

Chapter 1

Introduction

Let X_1, \dots, X_n be a random sample from a population with cumulative distribution function (c.d.f.) $F(x \mid \mathbf{q})$ and probability density function (p.d.f.) $f(x \mid \mathbf{q})$. We shall consider only the distributions with a single parameter \mathbf{q} . Let the parameter space be denoted by Θ . We follow the non-Bayesian inference point of view by regarding the parameter \mathbf{q} as a constant. Let $Y = t(X_1, \dots, X_n)$ be a sufficient statistic for \mathbf{q} which has the sampling c.d.f. $G(y \mid \mathbf{q}) = \Pr(Y \leq y)$ and the sampling p.d.f. $g(y \mid \mathbf{q})$.

Let $0 < \alpha < 1$ and $I(Y) = [q_L(Y), q_U(Y)]$, with $q_L(Y) < q_U(Y)$. We shall call the interval $I(Y)$ confidence interval for the parameter \mathbf{q} , the pre-set level $1-\alpha$ confidence level and the probability $\Pr(\mathbf{q} \in I(Y))$ confidence coefficient of the interval

$I(Y)$.

In this thesis we study the confidence intervals for the Poisson intensity parameter and the negative binomial success probability. By the Poisson distribution we mean that

$$f(x \mid \mathbf{q}) = \frac{e^{-\mathbf{q}} \mathbf{q}^x}{x!}, \quad x = 0, 1, \dots$$

The parameter space in the Poisson case is $\Theta = [0, \infty)$. By the negative binomial (including the geometric) distribution we mean that

$$f(x \mid \mathbf{q}) = \mathbf{q}(1-\mathbf{q})^x, \quad x = 0, 1, \dots \quad (1)$$

$Y = X_1 + \dots + X_r$ and

$$g(y \mid \mathbf{q}) = \binom{y+r-1}{r-1} \mathbf{q}^r (1-\mathbf{q})^y, \quad y = 0, 1, \dots \quad (2)$$

In the negative binomial case, the random variable Y is the number of failures when r -th success is observed, with $\mathbf{q} = \Pr(\text{Success})$ at each trial and (2) is the probability of the event $\{Y = y\}$. The parameter space in the negative binomial case is $\Theta = [0, 1]$.

The problem of how to construct a confidence interval for a parameter can be easily resolved in case that a pivotal quantity involving the parameter exists.

For example in the normal $(\boldsymbol{q}, \boldsymbol{s}^2)$ case. If \boldsymbol{s}^2 is known, then $Z = \frac{\sqrt{n}(\bar{X} - \boldsymbol{q})}{\boldsymbol{s}}$, where $\bar{X} = \sum_{i=1}^n \frac{X_i}{n}$ is the sample mean, is a pivotal quantity involving \boldsymbol{q} . Since Z has the standard normal distribution, it is easy to see that the interval $(\bar{X} - z_{\alpha/2} \frac{\boldsymbol{s}}{\sqrt{n}}, \bar{X} + z_{\alpha/2} \frac{\boldsymbol{s}}{\sqrt{n}})$ is a $(1 - \alpha)100\%$ confidence interval for the mean \boldsymbol{q} .

(A pivotal quantity is a function of a statistic and parameters whose distribution is free of any unknown parameters.)

In discrete distributions pivotal quantities for unknown parameters in general do not exist. Hence the method of constructing confidence intervals through pivotal quantities is an impasse.

An approximation approach used by many statisticians is normal approximation via the central limit theorem. For

example, if Y has the binomial distribution and q is the Bernoulli success probability, the universally accepted approximate $(1 - \alpha)100\%$ confidence interval for q is

$$\left(\hat{q} - z_{\alpha/2} \sqrt{\frac{\hat{q}(1-\hat{q})}{n}}, \hat{q} + z_{\alpha/2} \sqrt{\frac{\hat{q}(1-\hat{q})}{n}} \right), \quad (3)$$

where $\hat{q} = \frac{Y}{n}$. The theory behind the interval (3) was based on the normal approximation of the quantity

$$\frac{\hat{q} - q}{\sqrt{\frac{\hat{q}(1-\hat{q})}{n}}},$$

which, via the Slutsky's theorem, is asymptotically normally distributed. There is a big problem with the interval (3) because its confidence coefficient is far away from the pre-set confidence level $1 - \alpha$ even when the sample size n is very large. This interval has been a subject of many recent studies. For example, Agresti and Coull (1998), Blyth and Still (1983), Brown, Cai and DasGupta (2001), Leemis and Triverdi (1996), Sahai and Khurshid (1996) and Vollset (1993).

Using the same approach, we can argue that the quantity

$$\frac{\hat{\mathbf{I}} - \mathbf{I}}{\sqrt{\hat{\mathbf{I}}/n}},$$

where $\hat{\mathbf{I}} = \frac{Y}{n}$ is the sample mean of a random sample from a

Poisson population with mean \mathbf{I} is

$$\left(\hat{\mathbf{I}} - z_{\alpha/2} \sqrt{\frac{\hat{\mathbf{I}}}{n}}, \hat{\mathbf{I}} + z_{\alpha/2} \sqrt{\frac{\hat{\mathbf{I}}}{n}} \right). \quad (4)$$

Because the interval (3) does not perform well as an interval for the Bernoulli success probability, likewise we do not believe that the interval (4) would perform well for the Poisson intensity parameter. We shall not pursue the matters much further about this interval.

Chapter 2

Fiducial Intervals

We say that $\boldsymbol{q} \in \Theta$ is a location parameter of a distribution G if $G(y | \boldsymbol{q}) = G(y - \boldsymbol{q} | 0)$ for all y and that $\boldsymbol{q} > 0$ is a scale parameter of a distribution G if $G(y | \boldsymbol{q}) = G(\frac{y}{\boldsymbol{q}} | 1)$ for $y \geq 0$ and $= 0$ for $y < 0$. It is assumed that 0 is a value of the location parameter, 1 is a value of the scale parameter.

It should be noted here that the location and the scale parameters are with respect to the sampling distribution G of the sufficient statistic Y , not with respect to the original population distribution F . In the case of scale parameter, we restrict the statistic Y to be $\Pr(Y < 0) = 0$. It is a natural restriction, because a scale parameter is positive and a statistic for it should be non-negative. For example, in the normal population, the variance $\boldsymbol{q} = \boldsymbol{s}^2$ is treated as the scale parame-

ter of the sample variance $Y = S^2 = \frac{\sum_{i=1}^n (X_i - \bar{X})^2}{n-1}$, not as that of the population.

A random variable X is stochastically greater than a random variable Y if $\Pr(X \leq x) \leq \Pr(Y \leq x)$ for all x and $\Pr(X \leq x) < \Pr(Y \leq x)$ for some x . Intuitively, it means that the mass of Y is more on the right side of the mass of X . Using this stochastic ordering, we define the ordering of a family of c.d.f.'s in terms of its parameter.

Definition 1 A collection of c.d.f.'s $\{G(y | \mathbf{q}); \mathbf{q} \in \Theta\}$ is said to be stochastically increasing in \mathbf{q} if $\mathbf{q}_2 < \mathbf{q}_1$ implies $G(y | \mathbf{q}_1) \leq G(y | \mathbf{q}_2)$, for all y , and $G(y | \mathbf{q}_1) < G(y | \mathbf{q}_2)$, for some y . In other words, a c.d.f. $G(y | \mathbf{q})$ is stochastically increasing in \mathbf{q} if it is a monotonically decreasing function in \mathbf{q} for all fixed y .

Similarly we can define a collection of c.d.f.'s to be stochasti-

cally decreasing. It is evident that if a collection of c.d.f.'s $\{G(y | \mathbf{q}); \mathbf{q} \in \Theta\}$ is stochastically decreasing in \mathbf{q} , then it is stochastically increasing in $\mathbf{I} = \frac{1}{\mathbf{q}}$.

The next lemma shows that the family of distributions which are stochastically increasing consists of a very large number of distributions in statistics.

Lemma 2 If the parameter \mathbf{q} is a location or a scale parameter of a c.d.f. $G(y | \mathbf{q})$, then $G(y | \mathbf{q})$ is stochastically increasing in \mathbf{q} . In other words, $G(y | \mathbf{q})$ is a monotonically decreasing function in \mathbf{q} for all fixed y .

