section 2 and $\gamma = 1 - \alpha$, look down the table until a value of k is found

which equals t_p as nearly as possible. Read off the corresponding n, which is very close to the value of n which solves the above equation. Trial and error of one or two values will now settle the value of n exactly.

Similarly if we wanted to bound P on the other side, i.e., if $\Pr\left\{\hat{P} > P - d\right\} \geq \alpha$, or

$$\Pr\left\{P - d \leq G\left(\frac{\bar{x} + ks - \mu}{\sigma}\right)\right\} \geq \alpha$$

leads to the equation

$$\Pr\left\{T_f \leq t_p\sqrt{n+1} \,\middle|\, \delta = K_{p-d}\sqrt{n}\right\} = \alpha$$

which may be solved for n by the same procedure as the preceding equation.

If we wanted to bound P on both sides, i.e., if we wanted to find n so that $\Pr\left\{P - d \leq \hat{P} \leq P + d\right\} \geq \alpha$, we are led to equations similar to those involved in two-sided tolerance limits. Albert and Johnson [1] consider a closely related problem and give some values of n that solve the equations. Their procedures were developed for two-sided tolerance limits, but the procedures would be the same for one-sided tolerance limits.

9. TOLERANCE LIMITS FOR A RANDOMIZED COMPLETE BLOCK DESIGN.

9.1 The model.

The model for a randomized complete block design is given by

$$Y_{ij} = \mu + \beta_i + \tau_j + \epsilon_{ij},$$

where $i = 1, \ldots, b$, and $j = 1, \ldots, t$, and where μ, β_i, and τ_j are constants such that

$$\sum_{i=1}^{b} \beta_i = \sum_{j=1}^{t} \tau_j = 0.$$

The quantity τ_j measures the true effect of the jth treatment, computed as a deviation from the over-all mean μ. Similarly, β_i measures the true effect of the ith block computed as a deviation from the over-all mean μ. A fixed set of treatments and a fixed set of blocks are assumed; i.e., all treatments and blocks to which inferences are to be made are included in the experiment. The quantity ϵ_{ij} measures only the random effects, and the various ϵ's are assumed to be independently and normally distributed with mean zero and standard deviation σ.

The analysis of variance for this model is given in Table 9.1.1.

TABLE 9.1.1

Analysis of Variance for a Randomized Complete Block Design

Source of variation	Degrees of freedom	Sum of squares	Mean square	Expected mean square
Blocks	$b - 1$	B	$\frac{B}{b - 1}$	$\sigma^2 + \left(\frac{t}{b - 1}\right)\sum_{i=1}^{b}\beta_i^2$
Treatments	$t - 1$	T	$\frac{T}{t - 1}$	$\sigma^2 + \left(\frac{b}{t - 1}\right)\sum_{j=1}^{b}\tau_j^2$
Experimental error	$(b - 1)(t - 1)$	E	$\frac{E}{(b - 1)(t - 1)}$	σ^2
Total	$bt - 1$	S		

In Table 9.1.1

$$B = \sum_{i=1}^{b}\left(\sum_{j=1}^{i} y_{ij}\right)^2 \Big/ t - \left(\sum_{j=1}^{t}\sum_{i=1}^{b} y_{ij}\right)^2 \Big/ bt,$$

$$T = \sum_{j=1}^{i}\left(\sum_{i=1}^{b} y_{ij}\right)^2 \Big/ b - \left(\sum_{j=1}^{t}\sum_{i=1}^{b} y_{ij}\right)^2 \Big/ bt,$$

$$E = \sum_{j=1}^{t}\sum_{i=1}^{b}\left(y_{ij} - \overline{y}\right)^2 - B - T, \text{ and}$$

$$S = \sum_{j=1}^{t}\sum_{i=1}^{b}\left(y_{ij} - \overline{y}\right)^2.$$

9.2 Tolerance limit on Y's subject to a particular treatment.

The upper tolerance limit on the Y's subject to the rth treatment only, i.e., where $j = r$, and $i = 1, 2, \ldots, b$, is given by

$$\overline{y}_{.r} + k\sqrt{E/[(b - 1)(t - 1)]},$$

where

$$\overline{y}_{.r} = \frac{\sum_{i=1}^{b} y_{ir}}{b} = \mu + \tau_r + \frac{1}{b}\sum_{i=1}^{b}\epsilon_{ir},$$

and where k is read from the tables of Section 4 with $n = b$ and $f = (b-1)(t - 1)$.

9.3 Tolerance limit on means subject to a particular treatment.

The upper tolerance limit on sample mean values of Y subject to the rth treatment only, i.e., on $\overline{y}_{.r}$, is given by

$$\overline{y}_{.r} + k\sqrt{E/[b(b-1)(t-1)]}$$

where

$$\overline{y}_{.r} = \frac{1}{b}\sum_{i=1}^{b} y_{ir} = \mu + \tau_r + \frac{1}{b}\sum_{i=1}^{b} \epsilon_{ir},$$

and where k is read from the tables of Section 4 with $n = 1$ and $f = (b-1)(t-1)$.

9.4 Tolerance limit on Y's subject to a particular treatment in one block.

The upper tolerance limit on Y's subject to the rth treatment and selected from the qth block, i.e., where $j = r$ and $i = q$, is given by

$$y_{qr} + k\sqrt{E/(b-1)(t-1)},$$

where k is read from the tables of Section 4 with $n = 1$ and $f = (b-1)(t-1)$.

9.5 Tolerance limit on all Y's.

The upper tolerance limit on values of Y obtained from repeated runnings of the entire experiment is given by

$$\overline{y}_{..} + k\sqrt{E/(b-1)(t-1)},$$

$$\overline{y}_{..} = \frac{1}{bt}\sum_{j=1}^{t}\sum_{i=1}^{b} y_{ij} = \mu + \frac{1}{bt}\sum_{j=1}^{t}\sum_{i=1}^{b} \epsilon_{ij},$$

and where k is read from the tables of Section 4 with $n = bt$ and $f = (b-1)(t-1)$.

10. TOLERANCE LIMITS WHEN THE MEASURING INSTRUMENT IS SUBJECT TO ERROR.

10.1 The model.

In this section, $N(\mu, \sigma^2)$ is used to designate a normal distribution with mean μ and variance σ^2. Let U be $N(\mu_u, \sigma_u^2)$ and V be $N(\mu_v, \sigma_v^2)$. Then $X = U + V$ is $N(\mu_u + \mu_v, \sigma_u^2 + \sigma_v^2)$.

Suppose a sample of x's is obtained so that $x_{ij} = u_i + v_{ij}$, for $i = 1, 2, \ldots, r$, and $j = 1, 2, \ldots, m$, that is, where each of r values of U are measured m times. This situation would occur when a measuring instrument is subject to an error V while measuring an item U and can measure each selected U value m times. Then

$$\overline{x} = \frac{1}{mr}\sum_{i=1}^{mr} x_{ij}$$

is $N\left(\mu_u + \mu_v, \frac{\sigma_u^2}{r} + \frac{\sigma_v^2}{mr}\right)$. The problem to be solved is to find a one-sided tolerance limit for the U's. A general discussion of measuring instrument errors where the parameters are known is given in Reference [51].

The first step in solving the problem is to make an analysis of variance as given in Table 10.1.1.

TABLE 10.1.1

Analysis of Variance for the Problem of Instrument Error

Source of variation	Degrees of freedom	Sum of squares	Mean square	Expected mean square
Among product items	r - 1	A	$\frac{A}{r-1}$	$\sigma_v^2 + m\sigma_u^2$
Instrument error within product	r(m - 1)	W	$\frac{W}{r(m-1)}$	σ_v^2
Total	rm - 1	R		

In Table 10.1.1,

$$A = \sum_{i=1}^{r} \frac{\left(\sum_{j=1}^{m} x_{ij}\right)^2}{m} - \frac{\left(\sum_{i=1}^{k}\sum_{j=1}^{m} x_{ij}\right)^2}{mr},$$

$W = R - A$, and

$$R = \sum_{i=1}^{r}\sum_{j=1}^{m} x_{ij}^2 - \frac{\left(\sum_{i=1}^{r}\sum_{j=1}^{m} x_{ij}\right)^2}{mr}.$$

10.2 Tolerance limits.

The problem now is finding k such that the probability is γ that at least a proportion P of the population is below $\bar{x} + ks$, or, finding k so that

$$\Pr[\Pr\{U \le \bar{x} + ks\} \ge P] = \gamma, \text{ or}$$

$$\Pr\left[\Pr\left\{\frac{U - \mu_u}{\sigma_u} \le \frac{\bar{x} + ks - \mu_u}{\sigma_u}\right\} \ge P\right] = \gamma.$$

Let $\frac{1}{\sqrt{2\pi}} \int_{-\infty}^{K_p} \exp\left(-\frac{1}{2}t^2\right) dt = P$ and then

$$\Pr\left\{\frac{\bar{x} + ks - \mu_u}{\sigma_u} \ge K_p\right\} = \gamma.$$

Finally this may be written as

$$\Pr\left\{\frac{\frac{\bar{x}-\mu}{\sigma_1}\sqrt{n} - K_p\frac{\sigma_u}{\sigma_1}\sqrt{n} - \frac{\mu_u-\mu}{\sigma_1}\sqrt{n}}{\frac{s}{\sigma_2}} \geq -k\sqrt{n}\,\frac{\sigma_2}{\sigma_1}\right\} = \gamma,$$

where

$$\bar{x} \text{ is } N\left(\mu, \frac{\sigma_1^2}{n}\right)$$

and fs^2/σ_2^2 has a chi-square distribution with f degrees of freedom.

Under these conditions the above statement reduces to

$$\Pr\left\{\text{noncentral } t \leq k\sqrt{n}\,\frac{\sigma_2}{\sigma_1}\,\middle|\,\delta = K_p\frac{\sigma_u}{\sigma_1}\sqrt{n} + \frac{\mu_u-\mu}{\sigma_1}\sqrt{n}\right\} = \gamma.$$

In the model described in Section 10.1, $\mu = \mu_u + \mu_v$, $\sigma_1^2 = \sigma_v^2 + m\sigma_u^2$, and $n = rm$.

Since the noncentral t value depends on the unknown parameters, σ_u, σ_v, μ_u, and μ_v, the problem is impossible to solve exactly as stated. The problem is similar to the celebrated Behrens-Fisher problem for testing the equality of two means from normal distributions when the variances are not assumed equal. In Sections 10.3 and 10.4 solutions to the problem will be given provided the ratio σ_v/σ_u is known. If this ratio is not known, a solution is not given here.

10.3 First reduction (useful when σ_v/σ_u is known and σ_v is not too large relative to σ_u).

It is possible to make some logical assumptions which will reduce the problem somewhat. The first is to assume the $\mu_v = 0$, or, in other words, to assume that the measuring instrument has been properly calibrated. This reduces δ to

$$\delta = K_p\frac{\sigma_u\sqrt{rm}}{\sqrt{\sigma_v^2 + m\sigma_u^2}},$$

and if the ratio σ_v/σ_u were known, the value of δ could be computed.

An obvious value to use for ms^2 is the mean square given on the first line of the analysis of variance in Table 10.1.1 since the expected value of this mean square is $\sigma_v^2 + m\sigma_u^2$ and then $m\sigma_2^2 = \sigma_1^2$ so that the critical value of the noncentral t-distribution reduces to $k\sqrt{r}$ and is free of unknown parameters. Then fs^2/σ_2^2 has a chi-square distribution with $f = r - 1$ degrees of freedom.