Proof. First assume that \mathbf{q} is a location parameters. Let $\mathbf{q}_2 < \mathbf{q}_1$, then $y - \mathbf{q}_1 < y - \mathbf{q}_2$ all real y and $G(y | \mathbf{q}_1) = G(y - \mathbf{q}_1 | 0) \leq G(y - \mathbf{q}_2 | 0) = G(y | \mathbf{q}_2)$ for all y and $G(y | \mathbf{q}_1) = G(y - \mathbf{q}_1 | 0) < G(y - \mathbf{q}_2 | 0) = G(y | \mathbf{q}_2)$ for some y .

Next assume that \mathbf{q} is a scale parameter. For $0 < \mathbf{q}_2 < \mathbf{q}_1$, We have $\frac{y}{\mathbf{q}_1} < \frac{y}{\mathbf{q}_2}$, for all $y > 0$. Therefore, $G(y \mid \mathbf{q}_1) = G(\frac{y}{\mathbf{q}_1} \mid 1) \leq G(\frac{y}{\mathbf{q}_2} \mid 1) = G(y \mid \mathbf{q}_2)$ for all $y \geq 0$ and $G(y \mid \mathbf{q}_1) = G(\frac{y}{\mathbf{q}_1} \mid 1) < G(\frac{y}{\mathbf{q}_2} \mid 1) = G(y \mid \mathbf{q}_2)$ for some $y > 0$.

The location and scale parameters are not the only parameters in which a distribution G is stochastically increasing. Here are two popular examples, in which the c.d.f. are stochastically increasing in \mathbf{q} .

The Poisson distribution G defined by

$$G(y \mid \mathbf{q}) = \sum_{i=0}^y \frac{e^{-n\mathbf{q}} (n\mathbf{q})^i}{i!}, \quad y = 0, 1, \dots \quad (5)$$

with intensity parameter \mathbf{q} is stochastically increasing in \mathbf{q} by (12).

The binomial distribution

$$G(y \mid \mathbf{q}) = \sum_{i=0}^y \binom{n}{i} \mathbf{q}^i (1-\mathbf{q})^{n-i}, \quad y = 0, 1, \dots, n \quad (6)$$

is another example of stochastically increasing in the success probability \mathbf{q} by (16). In both distributions, the parameter \mathbf{q} is neither a location parameter, nor a scale parameter.

The graph of the Poisson distribution G in (5) for $y=2$ and $n=1$ is shown below:

The next is an example of a distribution which is stochastically decreasing in the parameter \mathbf{q} .

The negative binomial distribution G defined by

$$G(y \mid \mathbf{q}) = \sum_{i=0}^y \binom{i+r-1}{r-1} \mathbf{q}^r (1-\mathbf{q})^i, \quad y=0,1, \dots \quad (7)$$

with parameters (q, r) where r is a known integer, is stochastically decreasing in the success probability q by (15).

The next graph is for the negative binomial distribution G in (7) for $y=2$ and $r=2$ is shown below:

In a historical paper, Clopper and Pearson (1934) proposed a method of finding the two limits $\hat{q}_L(y)$ and $\hat{q}_U(y)$ of a $(1 - \alpha)100\%$ confidence interval $[\hat{q}_L(y), \hat{q}_U(y)]$ by solving for them in the equations

$$\begin{aligned}\Pr(Y \leq y \mid \hat{\mathbf{q}}_u(y)) &= \mathbf{a}/2, \\ \Pr(Y \geq y \mid \hat{\mathbf{q}}_L(y)) &= \mathbf{a}/2.\end{aligned}\tag{8}$$

They used the binomial distribution as an illustration. Clopper and Pearson's idea was based on the fiducial inference argument proposed earlier by Fisher (1930). (For an elementary explanation of the fiducial philosophy in general and the binomial distribution case in particular, see the recent paper by Wang (2000).)

In the binomial distribution (6), G is a stochastically increasing function in \mathbf{q} . Therefore, the two equations in (8) are meant for the stochastically increasing family of c.d.f.'s.

For the stochastically decreasing family of c.d.f.'s, they are to be modified as

$$\begin{aligned}\Pr(Y \geq y \mid \hat{\mathbf{q}}_u(y)) &= \mathbf{a}/2, \\ \Pr(Y \leq y \mid \hat{\mathbf{q}}_L(y)) &= \mathbf{a}/2.\end{aligned}\tag{9}$$

Evidently, the two sets of equations (8) and (9) can be more

generally rewritten as follows :

$$\begin{aligned} \Pr(Y \leq y \mid \hat{\mathbf{q}}_U(y)) &= \mathbf{a}_1, \\ \Pr(Y < y \mid \hat{\mathbf{q}}_L(y)) &= 1 - \mathbf{a}_2. \end{aligned} \quad (10)$$

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$$\begin{aligned} \Pr(Y < y \mid \hat{\mathbf{q}}_U(y)) &= 1 - \mathbf{a}_1, \\ \Pr(Y \leq y \mid \hat{\mathbf{q}}_L(y)) &= \mathbf{a}_2. \end{aligned} \quad (11)$$

where $\mathbf{a}_1 > 0, \mathbf{a}_2 > 0$ and $\mathbf{a}_1 + \mathbf{a}_2 = \mathbf{a}$.

The Clopper-Pearson intervals are special cases of the intervals obtained by solving the equations in (10) and (11) with $\mathbf{a}_1 = \mathbf{a}_2 = \mathbf{a}/2$.

Using (10), Wang and Chang (2002) constructed the shortest width fiducial intervals for the Bernoulli success probability \mathbf{q} at levels $\mathbf{a} = \mathbf{a}_1 + \mathbf{a}_2 = .01, .05$ and $.10$, for $n = 2, 3, \dots, 50$. That is, at a fixed level $1 - \mathbf{a}$ and an observed value $Y = y$, they constructed an interval $I(y) = [\mathbf{q}_L(y), \mathbf{q}_U(y)]$ for the Bernoulli success probability \mathbf{q} whose width $\mathbf{d}(I) = \mathbf{q}_U(y) - \mathbf{q}_L(y)$ is less

than or equal to, up to the fourth decimal point, the widths of all the fiducial intervals corresponding to all the pairs $(\mathbf{a}_1, \mathbf{a}_2)$ with $\mathbf{a}_1 + \mathbf{a}_2 = \mathbf{a}$.

In the next chapter, we shall compute the optimum fiducial intervals for the Poisson intensity parameter \mathbf{q} , for each $y = 0, 1, \dots, 100$. and at levels $1 - \mathbf{a} = 90\%$, 95% and 99% , with the results tabulated in Appendix I.

In Chapter 4, We shall compute the optimum fiducial intervals for the negative binomial success probability \mathbf{q} in (7), for each $y = 0, 1, \dots, 20$ and at levels $1 - \mathbf{a} = 90\%$, 95% and 99% , with results tabulated in Appendix II.

Chapter 3

Confidence Intervals For The Poisson Parameter

We first state the relationship between the Poisson distribution and the gamma distribution.

If a random variable X has the gamma distribution with p.d.f.

$$f(x) = \frac{1}{\Gamma(k)\mathbf{b}^k} x^{k-1} e^{-x/\mathbf{b}}, \quad k = 1, 2, \dots \text{ and } \mathbf{b} > 0,$$

then

$$\Pr(X \leq x \mid k, \mathbf{b}) = \Pr(Y \geq k \mid x/\mathbf{b}) \quad (12)$$

where Y is a Poisson random variable with parameter x/\mathbf{b} .

For our purpose we are interested in the special case of the gamma distribution with $\mathbf{b}=2$, so that the gamma distribution becomes the chi-squared distribution with $2k$ degrees of freed-

om. Denote by \mathbf{c}_{2k}^2 the random variable having the chi-squared distribution with $2k$ degrees of freedom. Then we can rewrite the relation (12) as

$$\Pr(\mathbf{c}_{2k}^2 \leq x) = \Pr(Y \geq k \mid x/2). \quad (13)$$

or for a Poisson random variable Y with parameter \mathbf{I} , we have

$$\Pr(Y \leq k \mid \mathbf{I}) = \Pr(\mathbf{c}_{2(k+1)}^2 > 2\mathbf{I}). \quad (14)$$

Theorem 3 Let Y be the Poisson random variable with distribution defined by (5), then the two limits $\mathbf{q}_L(y)$ and $\mathbf{q}_U(y)$ of the $(1 - \mathbf{a})100\%$ confidence intervals $[\mathbf{q}_L(y), \mathbf{q}_U(y)]$ for the parameter \mathbf{q} are if $Y = 0$,

$$\mathbf{q}_L(0) = 0,$$

$$\mathbf{q}_U(0) = \frac{-\ln \mathbf{a}}{n};$$

if $Y = y_0 = 1, 2, \dots$

$$\mathbf{q}_L(y_0) = \frac{\mathbf{c}_{2y_0, 1-\mathbf{a}_2}}{2n},$$

$$\mathbf{q}_U(y_0) = \frac{\mathbf{c}_{2(y_0+1), \mathbf{a}_1}}{2n},$$

where $c_{k,a}$ is $(1 - a)$ -th percentile of the chi-squared distribution with k degrees of freedom and $a_1 + a_2 = a$.