One could argue that s should be an estimate of σ_u only, since the problem is to find a tolerance limit on the U's only. However, $\bar{x}$ has variation in it due to the measuring instrument since $\bar{x}$ is

$$N\left(\mu_u, \left[\sigma_v^2 + m\sigma_u^2\right]/mr\right).$$

At any rate, the probability statement is exact under these circumstances even though the statement itself is only an approximation to the one needed. Clearly, there is no other sample mean that can be computed from the sample which would help the situation.

In summary, if the measuring instrument is properly calibrated, and the ratio of σ_v to σ_u is known, and σ_v is not too large relative to σ_u, then a possible one-sided tolerance limit on the U's is given by $\overline{x} + ks$, where

$$s^2 = A/[m(r - 1)] ,$$

and k is obtained from the noncentral t-distribution such that

$$\Pr\left\{\text{noncentral } t \leq k\sqrt{r} \,\middle|\, \delta = K_p \frac{\sigma_u\sqrt{rm}}{\sqrt{\sigma_v^2 + m\sigma_u^2}}\right\} = \gamma.$$

These values of k can be computed from the tables of Section 5. First, compute δ from the formula

$$\delta = K_p \frac{\sigma_u\sqrt{rm}}{\sqrt{\sigma_v^2 + m\sigma_u^2}} = K_p \frac{\sqrt{r}}{\sqrt{1 + \sigma_v^2/(m\sigma_u^2)}} .$$

Then

$$\eta = \frac{\delta}{\sqrt{2f}}\left(1 + \frac{\delta^2}{2f}\right)^{-\frac{1}{2}} \quad \text{where} \quad f = r - 1,$$

and λ is read from the tables of Section 5. Next the equation

$$k = \frac{\delta + \lambda\left(1 + \frac{\delta^2}{2f} - \frac{\lambda^2}{2f}\right)^{\frac{1}{2}}}{\left(1 - \frac{\lambda^2}{2f}\right)\sqrt{r}}$$

yields the required value of k. This solution will generally be satisfactory providing σ_v is small relative to σ_u. If this is not true, the reader is referred to Section 10.4.

10.4 Second reduction (useful when σ_v/σ_u is known and σ_v is large relative to σ_u.

Another possible solution to the problem of Section 10.2 is to take

$$s^2 = \frac{A}{m(r - 1)} - \frac{W}{mr(m - 1)} ,$$

which would estimate σ_u^2. However, for s^2 defined this way, fs^2/σ_u^2 has only an approximate chi-square distribution with f degrees of freedom, where

$$f \cong (r - 1) + \frac{(mr - 2r + 1)W^2 + \frac{2r^2}{r - 1}(m - 1)^2 AW}{W^2 + r^3\left(\frac{m - 1}{r - 1}\right)^3 A^2} .$$

The formula for f is obtained by specializing a formula given in Reference [61] to the problem here. If s^2 should be negative as estimated by the above procedure, then a zero is sometimes used in place of the negative value. For the problem considered here, however, the recommendation is to use some alternative procedure. Again assume the measuring instrument is properly calibrated so that $\mu_u = \mu$.

If s^2 estimates σ_u^2, then k is found from

$$\Pr\left\{\text{approximately a noncentral } t \le k\sqrt{rm}\,\frac{\sigma_u}{\sqrt{\sigma_v^2 + m\sigma_u^2}} \;\middle|\; \delta = K_p\,\frac{\sigma_u\sqrt{rm}}{\sqrt{\sigma_v^2 + m\sigma_u^2}}\right\} = \gamma.$$

The qualification that this is approximately a noncentral t is due, of course, to fs^2/σ_u^2 being only approximately chi-square and f being an approximation also. To find k, it is again necessary to know the ratio of σ_v to σ_u and enter Section 5 with the δ and t given above. Note that t also depends on σ_v/σ_u this time.

10.5 Solution when the mean μ_u of the distribution is known.

If the mean of the U's as defined in Section 10.1 is known and is μ_u, then the required tolerance limit will take the form

$$\mu_u + ks$$

where fs^2/σ_2^2 has a chi-square distribution with f degrees of freedom. In this case k is given by

$$k = K_p\,\frac{\sigma_u}{\sigma_2}\sqrt{\frac{f}{X_{1-\gamma}^2}}$$

where $X_{1-\gamma}^2$ is a percentage point of the chi-square distribution such that

$$\Pr\left\{X^2 \le X_{1-\gamma}^2\right\} = 1 - \gamma.$$

As in Section 10.4, σ_u^2 can be estimated from Table 10.1.1 of Section 10.1 by

$$s^2 = \frac{A}{m(r-1)} - \frac{W}{mr(m-1)}, \quad \text{for which}$$

$$f \cong (r-1) + \frac{(mr - 2r + 1)W^2 + \dfrac{2r^2(m-1)^2}{r-1}AW}{W^2 + r^3\left(\dfrac{m-1}{r-1}\right)^3 A^2}.$$

Then k is obtained from the tables of Section 4 with $n = \infty$ and f as above, but the result is only approximate since s^2 is only approximately chi-square with approximately f degrees of freedom. Note that μ_v is not necessarily zero this time.

If σ_v is small relative to σ_u as in Section 10.3 and the ratio σ_v/σ_u is known, then a solution to the problem of Section 10.1 when μ_u is known is possible paralleling Section 10.3. That is, take

$$s^2 = \frac{A}{m(r-1)}$$

from Table 10.1.1 and then

$$k = \frac{K_p}{\sqrt{1 + \sigma_v^2/(m\sigma_u^2)}}\sqrt{\frac{f}{X_{1-\gamma}^2}}.$$

10.6 Solution when the standard deviation σ_u is known.

If the standard deviation of the U's as defined in Section 10.1 is known and is σ_u, then the required tolerance limit will take the form

$$\bar{x} + k\sigma_u$$

where

$$\bar{x} \text{ is } N\left(\mu_u + \mu_v, \frac{\sigma_u^2}{r} + \frac{\sigma_v^2}{mr}\right).$$

In this case, it is necessary to find k such that

$$\Pr\left\{\Pr\left[U \leq \bar{x} + k\sigma_u\right] \geq P\right\} = \gamma,$$

or

$$\Pr\left\{\Pr\left[\frac{U - \mu_u}{\sigma_u} \leq \frac{\bar{x} + k\sigma_u - \mu_u}{\sigma_u}\right] \geq P\right\} = \gamma,$$

and if

$$\frac{1}{\sqrt{2\pi}} \int_{-\infty}^{K_p} \exp -\left(\frac{1}{2}t^2\right) dt = P,$$

then

$$k = K_p + K_\gamma \frac{\sqrt{\sigma_v^2 + m\sigma_u^2}}{\sigma_u\sqrt{rm}} - \frac{\mu_v}{\sigma_u}.$$

Again it is necessary to know the ratio of σ_v to σ_u in order to solve the problem and it is also necessary to know μ_v/σ_u or assume μ_v is zero (which implies a properly calibrated measuring instrument).

The tables of Section 3 with $f = \infty$ give $k = K_p + \frac{K_\gamma}{\sqrt{n}}$ and could be used to get the value of k here by putting

$$n = \frac{r}{1 + \sigma_v^2/(m\sigma_u^2)}$$

and then subtracting μ_v/σ_u from the entry found in Section 3 with $f = \infty$ and the above value for n. It is probably just as easy, however, to substitute directly in the formula with K_p and K_γ obtained from a table of the inverse of the normal probability distribution.

11. ONE-SIDED TOLERANCE LIMITS FOR LINEAR REGRESSION.

11.1 The model.

The model to be studied here is

$$Y = \beta_o + \beta_1 x_1 + \beta_2 x_2 + \ldots + \beta_p x_p + \epsilon$$

where ϵ is a normal random variable with mean zero and variance σ^2 and $x_1, x_2, \ldots, x_p$ are observable parameters and $\beta_o, \beta_1, \ldots, \beta_p$ are unknown constants which are estimated from a sample of size N.

The observations

$$
\begin{array}{l}
y_1, x_{11}, x_{21}, \ldots, x_{p1}; \\
y_2, x_{12}, x_{22}, \ldots, x_{p2}; \\
\cdot \quad \cdot \quad \cdot \quad \cdot \quad \cdot \\
\cdot \quad \cdot \quad \cdot \quad \cdot \quad \cdot \\
\cdot \quad \cdot \quad \cdot \quad \cdot \quad \cdot \\
y_N, x_{1N}, x_{2N}, \ldots, x_{pN};
\end{array}
$$

are assumed to be statistically independent of each other, i.e., the correlation of y_i and y_j for $i \neq j$ is zero, for the problem treated here. In case there is a dependency between the observations, the reader is referred to an article by Magness and McGuire [39] for formulas for the required variances. Maximum likelihood estimates of the β's may be obtained by well-known methods (see, for example, Mood [42], pp. 289-315).

11.2 Formulas for the case of one independent variable.

To be specific, if p = 1, then β_1 is estimated from

$$\hat{\beta}_1 = \frac{\sum_{i=1}^{N}(x_i - \overline{x})(y_i - \overline{y})}{\sum_{i=1}^{N}(x_i - \overline{x})^2}$$

and β_o is estimated by

$$\hat{\beta}_o = \overline{y} - \hat{\beta}_1 \overline{x} .$$

The joint distribution of $\left(\hat{\beta}_o, \hat{\beta}_1\right)$ is bivariate normal. Also σ^2, the variance of Y, is estimated from

$$\hat{\sigma}^2 = \frac{1}{N-2}\sum_{i=1}^{N}\left(y_i - \hat{\beta}_o - \hat{\beta}_1 x_i\right)^2 ,$$

and $(N - 2)\hat{\sigma}^2/\sigma^2$ has a chi-square distribution with N - 2 degrees of freedom and is independent of the joint distribution of (β_o, β_1). The variances and covariance of $\hat{\beta}_o$ and $\hat{\beta}_1$ are

$$\sigma^2_{\hat{\beta}_o} = \frac{\sigma^2 \sum_{i=1}^{N} x_i^2}{N \sum_{i=1}^{N}(x_i - \overline{x})^2} ,$$

$$\sigma^2_{\hat{\beta}_1} = \frac{\sigma^2}{\sum_{i=1}^{N}(x_i - \bar{x})^2},$$

$$\mathrm{cov}(\hat{\beta}_o, \hat{\beta}_1) = -\frac{\sigma^2 \bar{x}}{\sum_{i=1}^{N}(x_i - \bar{x})^2}.$$