Proof.

Now let us get back to the Poisson distribution in (5). For all $n = 1, 2, \dots$

$$\Pr(Y = 0 \mid \mathbf{q} = 0) = 1,$$

which means that 0 is the most probable value of \mathbf{q} to give rise to $Y = 0$ and hence 0 must be in the confidence interval for \mathbf{q} when $Y = 0$.

Since $\Pr(Y = 0 \mid \mathbf{q}) = e^{-n\mathbf{q}}$ is a decreasing function in \mathbf{q} , the confidence interval for \mathbf{q} , when $Y = 0$, must be of the form $[0, \mathbf{q}_u(0)]$, where $\mathbf{q}_u(0)$ is the solution for \mathbf{q} in $e^{-n\mathbf{q}} = a$.

In other words, we have $\mathbf{q}_u(0) = \frac{-\ln a}{n}$, $\mathbf{q}_l(0) = 0$.

For other values of $Y = y_0 > 0$, by the first equation in (10) and (14), we can solve for the upper limit $\mathbf{q}_u(y_0)$ in

$$\Pr(Y \leq y_0 \mid n \mathbf{q}_u(y_0))$$

$$\begin{aligned}
&= 1 - \Pr(Y \geq y_0 + 1 \mid n \mathbf{q}_U(y_0)) \\
&= 1 - \Pr(\mathbf{c}^2 \leq 2n \mathbf{q}_U(y_0) \mid 2(y_0 + 1)) \\
&= \Pr(\mathbf{c}^2 > 2n \mathbf{q}_U(y_0) \mid 2(y_0 + 1)) \\
&= \mathbf{a}_1,
\end{aligned}$$

for \mathbf{c}^2 is a chi-squared random variable with $2(y_0 + 1)$ degrees of freedom.

This implies that $2n \mathbf{q}_U(y_0) = \mathbf{c}_{2(y_0+1), \mathbf{a}_1}^2$, then we get

$$\mathbf{q}_U(y_0) = \frac{\mathbf{c}_{2(y_0+1), \mathbf{a}_1}^2}{2n}.$$

This proved the first part.

For the lower limit $\mathbf{q}_L(y_0)$, by the second equation in (10) and (14)

$$\begin{aligned}
&\Pr(Y < y_0 \mid n \mathbf{q}_L(y_0)) \\
&= 1 - \Pr(Y \geq y_0 \mid n \mathbf{q}_L(y_0)) \\
&= 1 - \Pr(\mathbf{c}^2 \leq 2n \mathbf{q}_L(y_0) \mid 2y_0) \\
&= \Pr(\mathbf{c}^2 > 2n \mathbf{q}_L(y_0) \mid 2y_0) \\
&= 1 - \mathbf{a}_2,
\end{aligned}$$

for \mathbf{c}^2 is a chi-squared random variable with $2y_0$ degrees of freedom.

This implies that $2n \mathbf{q}_L(y_0) = \mathbf{c}_{2y_0, 1-\mathbf{a}_2}^2$, then we get

$$\mathbf{q}_L(y_0) = \frac{\mathbf{c}_{2y_0, 1-\mathbf{a}_2}^2}{2n}.$$

And proof of the theorem complete.

In Appendix I, we have computed for $y=0, 1, \dots, 100$ value of the pair $(a(y), b(y))$ with so that $b(y) - a(y) \leq \frac{\mathbf{c}_{2(y_0+1), \mathbf{a}_1}^2}{2} - \frac{\mathbf{c}_{2y_0, 1-\mathbf{a}_2}^2}{2}$ for all $\mathbf{a} = \mathbf{a}_1 + \mathbf{a}_2 = .01, .05$ and $.10$. In other words, for a fixed level $1 - \mathbf{a}$ and $Y = y_0$, the interval $(a(y_0), b(y_0))$ is the shortest width $(1 - \mathbf{a})100\%$ confidence interval for the Poisson intensity parameter \mathbf{q} for $n=1$.

For general n , the optimum confidence intervals are

$$\frac{1}{n}(a(y), b(y)), \text{ for } n=1, 2, 3, \dots$$

Chapter 4

Confidence Intervals For The Negative Binomial Parameter

In this chapter we derive the $(1 - \alpha)100\%$ confidence intervals for the success probability of the negative binomial distribution in (7).

We first state the relationship between the negative binomial distribution and the binomial distribution. A binomial random variable with parameter (n, \mathbf{q}) can be interpreted as the number of success in n independent trials while a negative binomial random variable with parameter (r, \mathbf{q}) is the number of failures when the r -th success is obtained. Therefore, in a sense, X and Y are complement of each other. The c.d.f. of the binomial distribution is as in (6) .

Let X have the binomial (n, \mathbf{q}) distribution and Y have the negative binomial (r, \mathbf{q}) distribution, then

$$\Pr(X \leq r-1 \mid n, \mathbf{q}) = \Pr(Y \geq n-r+1 \mid r, \mathbf{q}). \quad (15)$$

Second, we state the relationship between the binomial distribution and the beta distribution.

Let W have the beta $(x+1, n-x)$ distribution and X have the binomial (n, \mathbf{q}) distribution, then

$$\Pr(X \leq x \mid n, \mathbf{q}) = \Pr(W > \mathbf{q} \mid x+1, n-x). \quad (16)$$

Let w denote the beta (\mathbf{a}, \mathbf{b}) random variable with p.d.f.

$$f_W(w) = \frac{\Gamma(\mathbf{a} + \mathbf{b})}{\Gamma(\mathbf{a})\Gamma(\mathbf{b})} w^{\mathbf{a}-1} (1-w)^{\mathbf{b}-1}, \quad 0 \leq w \leq 1, \quad \mathbf{a} > 0, \quad \mathbf{b} > 0.$$

We now derive the confidence intervals for the Bernoulli success probability \mathbf{q} , then use it to derive the negative binomial parameter by (15)..

Theorem 4 Let X be the binomial random variable with distribution defined by (6), then the two limits $q_L(x)$ and $q_U(x)$ of the $(1 - \alpha)100\%$ confidence interval $[q_L(x), q_U(x)]$ for the success probability q are :

a) if $X = 0$,

$$q_L(0) = 0,$$

$$q_U(0) = 1 - \alpha^{1/n};$$

b) if $X = n$,

$$q_L(0) = \alpha^{1/n},$$

$$q_U(0) = 1;$$

and c) if $0 < X < n$,

$$q_L(x) = \frac{x}{x + (n - x + 1)F_{2(n-x+1), 2x; \alpha}},$$

$$q_U(x) = \frac{(x + 1)F_{2(x+1), 2(n-x); \alpha_1}}{(n - x) + (x + 1)F_{2(x+1), 2(n-x); \alpha_1}}.$$

Proof. For fixed n ,

$$\Pr(X = 0 \mid q = 0) = 1,$$

implies that 0 is the most probable value of q to give rise to the

event $\{X=0\}$ and consequently, 0 must be in the confidence interval for \mathbf{q} when $X=0$. Since $\Pr(X=0 \mid \mathbf{q}) = (1 - \mathbf{q})^n$ is strictly monotone decreasing in \mathbf{q} from the maximum = 1 to the minimum = 0, the natural choice of $\mathbf{q}_L(0)$ is the value $\mathbf{q}_U(0)$ satisfying $(1 - \mathbf{q}_U(0))^n = \mathbf{a}$, which is equivalent to saying $\mathbf{q}_L(y) = 1 - \mathbf{a}^{1/n}$. This proved the first part.

For the second part ,

$$\Pr(X = n \mid \mathbf{q}=1) = 1,$$

implies that 1 is the most probability value of \mathbf{q} to give rise to observing $X = n$. In fact, the maximum likelihood estimate $\hat{\mathbf{q}} = \frac{X}{n} = 1$ in this case. Therefore, 1 must be an element of the confidence interval for \mathbf{q} when $X = n$. Following similar argument, as before, we conclude $\mathbf{q}_L(n) = \mathbf{a}^{1/n}$ and $\mathbf{q}_U(n) = 1$.