A value of Y is estimated from $\hat{y} = \hat{\beta}_o + \hat{\beta}_1 x$ and a one-sided tolerance limit on the population of Y's with mean equal to $\beta_o + \beta_1 x$ and variance equal to σ^2 is given by $\hat{y} + k\hat{\sigma}$. The quantity k is determined by

$$\Pr\left\{\Pr\left\{Y < \hat{y} + k\hat{\sigma}\right\} \geq P\right\} = \gamma,$$

or

$$\Pr\left\{\frac{\hat{y} + k\hat{\sigma} - \beta_o - \beta_1 x}{\sigma} \geq K_p\right\} = \gamma,$$

or

$$\Pr\left\{\frac{\dfrac{\hat{y} - \beta_o - \beta_1 x}{\sigma\sqrt{A}} - \dfrac{K_p}{\sqrt{A}}}{\hat{\sigma}/\sigma} \geq -\frac{k}{\sqrt{A}}\right\} = \gamma,$$

which is now in the form of the noncentral t-distribution with

$$\delta = K_p/\sqrt{A},\ t = k/\sqrt{A} \text{ and } f = N - 2,$$

where

$$A = \frac{\sum_{i=1}^{N}(x_i - x)^2}{N\sum_{i=1}^{N}(x_i - \bar{x})^2},$$

since the variance of $\hat{y}$ is equal to $A\sigma^2$. Hence the quantity k may be obtained from the tables of Sections 3 and 4 with $n = 1/A$ and $f = N - 2$. Note that there are no approximations involved in these results and if the value of x corresponds to $\bar{x}$, then the estimate is $\bar{y}$ and $n = N$. Wallis [75] gave the above formula for n.

11.3 Formulas for the case of p independent variables.

Returning to the general model at the beginning of this section, σ^2 is estimated by

$$\hat{\sigma}^2 = \frac{1}{N - p - 1}\sum_{i=1}^{N}\left(y_i - \hat{\beta}_o - \hat{\beta}_1 x_i - \ldots - \hat{\beta}_p x_p\right)^2$$

and $(N - p - 1)\hat{\sigma}^2/\sigma^2$ has a chi-square distribution with $N - p - 1$ degrees of freedom. The β's are estimated by

$$\hat{\beta}_r = \sum_{q=1}^{p} z^{rq} \sum_{i=1}^{N} (y_i - \bar{y})(x_{qi} - \bar{x}_q),$$

and

$$\hat{\beta}_o = \bar{y} - \hat{\beta}_1\bar{x}_1 - \hat{\beta}_2\bar{x}_2 - \ldots - \hat{\beta}_p\bar{x}_p,$$

where z^{rq} is the (r, q)th element in the matrix obtained as the inverse of the matrix $||z_{rq}||$ where

$$z_{rq} = \sum_{i=1}^{N} (x_{ri} - \bar{x}_r)(x_{qi} - \bar{x}_q).$$

The $\hat{\beta}$'s are normally distributed with mean values equal to the corresponding β's and variance-covariance equal to

$$\operatorname{cov}\left[\left(\hat{\beta}_r - \beta_r\right)\left(\hat{\beta}_q - \beta_q\right)\right] = z^{rq}\,\sigma^2,$$

where z^{rq} is as defined before. The distribution of the $\hat{\beta}$ is independent of the distribution of $\hat{\sigma}^2$.

Now suppose a tolerance limit $\hat{y} + ks$ is required so that the probability is γ that at least a proportion P of all y's with mean $\beta_o + \beta_1 x_1 + \beta_2 x_2 + \ldots + \beta_p x_p$, where $(x_1, x_2, \ldots, x_p)$ are arbitrarily fixed values, will be below $\hat{y} + ks$. That is, it is necessary to find k so that

$$\Pr\left\{\Pr\left\{Y < \hat{y} + ks\right\} \geq P\right\} = \gamma.$$

Hence,

$$\Pr\left\{\frac{\hat{y} + ks - \beta_o - \beta_1 x_1 - \ldots - \beta_p x_p}{\sigma} \geq K_p\right\} = \gamma,$$

where K_p is defined by

$$\frac{1}{\sqrt{2\pi}} \int_{-\infty}^{K_p} e^{-t^2/2}\, dt = P,$$

and σ^2 is the variance of Y. The variance of $\hat{y}$ is given by

$$\sigma^2_{\hat{y}} = \sigma^2\left[\frac{1}{N} + \sum_{i=1}^{p} (x_i - \bar{x}_i)^2 z^{ii} + 2\sum_{i=1}^{p-1}\sum_{j=i+1}^{p} (x_i - \bar{x}_i)(x_j - \bar{x}_j)\, z^{ij}\right] = A\sigma^2,$$

where $(x_1, x_2, \ldots, x_p)$ are the particular values of the independent variables which are chosen to give y. Then

$$\Pr\left\{\frac{\dfrac{\hat{y} - \beta_o - \beta_1 x_1 - \ldots - \beta_p x_p}{\sigma\sqrt{A}} - \dfrac{K_p}{\sqrt{A}}}{s/\sigma} \geq -\frac{k}{\sqrt{A}}\right\} = \gamma$$

and hence k may be read from the tables of Sections 3 and 4 where $f = N - p - 1$ and the n for entering the tables is given by $n = 1/A$.

12. COMPARISON OF VARIOUS APPROXIMATIONS TO k WITH EXACT VALUES.

12.1 The Jennett and Welch approximation to k.

Jennett and Welch [28] derived a formula for k based on a normal approximation to the distribution of $\bar{x} + ks$. The formula is:

$$k = \frac{K_p + \sqrt{K_p^2 - AB}}{A}, \qquad \text{(approximation J)},$$

where

$$A = 1 - \frac{K_\gamma^2}{2f},$$

and

$$B = K_p^2 - \frac{K_\gamma^2}{n}.$$

This formula is also given on page 59 of Eisenhart, Hastay, and Wallis [12].

12.2 The van Eeden approximation to k.

Constance van Eeden [72] summarizes several different approximations which may be used to obtain k. Her approximation II b which is of the Cornish-Fisher type may be rewritten

$$k = \frac{t^*(f,\gamma)}{\sqrt{n}} + K_p\left[1 + \frac{2K_\gamma^2 + 1}{4f} + \frac{4K_\gamma^4 + 12K_\gamma^2 + 1}{32f^2}\right]$$

$$+ K_p^2\sqrt{n}\left[\frac{K_\gamma}{4f} + \frac{K_\gamma^3 + 4K_\gamma}{16f^2}\right] - K_p^3\, n\left[\frac{K_\gamma^2 - 1}{24f^2}\right] - K_p^4\, n\sqrt{n}\left[\frac{K_\gamma}{32f^2}\right], \qquad \text{(approximation E)},$$

where $t^*(f,\gamma)$ is the γth percentage point of Student's t-distribution with f degrees of freedom.

12.3 The normal approximation to noncentral t.

For large values of f, the degrees of freedom, the noncentral t-statistic becomes approximately normally distributed with mean and variance as given in Section 8.9. The value of t_o in the statement

$$\Pr\left\{\text{noncentral } t \le t_o \,\middle|\, \delta, f\right\} = \gamma$$

is therefore given approximately by:

$$t_o \approx \delta c_{11} + K_\gamma\sqrt{c_{22}\,\delta^2 + c_{20}},$$

or equivalently k is given approximately for large values of f by:

$$k \approx c_{11} K_p + K_\gamma \sqrt{c_{22} K_p^2 + \frac{c_{20}}{n}} .$$

Johnson and Welch [32] give the following approximations for the moments and for the c's:

$$\mu \approx \delta ; \mu_2 \approx 1 + \frac{\delta^2}{2f}; \text{ and } \mu_3 \approx \frac{\delta}{f}\left[3 + \frac{5\delta^2}{4f}\right]; \qquad \text{or}$$

$$c_{11} \approx 1; c_{22} \approx \frac{1}{2f}; c_{20} \approx 1; c_{33} \approx \frac{5}{4f^2} \quad \text{and} \quad c_{31} \approx \frac{3}{f}.$$

Johnson and Welch note that these approximations substituted in the approximate formula for k given above do not yield very good results and recommend the normal approximation to $\bar{x} + ks$ given in Section 12.1 over the one given in this section.

However, examination of the table given by Hogben, Pinkham, and Wilk [26] indicated that perhaps a good deal of the difficulty is due to the approximate values of the c's chosen. The only c which is difficult to compute is c_{11} and so a better approximation to c_{11} was sought. Empirical examination of the Hogben, Pinkham, and Wilk table led to the following approximation:

$$c_{11} \approx 1 + \frac{3}{4(f - 1.042)} .$$

This approximation gave c_{11} accurately to five decimal places for $f \geq 9$. The value of c_{22} was computed from c_{11} and c_{20} computed exactly giving approximate values of k which were labeled Approximation D. Explicitly,

$$k \approx c_{11} K_p + K_\gamma \sqrt{c_{22} K_p^2 + \frac{c_{20}}{n}} , \qquad \text{(Approximation D).}$$

12.4 The Student approximation to noncentral t.

Empirical examination of the preceding approximation (D) indicated that a better approximation to k could be obtained by replacing K_γ by $t^*(f, \gamma)$, the γth percentage point of Student's t-distribution with f degrees of freedom, i.e., $\Pr\left\{T_f \leq t^*(f, \gamma) \,\middle|\, \delta = 0\right\} = \gamma$. The new approximation was labeled C and is given by:

$$k \approx c_{11} K_p + t^*(f, \gamma) \sqrt{c_{22} K_p^2 + \frac{c_{20}}{n}} , \qquad \text{(Approximation C).}$$

12.5 Comparison of the approximations.

For $f = n - 1$, $\gamma = 0.90$, 0.95, and 0.99; and $P = 0.75$, 0.90, 0.95, 0.975, 0.99, 0.999, 0.9999, and 0.99999, each of the approximations C, D, J, and E were computed and compared with the exact values. The number of correct decimal places in each approximation was then recorded as 3, 2, or 1 following the letter designating the approximation.

The computations for each of the approximations and the exact value of k were carried in the computer to 11 decimal digits. The absolute values of the difference between each approximation and the exact value was obtained. The approximations C, D, J, and E were then ordered from best (1) to worst (4). If this difference minus 0.0005 was negative, a 3 was recorded on the second line. If the difference minus 0.005 was zero or positive, then the difference had 0.005 subtracted. If this was negative, a 2 was recorded on the second line and if it was positive or zero, the next step was taken. If the difference minus 0.050 gave a negative, then a 1 was recorded on the second line. If the difference minus 0.050 gave a zero or a positive, then a 0 was recorded on the second line. Table 12.5.1 below gives the results of these computations.