For $X = x_0 = 1, 2, \dots, n-1$, by the first part of (10) and (16)

$$\Pr(X \leq x_0 \mid n, \mathbf{q}_U)$$

$$\begin{aligned}
&= \Pr(W > \mathbf{q}_U \mid x_0 + 1, n - x_0) \\
&= \int_{\mathbf{q}_U}^1 \frac{n!}{x_0!(n - x_0 - 1)!} w^{x_0} (1 - w)^{n - x_0 - 1} dw
\end{aligned}$$

$$\text{Let } t = \left(\frac{n - x_0}{x_0 + 1} \right) \left(\frac{w}{1 - w} \right),$$

$$\text{then } w = \frac{\left(\frac{x_0 + 1}{n - x_0} \right) t}{1 + \left(\frac{x_0 + 1}{n - x_0} \right) t} \text{ and } dw = \frac{\frac{x_0 + 1}{n - x_0}}{\left[1 + \left(\frac{x_0 + 1}{n - x_0} \right) t \right]^2} dt$$

This is a one-to-one continuous transformation from $0 \leq w \leq 1$ to $0 \leq t < \infty$. And the range of integration changes from $[\mathbf{q}_U, 1]$ to $[t(\mathbf{q}_U), \infty)$, where $t(\mathbf{q}) = \left(\frac{n - x_0}{x_0 + 1} \right) \left(\frac{\mathbf{q}}{1 - \mathbf{q}} \right)$.

Therefore,

$$\begin{aligned}
&\Pr(X \leq x_0 \mid n, \mathbf{q}_U) \\
&= \int_{\mathbf{q}_U}^1 \frac{n!}{x_0!(n - x_0 - 1)!} w^{(x_0+1)-1} (1 - w)^{n - x_0 - 1} dw \\
&= \frac{n!}{x_0!(n - x_0 - 1)!} \int_{t(\mathbf{q}_U)}^{\infty} \left[\frac{\left(\frac{x_0 + 1}{n - x_0} \right) t}{1 + \left(\frac{x_0 + 1}{n - x_0} \right) t} \right]^{x_0} \left[1 - \frac{\left(\frac{x_0 + 1}{n - x_0} \right) t}{1 + \left(\frac{x_0 + 1}{n - x_0} \right) t} \right]^{n - x_0 - 1} \frac{\frac{x_0 + 1}{n - x_0}}{\left[1 + \left(\frac{x_0 + 1}{n - x_0} \right) t \right]^2} dt
\end{aligned}$$

$$\begin{aligned}
&= \frac{n!}{x_0!(n-x_0-1)!} \left(\frac{x_0+1}{n-x_0} \right)^{x_0+1} \int_{t(\mathbf{q}_U)}^{\infty} \frac{t^{x_0}}{\left[1 + \left(\frac{x_0+1}{n-x_0} \right) t \right]^{n+1}} dt \\
&= \frac{\Gamma(n+1)}{\Gamma(x_0+1)\Gamma(n-x_0)} \left(\frac{x_0+1}{n-x_0} \right)^{x_0+1} \int_{t(\mathbf{q}_U)}^{\infty} \frac{t^{x_0}}{\left[1 + \left(\frac{x_0+1}{n-x_0} \right) t \right]^{n+1}} dt \\
&= \Pr(F_{2(x_0+1), 2(n-x_0)} > t(\mathbf{q}_U)) \\
&= \mathbf{a}_1.
\end{aligned}$$

The upper limit \mathbf{q}_U can be found by solving

$$F_{2(x_0+1), 2(n-x_0); \mathbf{a}} = t(\mathbf{q}_U) = \left(\frac{n-x_0}{x_0+1} \right) \left(\frac{\mathbf{q}_U}{1-\mathbf{q}_U} \right), \quad (17)$$

where $F_{k, +; \mathbf{a}}$ is the $(1-\mathbf{a})100\%$ percentile of the F-distribution with k and $+$ degrees of freedom.

The solution for \mathbf{q}_U in (17) is easily seen to be

$$\mathbf{q}_U(x_0) = \frac{(x_0+1)F_{2(x_0+1), 2(n-x_0); \mathbf{a}}}{(n-x_0) + (x_0+1)F_{2(x_0+1), 2(n-x_0); \mathbf{a}}}.$$

For the lower limit $\mathbf{q}_L(x)$, by the second part of (10), (16) and using the change of variable

$$\text{Let } t = \left(\frac{n-x_0+1}{x_0} \right) \left(\frac{\mathbf{q}_L}{1-\mathbf{q}_L} \right),$$

$$\text{then } w = \frac{\left(\frac{x_0}{n-x_0+1} \right)^t}{1 + \left(\frac{x_0}{n-x_0+1} \right)^t}, \text{ and } dw = \frac{\frac{x_0}{n-x_0+1}}{\left[1 + \left(\frac{x_0}{n-x_0+1} \right)^t \right]^2} dt$$

We have

$$\begin{aligned} & \Pr(X < x_0 \mid n, \mathbf{q}_L) \\ &= \Pr(X \leq x_0 - 1 \mid n, \mathbf{q}_L) \\ &= \Pr(W > \mathbf{q}_L \mid x_0, n - x_0 + 1) \\ &= \int_{\mathbf{q}_L}^1 \frac{n!}{(x_0 - 1)!(n - x_0)!} w^{x_0-1} (1-w)^{(n-x_0+1)-1} dw \end{aligned}$$

=

$$\frac{n!}{(x_0 - 1)!(n - x_0)!} \int_{t(\mathbf{q}_L)}^{\infty} \left[\frac{\left(\frac{x_0}{n-x_0+1} \right)^t}{1 + \left(\frac{x_0}{n-x_0+1} \right)^t} \right]^{x_0-1} \left[1 - \frac{\left(\frac{x_0}{n-x_0+1} \right)^t}{1 + \left(\frac{x_0}{n-x_0+1} \right)^t} \right]^{(n-x_0+1)-1} \frac{\frac{x_0}{n-x_0+1}}{\left[1 + \left(\frac{x_0}{n-x_0+1} \right)^t \right]^2} dt$$

$$\begin{aligned}
&= \frac{n!}{(x_0 - 1)!(n - x_0)!} \left(\frac{x_0}{n - x_0 + 1} \right)^{x_0} \int_{t(\mathbf{q}_L)}^{\infty} \frac{t^{x_0-1}}{\left[1 + \left(\frac{x_0}{n - x_0 + 1} \right) t \right]^{n+1}} dt \\
&= \frac{\Gamma(n+1)}{\Gamma(x_0)\Gamma(n - x_0 + 1)} \left(\frac{x_0}{n - x_0 + 1} \right)^{x_0} \int_{t(\mathbf{q}_L)}^{\infty} \frac{t^{x_0-1}}{\left[1 + \left(\frac{x_0}{n - x_0 + 1} \right) t \right]^{n+1}} dt \\
&= \Pr(F_{2x_0, 2(n-x_0+1)} > t(\mathbf{q}_L)) \\
&= 1 - \mathbf{a}_2.
\end{aligned}$$

The lower limit \mathbf{q}_L can be found by solving

$$F_{2(x_0+1), 2(n-x_0); \mathbf{a}} = t(\mathbf{q}_L) = \left(\frac{n - x_0}{x_0 + 1} \right) \left(\frac{\mathbf{q}_U}{1 - \mathbf{q}_U} \right).$$

Equating

$$F_{2x_0, 2(n-x_0+1); 1-\mathbf{a}_2} = t(\mathbf{q}_L) = \left(\frac{n - x_0 + 1}{x_0} \right) \left(\frac{\mathbf{q}_L}{1 - \mathbf{q}_L} \right).$$

we obtain

$$\begin{aligned}
\mathbf{q}_L(x_0) &= \frac{x_0 F_{2x_0, 2(n-x_0+1); 1-\mathbf{a}_2}}{(n - x_0 + 1) + x_0 F_{2x_0, 2(n-x_0+1); 1-\mathbf{a}_2}} \\
&= \frac{x_0}{x_0 + (n - x_0 + 1) F_{2(n-x_0+1), 2x_0; \mathbf{a}_2}}. \tag{18}
\end{aligned}$$

The last equality is by the well known property $F_{k,+;a} = \frac{1}{F_{+,k;1-a}}$ of the F-distribution. This completes the proof of the theorem.

We make a short remark here that in (18) we changed $F_{2x_0,2(n-x_0+1);1-a_2}$ to $\frac{1}{F_{2(n-x_0+1),2x_0;a_2}}$ is because in all the tables for the F-distributions listed only the upper tail probabilities.

Now the $(1 - \mathbf{a})100\%$ confidence intervals for negative binomial distribution parameter. By (15) a negative binomial random variable and a binomial random variable are complement of each other, the next result can be regarded as a corollary to theorem 4.

Corollary 5 Let Y be the negative binomial random variable with distribution defined by (7), then the two limits $\mathbf{q}_L(y)$ and $\mathbf{q}_U(y)$ of the $(1 - \mathbf{a})100\%$ confidence interval $[\mathbf{q}_L(y), \mathbf{q}_U(y)]$ for

the success probability \mathbf{q} are

a) if $Y = 0$,

$$\mathbf{q}_L(0) = \mathbf{a}^{1/r},$$

$$\mathbf{q}_U(0) = 1;$$

b) if $Y = y_0 = 1, 2, \dots$

$$\mathbf{q}_L(y_0) = \frac{r}{r + (y_0 + 1)F_{2(y_0+1), 2r; \mathbf{a}_2}},$$

$$\mathbf{q}_U(y_0) = \frac{rF_{2r, 2y_0, \mathbf{a}_1}}{y_0 + rF_{2r, 2y_0, \mathbf{a}_1}} \dots$$

Proof. For $Y = 0$. Since

$$\Pr(Y=0 \mid \mathbf{q}=1) = 1,$$

1 is the most probable value of \mathbf{q} to give rise to the event $\{Y=0\}$. Hence, 1 must be in the confidence interval for \mathbf{q} when $Y=0$ is a realization. In other words, $\mathbf{q}_U(0) = 1$. Also $\Pr(Y=0 \mid \mathbf{q}) = \mathbf{q}^r$, the lower value of $\mathbf{q}_L(0)$ must be the solution of \mathbf{q} in the equation $\mathbf{q}^r = \mathbf{a}$ which is to say $\mathbf{q}_L(0) = \mathbf{a}^{1/r}$.

For $Y = y_0 = 1, 2, \dots$. For the upper limit $\mathbf{q}_U(y_0)$, by the

first equation in (11) and (15)

$$\begin{aligned} & \Pr(Y < y_0 \mid r, \mathbf{q}_U) \\ &= 1 - \Pr(Y \geq y_0 \mid r, \mathbf{q}_U) \end{aligned}$$

Expressing in terms of the binomial and the negative binomial parameters n and r , $y_0 = n - r + 1$ which implies

$$\begin{aligned} & \Pr(Y < y_0 \mid r, \mathbf{q}_U) \\ &= 1 - \Pr(Y \geq n - r + 1 \mid r, \mathbf{q}_U) \\ &= 1 - \Pr(X \leq r - 1 \mid n, \mathbf{q}_U) \\ &= 1 - \mathbf{a}_1. \end{aligned}$$

which implies $\Pr(X \leq r - 1 \mid n, \mathbf{q}_U) = \mathbf{a}_1$. Where $X \sim$ binomial (n, \mathbf{q}) , by Theorem 4, putting $r - 1$ in lieu of x , we get

$$\begin{aligned} \mathbf{q}_U(y_0) &= \frac{rF_{2r, 2(n-r+1); \mathbf{a}_1}}{(n-r+1) + rF_{2r, 2(n-r+1); \mathbf{a}_1}}, \\ &= \frac{rF_{2r, 2y_0, \mathbf{a}_1}}{y_0 + rF_{2r, 2y_0, \mathbf{a}_1}}. \end{aligned}$$

For the lower limit $\mathbf{q}_L(y_0)$. By the second equation in (11) and (15),

$$\begin{aligned} & \Pr(Y \leq y_0 \mid r, \mathbf{q}_L) \\ &= 1 - \Pr(Y \geq y_0 + 1 \mid r, \mathbf{q}_L) \end{aligned}$$

Expressing in terms of the binomial and the negative binomial parameters n and r , $y_0 + 1 = n - r + 1$ which implies

$$\begin{aligned} & \Pr(Y \leq y_0 \mid r, \mathbf{q}_L) \\ &= 1 - \Pr(Y \geq y_0 + 1 \mid r, \mathbf{q}_L) \\ &= 1 - \Pr(X \leq r - 1 \mid n, \mathbf{q}_L) \\ &= \mathbf{a}_2. \end{aligned}$$

or $\Pr(X \leq r - 1 \mid n, \mathbf{q}_L) = 1 - \mathbf{a}_2$, where $X \sim \text{binomial}(n, \mathbf{q})$. By

Theorem 4, putting $r - 1$ in lieu of $x - 1$, we get

$$\begin{aligned} \mathbf{q}_L(y_0) &= \frac{rF_{2r, 2(n-r+1); 1-\mathbf{a}_2}}{(n-r+1) + rF_{2r, 2(n-r+1); 1-\mathbf{a}_2}}, \\ &= \frac{r}{r + (y_0 + 1)F_{2(y_0+1), 2r; \mathbf{a}_2}}. \end{aligned}$$

This completes the proof of the corollary.

In Appendix II, we have tabulated the pair $(\mathbf{q}_1(y), \mathbf{q}_2(y))$, for $y = 0, 1, 2, \dots, 100$ and $r = 1, 2, \dots, 20$, such that

$q_2(y) - q_1(y) \leq q_U(y) - q_L(y)$ for all values of (a_1, a_2) with $a_1 + a_2 = a$. We take the confidence levels $1 - a = 90\%$, 95% and 99% .

For example, for $r = 2$, $y_0 = 9$ the shortest width confidence interval for the negative binomial success probability is $(.0108, .3423)$ at 90% level, $(.0060, .3972)$ at 95% level and $(.0015, .5051)$ at 99% level.

Appendix I Table of (1- α) Optimum Confidence Intervals for Poisson

parameter (I), ($a(y), b(y)$) where $a(y) = \chi^2_{2y, 1-\alpha_2} / 2$ and

$b(y) = \chi^2_{2(y+1), \alpha_1} / 2$ $\alpha_1 + \alpha_2 = \alpha = .01, .05$ and $.10$

y	90 %		95 %		99 %	
0	(0.0000	2.3025)	(0.0000	2.9957)	(0.0000	4.6051)
1	(0.0000	3.8897)	(0.0000	4.7439)	(0.0000	6.6384)
2	(0.0727	5.3591)	(0.0375	6.3146)	(0.0079	8.4099)
3	(0.4175	6.8294)	(0.2893	7.8543)	(0.1271	10.0882)
4	(0.9086	8.2515)	(0.6936	9.3434)	(0.3845	11.7052)
5	(1.4781	9.6302)	(1.1859	10.7856)	(0.7385	13.2683)
6	(2.0979	10.9753)	(1.7359	12.1903)	(1.1606	14.7870)
7	(2.7536	12.2940)	(2.3276	13.5652)	(1.6330	16.2694)
8	(3.4365	13.5913)	(2.9511	14.9157)	(2.1451	17.7222)
9	(4.1409	14.8711)	(3.5999	16.2460)	(2.6887	19.1496)
10	(4.8630	16.1361)	(4.2696	17.5591)	(3.2586	20.5555)
11	(5.5999	17.3883)	(4.9566	18.8575)	(3.8508	21.9430)
12	(6.3494	18.6295)	(5.6587	20.1430)	(4.4621	23.3141)
13	(7.1098	19.8609)	(6.3737	21.4171)	(5.0900	24.6709)
14	(7.8799	21.0838)	(7.1001	22.6811)	(5.7326	26.0147)
15	(8.6586	22.2988)	(7.8366	23.9361)	(6.3881	27.3469)
16	(9.4449	23.5069)	(8.5823	25.1829)	(7.0554	28.6687)
17	(10.2381	24.7086)	(9.3360	26.4221)	(7.7334	29.9810)
18	(11.0376	25.9045)	(10.0973	27.6547)	(8.4209	31.2844)
19	(11.8428	27.0951)	(10.8654	28.8808)	(9.1175	32.5800)
20	(12.6533	28.2808)	(11.6397	30.1013)	(9.8220	33.8678)
21	(13.4686	29.4619)	(12.4199	31.3164)	(10.5338	35.1487)
22	(14.2885	30.6388)	(13.2053	32.5264)	(11.2528	36.4232)
23	(15.1125	31.8117)	(13.9958	33.7318)	(11.9785	37.6920)
24	(15.9405	32.9809)	(14.7908	34.9328)	(12.7098	38.9548)
25	(16.7721	34.1467)	(15.5903	36.1298)	(13.4469	40.2124)
26	(17.6071	35.3091)	(16.3938	37.3228)	(14.1895	41.4650)
27	(18.4454	36.4685)	(17.2012	38.5124)	(14.9370	42.7130)