TABLE 12.5.1

Comparisons of Approximations to k for f = n -1

$\gamma = .90$

	p																															
n	.75000				.90000				.95000				.97500				.99000				.99900				.99990				.99999			
	C	D	J	E	C	D	J	E	C	D	J	E	C	D	J	E	C	D	J	E	C	D	J	E	C	D	J	E	C	D	J	E
10	4	2	3	1	4	1	3	2	4	1	3	2	3	1	2	4	3	1	2	4	3	1	2	4	2	1	3	4	2	1	3	4
	1	1	1	2	0	1	0	1	0	1	0	1	0	1	0	0	0	1	0	0	0	1	0	0	0	1	0	0	0	1	0	0
15	3	2	4	1	3	1	4	2	2	1	4	3	2	1	3	4	2	1	3	4	2	1	3	4	2	1	3	4	2	1	3	4
	1	2	1	2	1	1	1	1	1	1	1	1	1	1	1	0	1	1	0	0	1	1	0	0	1	1	0	0	1	1	0	0
20	3	2	4	1	3	1	4	2	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
	1	2	1	3	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	0	1	1	1	0	1	1	0	0	1	1	0	0
25	3	2	4	1	1	3	4	2	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
	1	2	1	3	2	1	1	1	2	1	1	1	2	1	1	0	2	1	1	0	2	1	1	0	2	1	1	0	2	1	1	0
30	3	2	4	1	1	3	4	2	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
	2	2	1	3	2	1	1	1	2	1	1	1	3	1	1	0	3	1	1	0	3	1	1	0	2	1	1	0	2	1	1	0
40	2	3	4	1	1	3	4	2	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
	2	2	1	3	2	1	1	1	2	1	1	1	2	1	1	1	2	1	1	0	2	1	1	0	2	1	1	0	1	1	1	0
50	2	3	4	1	1	3	4	2	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
	3	2	2	3	2	2	1	2	2	1	1	1	2	1	1	1	2	1	1	0	2	1	1	0	1	1	1	0	1	1	1	0
60	1	3	4	2	1	3	4	2	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
	3	2	2	3	2	2	1	2	2	1	1	1	2	1	1	1	2	1	1	0	2	1	1	0	1	1	1	0	1	1	1	0
80	2	3	4	1	1	2	4	3	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
	3	2	2	3	2	2	2	2	2	2	1	1	2	1	1	1	2	1	1	0	2	1	1	0	1	1	1	0	1	1	1	0
100	2	3	4	1	1	2	4	3	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
	2	2	2	3	2	2	2	2	2	2	2	1	2	2	2	1	2	2	1	0	2	1	1	0	1	1	1	0	1	1	1	0
120	2	3	4	1	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
	2	2	2	3	2	2	2	2	2	2	2	1	2	2	2	1	2	2	2	0	2	1	1	0	2	1	1	0	1	1	1	0
150	2	3	4	1	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
	2	2	2	3	2	2	2	2	2	2	2	1	2	2	2	1	2	2	2	0	2	2	2	0	2	1	1	0	2	1	1	0
200	2	3	4	1	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	3	2	4	1	3	2	4	1	3	2	4
	2	2	2	3	2	2	2	2	2	2	2	1	2	2	2	1	2	2	2	1	2	2	2	0	2	2	2	0	2	2	2	0
1000	2	4	3	1	2	3	1	4	2	3	1	4	2	3	1	4	2	3	1	4	2	3	1	4	2	3	1	4	2	3	1	4
	3	3	3	3	3	3	3	2	3	3	3	2	3	2	3	1	2	2	2	1	2	2	2	0	2	2	2	0	2	2	2	0

TABLE 12.5.1 (Continued)

Comparisons of Approximations to k for f = n - 1

$\gamma = .95$

	p																															
n	.75000				.90000				.95000				.97500				.99000				.99900				.99990				.99999			
	C	D	J	E	C	D	J	E	C	D	J	E	C	D	J	E	C	D	J	E	C	D	J	E	C	D	J	E	C	D	J	E
10	2	4	3	1	1	4	3	2	1	4	2	3	1	3	2	4	1	3	2	4	1	3	2	4	1	3	2	4	1	3	2	4
	1	0	1	2	1	0	1	1	3	0	1	0	2	0	1	0	1	0	1	0	1	0	1	0	1	0	0	0	1	0	0	0
15	2	4	3	1	2	4	3	1	2	4	1	3	2	3	1	4	2	3	1	4	2	3	1	4	2	3	1	4	2	3	1	4
	2	1	1	2	1	0	1	1	1	0	1	0	1	0	1	0	1	0	1	0	0	0	1	0	0	0	1	0	0	0	1	0
20	2	4	3	1	3	4	2	1	2	4	1	3	2	3	1	4	2	3	1	4	2	3	1	4	2	3	1	4	2	3	1	4
	2	1	1	2	1	1	1	1	1	0	1	1	1	0	1	0	1	0	1	0	0	0	1	0	0	0	1	0	0	0	1	0
25	2	4	3	1	3	4	2	1	2	4	1	3	2	3	1	4	2	3	1	4	2	3	1	4	2	3	1	4	2	3	1	4
	1	1	1	3	1	1	1	1	1	1	1	1	1	0	1	0	1	0	1	0	1	0	1	0	0	0	1	0	0	0	1	0
30	2	4	3	1	3	4	2	1	2	4	1	3	2	3	1	4	2	3	1	4	2	3	1	4	2	3	1	4	2	3	1	4
	1	1	1	3	1	1	1	1	1	1	1	1	1	1	1	0	1	0	1	0	1	0	1	0	0	0	1	0	0	0	1	0
40	3	4	2	1	3	4	1	2	2	4	1	3	2	3	1	4	2	3	1	4	2	3	1	4	2	3	1	4	2	3	1	4
	1	1	1	3	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	0	1	0	1	0	1	0	1	0	0	0	1	0
50	3	4	2	1	3	4	1	2	2	4	1	3	2	3	1	4	2	3	1	4	2	3	1	4	2	3	1	4	2	3	1	4
	1	1	2	3	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	0	1	1	1	0	1	0	1	0	1	0	1	0
60	3	4	2	1	3	4	1	2	2	3	1	4	2	3	1	4	2	3	1	4	2	3	1	4	2	3	1	4	2	3	1	4
	1	1	2	3	1	1	2	1	1	1	1	1	1	1	1	0	1	1	1	0	1	1	1	0	1	1	1	0	1	1	1	0
80	3	4	2	1	3	4	1	2	2	3	1	4	2	3	1	4	2	3	1	4	2	3	1	4	2	3	1	4	2	3	1	4
	2	1	2	3	1	1	2	1	1	1	2	1	1	1	2	1	1	1	2	0	1	1	1	0	1	1	1	0	1	1	1	0
100	3	4	2	1	3	4	1	2	2	3	1	4	2	3	1	4	2	3	1	4	2	3	1	4	2	3	1	4	2	3	1	4
	2	1	2	3	1	1	2	2	1	1	2	1	1	1	2	1	1	1	2	0	1	1	2	0	1	1	1	0	1	1	1	0
120	3	4	2	1	3	4	1	2	2	3	1	4	2	3	1	4	2	3	1	4	2	3	1	4	2	3	1	4	2	3	1	4
	2	2	2	3	1	1	2	2	1	1	2	1	1	1	2	1	1	1	2	0	1	1	2	0	1	1	2	0	1	1	2	0
150	3	4	2	1	3	4	1	2	2	3	1	4	2	3	1	4	2	3	1	4	2	3	1	4	2	3	1	4	2	3	1	4
	2	2	2	3	1	1	2	2	1	1	2	1	1	1	2	1	1	1	2	0	1	1	2	0	1	1	2	0	1	1	2	0
200	3	4	2	1	3	4	1	2	2	3	1	4	2	3	1	4	2	3	1	4	2	3	1	4	2	3	1	4	2	3	1	4
	2	2	2	3	2	2	2	2	1	1	2	1	1	1	2	1	1	1	2	0	1	1	2	0	1	1	2	0	1	1	2	0
1000	3	4	2	1	2	3	1	4	2	3	1	4	2	3	1	4	2	3	1	4	2	3	1	4	2	3	1	4	2	3	1	4
	3	2	3	3	2	2	3	2	2	2	3	2	2	2	3	1	2	2	3	1	2	2	3	0	2	2	3	0	2	2	2	0