y	90 %		95 %		99 %	
28	(19.2867	37.6250)	(18.0122	39.6983)	(15.6892	43.9564)
29	(20.1309	38.7788)	(18.8266	40.8811)	(16.4457	45.1954)
30	(20.9778	39.9299)	(19.6442	42.0607)	(17.2067	46.4307)
31	(21.8273	41.0785)	(20.4650	43.2374)	(17.9715	47.6619)
32	(22.6793	42.2248)	(21.2887	44.4113)	(18.7402	48.8896)
33	(23.5336	43.3688)	(22.1152	45.5825)	(19.5126	50.1139)
34	(24.3901	44.5106)	(22.9443	46.7512)	(20.2886	51.3349)
35	(25.2488	45.6504)	(23.7760	47.9174)	(21.0679	52.5527)
36	(26.1096	46.7882)	(24.6101	49.0814)	(21.8500	53.7671)
37	(26.9723	47.9241)	(25.4465	50.2429)	(22.6355	54.9790)
38	(27.8369	49.0582)	(26.2852	51.4024)	(23.4239	56.1880)
39	(28.7032	50.1905)	(27.1260	52.5599)	(24.2149	57.3942)
40	(29.5714	51.3212)	(27.9689	53.7152)	(25.0090	58.5981)
41	(30.4411	52.4502)	(28.8138	54.8688)	(25.8052	59.7990)
42	(31.3125	53.5777)	(29.6605	56.0204)	(26.6041	60.9977)
43	(32.1854	54.7036)	(30.5091	57.1703)	(27.4057	62.1944)
44	(33.0599	55.8282)	(31.3596	58.3185)	(28.2094	63.3887)
45	(33.9357	56.9513)	(32.2117	59.4650)	(29.0152	64.5806)
46	(34.8130	58.0730)	(33.0655	60.6099)	(29.8234	65.7706)
47	(35.6916	59.1935)	(33.9208	61.7531)	(30.6334	66.9584)
48	(36.5715	60.3127)	(34.7777	62.8950)	(31.4458	68.1445)
49	(37.4527	61.4307)	(35.6362	64.0354)	(32.2598	69.3283)
50	(38.3350	62.5474)	(36.4961	65.1743)	(33.0759	70.5106)
51	(39.2186	63.6630)	(37.3574	66.3118)	(33.8941	71.6912)
52	(40.1033	64.7775)	(38.2199	67.4480)	(34.7137	72.8698)
53	(40.9892	65.8908)	(39.0839	68.5829)	(35.5348	74.0463)
54	(41.8761	67.0031)	(39.9493	69.7166)	(36.3583	75.2219)
55	(42.7641	68.1144)	(40.8158	70.8491)	(37.1831	76.3956)
56	(43.6531	69.2247)	(41.6836	71.9803)	(38.0096	77.5679)
57	(44.5431	70.3340)	(42.5525	73.1104)	(38.8373	78.7383)
58	(45.4341	71.4424)	(43.4227	74.2394)	(39.6667	79.9074)
59	(46.3260	72.5497)	(44.2939	75.3673)	(40.4978	81.0752)
60	(47.2188	73.6563)	(45.1663	76.4940)	(41.3304	82.2417)

y	90 %		95 %		99 %	
61	(48.1126	74.7619)	(46.0396	77.6197)	(42.1640	83.4064)
62	(49.0072	75.8666)	(46.9141	78.7444)	(42.9991	84.5700)
63	(49.9026	76.9706)	(47.7895	79.8681)	(43.8357	85.7324)
64	(50.7990	78.0737)	(48.6660	80.9909)	(44.6732	86.8931)
65	(51.6961	79.1760)	(49.5435	82.1127)	(45.5126	88.0532)
66	(52.5940	80.2775)	(50.4219	83.2336)	(46.3528	89.2117)
67	(53.4927	81.3783)	(51.3012	84.3535)	(47.1943	90.3691)
68	(54.3922	82.4783)	(52.1813	85.4725)	(48.0372	91.5254)
69	(55.2924	83.5776)	(53.0624	86.5906)	(48.8807	92.6801)
70	(56.1933	84.6761)	(53.9444	87.7080)	(49.7261	93.8345)
71	(57.0949	85.7740)	(54.8272	88.8245)	(50.5720	94.9872)
72	(57.9973	86.8712)	(55.7108	89.9402)	(51.4192	96.1390)
73	(58.9003	87.9677)	(56.5953	91.0551)	(52.2676	97.2898)
74	(59.8040	89.0636)	(57.4805	92.1692)	(53.1164	98.4391)
75	(60.7084	90.1588)	(58.3665	93.2825)	(53.9670	99.5881)
76	(61.6134	91.2534)	(59.2534	94.3952)	(54.8181	100.7357)
77	(62.5189	92.3473)	(60.1409	95.5070)	(55.6709	101.8829)
78	(63.4252	93.4406)	(61.0291	96.6181)	(56.5241	103.0287)
79	(64.3320	94.5334)	(61.9181	97.7286)	(57.3783	104.1736)
80	(65.2394	95.6255)	(62.8079	98.8384)	(58.2335	105.3177)
81	(66.1474	96.7171)	(63.6982	99.9473)	(59.0891	106.4604)
82	(67.0560	97.8082)	(64.5894	101.0558)	(59.9463	107.6028)
83	(67.9652	98.8987)	(65.4811	102.1636)	(60.8044	108.7445)
84	(68.8748	99.9886)	(66.3735	103.2706)	(61.6628	109.8849)
85	(69.7850	101.0780)	(67.2665	104.3771)	(62.5222	111.0244)
86	(70.6958	102.1669)	(68.1601	105.4828)	(63.3824	112.1632)
87	(71.6071	103.2553)	(69.0544	106.5881)	(64.2436	113.3013)
88	(72.5189	104.3431)	(69.9494	107.6928)	(65.1056	114.4386)
89	(73.4312	105.4305)	(70.8449	108.7968)	(65.9684	115.5752)
90	(74.3439	106.5173)	(71.7410	109.9002)	(66.8321	116.7112)
91	(75.2572	107.6038)	(72.6376	111.0031)	(67.6966	117.8464)
92	(76.1710	108.6897)	(73.5349	112.1054)	(68.5612	118.9804)
93	(77.0852	109.7751)	(74.4326	113.2071)	(69.4274	120.1143)

y	90 %		95 %		99 %	
94	(77.9998	110.8601)	(75.3311	114.3084)	(70.2936	121.2469)
95	(78.9150	111.9446)	(76.2298	115.4089)	(71.1606	122.3788)
96	(79.8306	113.0288)	(77.1293	116.5092)	(72.0290	123.5108)
97	(80.7466	114.1124)	(78.0292	117.6088)	(72.8975	124.6415)
98	(81.6631	115.1957)	(78.9297	118.7079)	(73.7667	125.7716)
99	(82.5800	116.2785)	(79.8306	119.8064)	(74.6367	126.9011)
100	(83.4973	117.3608)	(80.7322	120.9047)	(75.5073	128.0299)

Appendix II Table of $(1-\mathbf{a})$ Optimum Confidence Intervals for negative binomial parameter $(P), (J_1(y), \mathbf{q}_2(y))$ where $\mathbf{q}_2(y) - J_1(y) \leq \mathbf{q}_U(y) - \mathbf{q}_L(y)$ for all values of $(\mathbf{a}_1, \mathbf{a}_2)$ with $\mathbf{a}_1 + \mathbf{a}_2 = \mathbf{a} = .01, .05$ and $.10$

ro	yo	90%		95%		99%	
1	0	(.1000	1.0000)	(.0500	1.0000)	(.0100	1.0000)
1	1	(.0000 ⁺	.9000)	(.0000 ⁺	.9500)	(.0000 ⁺	.9900)
1	2	(.0000 ⁺	.6838)	(.0000 ⁺	.7764)	(.0000 ⁺	.9000)
1	3	(.0000 ⁺	.5358)	(.0000 ⁺	.6316)	(.0000 ⁺	.7846)
1	4	(.0000 ⁺	.4377)	(.0000 ⁺	.5271)	(.0000 ⁺	.6838)
1	5	(.0000 ⁺	.3690)	(.0000 ⁺	.4507)	(.0000 ⁺	.6019)
1	6	(.0000 ⁺	.3187)	(.0000 ⁺	.3930)	(.0000 ⁺	.5359)
1	7	(.0000 ⁺	.2803)	(.0000 ⁺	.3482)	(.0000 ⁺	.4821)
1	8	(.0000 ⁺	.2501)	(.0000 ⁺	.3123)	(.0000 ⁺	.4377)
1	9	(.0000 ⁺	.2257)	(.0000 ⁺	.2831)	(.0000 ⁺	.4005)
1	10	(.0000 ⁺	.2057)	(.0000 ⁺	.2589)	(.0000 ⁺	.3691)
1	11	(.0000 ⁺	.1889)	(.0000 ⁺	.2384)	(.0000 ⁺	.3421)
1	12	(.0000 ⁺	.1746)	(.0000 ⁺	.2209)	(.0000 ⁺	.3187)
1	13	(.0000 ⁺	.1623)	(.0000 ⁺	.2058)	(.0000 ⁺	.2983)
1	14	(.0000 ⁺	.1517)	(.0000 ⁺	.1926)	(.0000 ⁺	.2803)
1	15	(.0000 ⁺	.1423)	(.0000 ⁺	.1810)	(.0000 ⁺	.2644)
1	16	(.0000 ⁺	.1340)	(.0000 ⁺	.1708)	(.0000 ⁺	.2501)
1	17	(.0000 ⁺	.1267)	(.0000 ⁺	.1616)	(.0000 ⁺	.2373)
1	18	(.0000 ⁺	.1201)	(.0000 ⁺	.1533)	(.0000 ⁺	.2257)
1	19	(.0000 ⁺	.1141)	(.0000 ⁺	.1459)	(.0000 ⁺	.2152)
1	20	(.0000 ⁺	.1087)	(.0000 ⁺	.1391)	(.0000 ⁺	.2057)
1	21	(.0000 ⁺	.1039)	(.0000 ⁺	.1329)	(.0000 ⁺	.1969)
1	22	(.0000 ⁺	.0994)	(.0000 ⁺	.1273)	(.0000 ⁺	.1889)
1	23	(.0000 ⁺	.0953)	(.0000 ⁺	.1221)	(.0000 ⁺	.1815)
1	24	(.0000 ⁺	.0915)	(.0000 ⁺	.1173)	(.0000 ⁺	.1746)
1	25	(.0000 ⁺	.0880)	(.0000 ⁺	.1129)	(.0000 ⁺	.1682)
1	26	(.0000 ⁺	.0848)	(.0000 ⁺	.1088)	(.0000 ⁺	.1623)
1	27	(.0000 ⁺	.0817)	(.0000 ⁺	.1050)	(.0000 ⁺	.1568)
1	28	(.0000 ⁺	.0789)	(.0000 ⁺	.1015)	(.0000 ⁺	.1517)
1	29	(.0000 ⁺	.0763)	(.0000 ⁺	.0981)	(.0000 ⁺	.1468)
1	30	(.0000 ⁺	.0739)	(.0000 ⁺	.0950)	(.0000 ⁺	.1423)
1	31	(.0000 ⁺	.0716)	(.0000 ⁺	.0921)	(.0000 ⁺	.1381)
1	32	(.0000 ⁺	.0694)	(.0000 ⁺	.0894)	(.0000 ⁺	.1340)

ro	yo	90%		95%		99%	
1	33	(.0000 ⁺	.0674)	(.0000 ⁺	.0868)	(.0000 ⁺	.1303)
1	34	(.0000 ⁺	.0655)	(.0000 ⁺	.0843)	(.0000 ⁺	.1267)
1	35	(.0000 ⁺	.0637)	(.0000 ⁺	.0820)	(.0000 ⁺	.1233)
1	36	(.0000 ⁺	.0620)	(.0000 ⁺	.0798)	(.0000 ⁺	.1201)
1	37	(.0000 ⁺	.0603)	(.0000 ⁺	.0778)	(.0000 ⁺	.1170)
1	38	(.0000 ⁺	.0588)	(.0000 ⁺	.0758)	(.0000 ⁺	.1141)
1	39	(.0000 ⁺	.0573)	(.0000 ⁺	.0739)	(.0000 ⁺	.1114)
1	40	(.0000 ⁺	.0559)	(.0000 ⁺	.0722)	(.0000 ⁺	.1088)
1	41	(.0000 ⁺	.0546)	(.0000 ⁺	.0705)	(.0000 ⁺	.1062)
1	42	(.0000 ⁺	.0533)	(.0000 ⁺	.0688)	(.0000 ⁺	.1039)
1	43	(.0000 ⁺	.0521)	(.0000 ⁺	.0673)	(.0000 ⁺	.1016)
1	44	(.0000 ⁺	.0510)	(.0000 ⁺	.0658)	(.0000 ⁺	.0994)
1	45	(.0000 ⁺	.0499)	(.0000 ⁺	.0644)	(.0000 ⁺	.0973)
1	46	(.0000 ⁺	.0488)	(.0000 ⁺	.0631)	(.0000 ⁺	.0953)
1	47	(.0000 ⁺	.0478)	(.0000 ⁺	.0618)	(.0000 ⁺	.0933)
1	48	(.0000 ⁺	.0468)	(.0000 ⁺	.0605)	(.0000 ⁺	.0915)
1	49	(.0000 ⁺	.0459)	(.0000 ⁺	.0593)	(.0000 ⁺	.0897)
1	50	(.0000 ⁺	.0450)	(.0000 ⁺	.0582)	(.0000 ⁺	.0880)
1	51	(.0000 ⁺	.0441)	(.0000 ⁺	.0570)	(.0000 ⁺	.0863)
1	52	(.0000 ⁺	.0433)	(.0000 ⁺	.0560)	(.0000 ⁺	.0848)
1	53	(.0000 ⁺	.0425)	(.0000 ⁺	.0550)	(.0000 ⁺	.0832)
1	54	(.0000 ⁺	.0417)	(.0000 ⁺	.0540)	(.0000 ⁺	.0817)
1	55	(.0000 ⁺	.0410)	(.0000 ⁺	.0530)	(.0000 ⁺	.0803)
1	56	(.0000 ⁺	.0403)	(.0000 ⁺	.0521)	(.0000 ⁺	.0789)
1	57	(.0000 ⁺	.0396)	(.0000 ⁺	.0512)	(.0000 ⁺	.0776)
1	58	(.0000 ⁺	.0389)	(.0000 ⁺	.0503)	(.0000 ⁺	.0763)
1	59	(.0000 ⁺	.0383)	(.0000 ⁺	.0495)	(.0000 ⁺	.0751)
1	60	(.0000 ⁺	.0376)	(.0000 ⁺	.0487)	(.0000 ⁺	.0739)
1	61	(.0000 ⁺	.0370)	(.0000 ⁺	.0479)	(.0000 ⁺	.0727)
1	62	(.0000 ⁺	.0365)	(.0000 ⁺	.0472)	(.0000 ⁺	.0716)
1	63	(.0000 ⁺	.0359)	(.0000 ⁺	.0464)	(.0000 ⁺	.0705)
1	64	(.0000 ⁺	.0353)	(.0000 ⁺	.0457)	(.0000 ⁺	.0694)
1	65	(.0000 ⁺	.0348)	(.0000 ⁺	.0450)	(.0000 ⁺	.0684)
1	66	(.0000 ⁺	.0343)	(.0000 ⁺	.0444)	(.0000 ⁺	.0674)
1	67	(.0000 ⁺	.0338)	(.0000 ⁺	.0437)	(.0000 ⁺	.0664)
1	68	(.0000 ⁺	.0333)	(.0000 ⁺	.0431)	(.0000 ⁺	.0655)
1	69	(.0000 ⁺	.0328)	(.0000 ⁺	.0425)	(.0000 ⁺	.0646)