TABLE 12.5.1 (Continued)

Comparisons of Approximations to k for f = n - 1

$\gamma = .99$

n	p = .75000				.90000				.95000				.97500				.99000				.99900				.99990				.99999			
	C	D	J	E	C	D	J	E	C	D	J	E	C	D	J	E	C	D	J	E	C	D	J	E	C	D	J	E	C	D	J	E
10	3	4	2	1	3	4	2	1	3	4	2	1	2	4	1	3	2	4	1	3	2	3	1	4	2	3	1	4	2	3	1	4
	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	3	4	1	2	3	4	2	1	3	4	1	2	2	4	1	3	2	3	1	4	2	3	1	4	2	3	1	4	2	3	1	4
	0	0	2	2	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	3	4	1	2	3	4	1	2	3	4	1	2	2	4	1	3	2	3	1	4	2	3	1	4	2	3	1	4	2	3	1	4
	1	0	2	2	0	0	1	1	0	0	1	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
25	3	4	2	1	3	4	1	2	3	4	1	2	2	4	1	3	2	3	1	4	2	3	1	4	2	3	1	4	2	3	1	4
	1	0	2	2	0	0	1	1	0	0	1	0	0	0	1	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0
30	3	4	2	1	3	4	1	2	3	4	1	2	2	4	1	3	2	3	1	4	2	3	1	4	2	3	1	4	2	3	1	4
	1	0	2	2	0	0	2	1	0	0	1	0	0	0	1	0	0	0	1	0	0	0	1	0	0	0	1	0	0	0	0	0
40	3	4	2	1	3	4	1	2	3	4	1	2	2	4	1	3	2	3	1	4	2	3	1	4	2	3	1	4	2	3	1	4
	1	1	2	2	0	0	2	1	0	0	1	1	0	0	1	0	0	0	1	0	0	0	1	0	0	0	1	0	0	0	1	0
50	3	4	2	1	3	4	1	2	3	4	1	2	2	3	1	4	2	3	1	4	2	3	1	4	2	3	1	4	2	3	1	4
	1	1	2	3	1	0	2	1	0	0	2	1	0	0	1	0	0	0	1	0	0	0	1	0	0	0	1	0	0	0	1	0
60	3	4	2	1	3	4	1	2	3	4	1	2	2	3	1	4	2	3	1	4	2	3	1	4	2	3	1	4	2	3	1	4
	1	1	2	3	1	1	3	1	1	0	2	1	0	0	2	0	0	0	1	0	0	0	1	0	0	0	1	0	0	0	1	0
80	3	4	2	1	3	4	1	2	3	4	1	2	2	3	1	4	2	3	1	4	2	3	1	4	2	3	1	4	2	3	1	4
	1	1	2	3	1	1	3	1	1	1	2	1	1	0	2	0	0	0	2	0	0	0	1	0	0	0	1	0	0	0	1	0
100	3	4	2	1	3	4	1	2	3	4	1	2	2	3	1	4	2	3	1	4	2	3	1	4	2	3	1	4	2	3	1	4
	1	1	2	3	1	1	3	1	1	1	2	1	1	1	2	0	1	1	2	0	0	0	2	0	0	0	1	0	0	0	1	0
120	3	4	2	1	3	4	1	2	3	4	1	2	2	3	1	4	2	3	1	4	2	3	1	4	2	3	1	4	2	3	1	4
	1	1	2	3	1	1	3	1	1	1	3	1	1	1	2	0	1	1	2	0	1	0	2	0	0	0	2	0	0	0	1	0
150	3	4	2	1	3	4	1	2	3	4	1	2	2	3	1	4	2	3	1	4	2	3	1	4	2	3	1	4	2	3	1	4
	1	1	2	3	1	1	3	1	1	1	3	1	1	1	2	1	1	1	2	0	1	1	2	0	1	1	2	0	1	0	2	0
200	3	4	2	1	3	4	1	2	2	4	1	3	2	3	1	4	2	3	1	4	2	3	1	4	2	3	1	4	2	3	1	4
	1	1	2	3	1	1	3	2	1	1	3	1	1	1	3	1	1	1	2	0	1	1	2	0	1	1	2	0	1	1	2	0
1000	3	4	2	1	3	4	1	2	2	3	1	4	2	3	1	4	2	3	1	4	2	3	1	4	2	3	1	4	2	3	1	4
	2	2	3	3	2	2	3	2	2	2	3	1	2	2	3	1	2	2	3	1	1	1	3	0	1	1	3	0	1	1	3	0

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