ro	yo	90%		95%		99%	
1	70	(.0000 ⁺	.0324)	(.0000 ⁺	.0419)	(.0000 ⁺	.0637)
1	71	(.0000 ⁺	.0319)	(.0000 ⁺	.0413)	(.0000 ⁺	.0628)
1	72	(.0000 ⁺	.0315)	(.0000 ⁺	.0408)	(.0000 ⁺	.0620)
1	73	(.0000 ⁺	.0311)	(.0000 ⁺	.0402)	(.0000 ⁺	.0611)
1	74	(.0000 ⁺	.0306)	(.0000 ⁺	.0397)	(.0000 ⁺	.0603)
1	75	(.0000 ⁺	.0302)	(.0000 ⁺	.0392)	(.0000 ⁺	.0596)
1	76	(.0000 ⁺	.0298)	(.0000 ⁺	.0387)	(.0000 ⁺	.0588)
1	77	(.0000 ⁺	.0295)	(.0000 ⁺	.0382)	(.0000 ⁺	.0581)
1	78	(.0000 ⁺	.0291)	(.0000 ⁺	.0377)	(.0000 ⁺	.0573)
1	79	(.0000 ⁺	.0287)	(.0000 ⁺	.0372)	(.0000 ⁺	.0566)
1	80	(.0000 ⁺	.0284)	(.0000 ⁺	.0368)	(.0000 ⁺	.0559)
1	81	(.0000 ⁺	.0280)	(.0000 ⁺	.0363)	(.0000 ⁺	.0553)
1	82	(.0000 ⁺	.0277)	(.0000 ⁺	.0359)	(.0000 ⁺	.0546)
1	83	(.0000 ⁺	.0274)	(.0000 ⁺	.0355)	(.0000 ⁺	.0540)
1	84	(.0000 ⁺	.0270)	(.0000 ⁺	.0350)	(.0000 ⁺	.0533)
1	85	(.0000 ⁺	.0267)	(.0000 ⁺	.0346)	(.0000 ⁺	.0527)
1	86	(.0000 ⁺	.0264)	(.0000 ⁺	.0342)	(.0000 ⁺	.0521)
1	87	(.0000 ⁺	.0261)	(.0000 ⁺	.0338)	(.0000 ⁺	.0516)
1	88	(.0000 ⁺	.0258)	(.0000 ⁺	.0335)	(.0000 ⁺	.0510)
1	89	(.0000 ⁺	.0255)	(.0000 ⁺	.0331)	(.0000 ⁺	.0504)
1	90	(.0000 ⁺	.0253)	(.0000 ⁺	.0327)	(.0000 ⁺	.0499)
1	91	(.0000 ⁺	.0250)	(.0000 ⁺	.0324)	(.0000 ⁺	.0493)
1	92	(.0000 ⁺	.0247)	(.0000 ⁺	.0320)	(.0000 ⁺	.0488)
1	93	(.0000 ⁺	.0245)	(.0000 ⁺	.0317)	(.0000 ⁺	.0483)
1	94	(.0000 ⁺	.0242)	(.0000 ⁺	.0314)	(.0000 ⁺	.0478)
1	95	(.0000 ⁺	.0239)	(.0000 ⁺	.0310)	(.0000 ⁺	.0473)
1	96	(.0000 ⁺	.0237)	(.0000 ⁺	.0307)	(.0000 ⁺	.0468)
1	97	(.0000 ⁺	.0235)	(.0000 ⁺	.0304)	(.0000 ⁺	.0464)
1	98	(.0000 ⁺	.0232)	(.0000 ⁺	.0301)	(.0000 ⁺	.0459)
1	99	(.0000 ⁺	.0230)	(.0000 ⁺	.0298)	(.0000 ⁺	.0455)
1	100	(.0000 ⁺	.0228)	(.0000 ⁺	.0295)	(.0000 ⁺	.0450)

ro	yo	90%		95%		99%	
2	0	(.3162	1.0000)	(.2236	1.0000)	(.1000	1.0000)
2	1	(.1958	1.0000)	(.1353	1.0000)	(.0589	1.0000)
2	2	(.0783	.8421)	(.0546	.8904)	(.0239	.9521)
2	3	(.0429	.7008)	(.0276	.7649)	(.0099	.8640)
2	4	(.0291	.5984)	(.0177	.6662)	(.0056	.7807)
2	5	(.0218	.5213)	(.0129	.5882)	(.0038	.7076)
2	6	(.0174	.4613)	(.0101	.5257)	(.0028	.6447)
2	7	(.0145	.4135)	(.0082	.4748)	(.0022	.5910)
2	8	(.0124	.3746)	(.0069	.4326)	(.0018	.5449)
2	9	(.0108	.3423)	(.0060	.3972)	(.0015	.5051)
2	10	(.0096	.3151)	(.0053	.3670)	(.0013	.4705)
2	11	(.0086	.2918)	(.0047	.3410)	(.0011	.4401)
2	12	(.0078	.2718)	(.0042	.3185)	(.0010	.4133)
2	13	(.0072	.2543)	(.0039	.2987)	(.0009	.3896)
2	14	(.0066	.2389)	(.0035	.2812)	(.0008	.3683)
2	15	(.0061	.2253)	(.0033	.2656)	(.0008	.3492)
2	16	(.0057	.2131)	(.0030	.2516)	(.0007	.3320)
2	17	(.0053	.2022)	(.0028	.2391)	(.0007	.3163)
2	18	(.0050	.1923)	(.0027	.2277)	(.0006	.3021)
2	19	(.0047	.1834)	(.0025	.2174)	(.0006	.2891)
2	20	(.0045	.1752)	(.0024	.2079)	(.0005	.2771)
2	21	(.0043	.1677)	(.0022	.1992)	(.0005	.2661)
2	22	(.0041	.1609)	(.0021	.1913)	(.0005	.2559)
2	23	(.0039	.1546)	(.0020	.1839)	(.0005	.2465)
2	24	(.0037	.1487)	(.0019	.1771)	(.0004	.2377)
2	25	(.0035	.1433)	(.0019	.1708)	(.0004	.2295)
2	26	(.0034	.1383)	(.0018	.1649)	(.0004	.2219)
2	27	(.0033	.1336)	(.0017	.1594)	(.0004	.2148)
2	28	(.0031	.1292)	(.0016	.1542)	(.0004	.2081)
2	29	(.0030	.1251)	(.0016	.1494)	(.0003	.2018)
2	30	(.0029	.1212)	(.0015	.1449)	(.0003	.1958)
2	31	(.0028	.1176)	(.0015	.1406)	(.0003	.1902)
2	32	(.0027	.1142)	(.0014	.1366)	(.0003	.1850)
2	33	(.0026	.1110)	(.0014	.1328)	(.0003	.1800)
2	34	(.0026	.1079)	(.0013	.1292)	(.0003	.1752)
2	35	(.0025	.1051)	(.0013	.1258)	(.0003	.1707)
2	36	(.0024	.1023)	(.0013	.1225)	(.0003	.1665)

ro	yo	90%		95%		99%	
2	37	(.0024	.0997)	(.0012	.1195)	(.0003	.1624)
2	38	(.0023	.0973)	(.0012	.1165)	(.0003	.1585)
2	39	(.0022	.0949)	(.0011	.1138)	(.0002	.1549)
2	40	(.0022	.0927)	(.0011	.1111)	(.0002	.1513)
2	41	(.0021	.0906)	(.0011	.1086)	(.0002	.1480)
2	42	(.0021	.0885)	(.0011	.1062)	(.0002	.1448)
2	43	(.0020	.0866)	(.0010	.1039)	(.0002	.1417)
2	44	(.0020	.0847)	(.0010	.1016)	(.0002	.1387)
2	45	(.0019	.0829)	(.0010	.0995)	(.0002	.1359)
2	46	(.0019	.0812)	(.0010	.0975)	(.0002	.1332)
2	47	(.0018	.0796)	(.0009	.0955)	(.0002	.1306)
2	48	(.0018	.0780)	(.0009	.0937)	(.0002	.1280)
2	49	(.0018	.0765)	(.0009	.0919)	(.0002	.1256)
2	50	(.0017	.0750)	(.0009	.0901)	(.0002	.1233)
2	51	(.0017	.0736)	(.0009	.0884)	(.0002	.1210)
2	52	(.0017	.0723)	(.0009	.0868)	(.0002	.1189)
2	53	(.0016	.0710)	(.0008	.0853)	(.0002	.1168)
2	54	(.0016	.0697)	(.0008	.0838)	(.0002	.1148)
2	55	(.0016	.0685)	(.0008	.0823)	(.0002	.1128)
2	56	(.0015	.0673)	(.0008	.0809)	(.0002	.1109)
2	57	(.0015	.0662)	(.0008	.0796)	(.0002	.1091)
2	58	(.0015	.0651)	(.0008	.0783)	(.0002	.1074)
2	59	(.0015	.0640)	(.0007	.0770)	(.0002	.1057)
2	60	(.0014	.0630)	(.0007	.0758)	(.0002	.1040)
2	61	(.0014	.0620)	(.0007	.0746)	(.0002	.1024)
2	62	(.0014	.0610)	(.0007	.0735)	(.0001	.1009)
2	63	(.0014	.0601)	(.0007	.0723)	(.0001	.0993)
2	64	(.0013	.0592)	(.0007	.0713)	(.0001	.0979)
2	65	(.0013	.0583)	(.0007	.0702)	(.0001	.0965)
2	66	(.0013	.0575)	(.0007	.0692)	(.0001	.0951)
2	67	(.0013	.0566)	(.0007	.0682)	(.0001	.0937)
2	68	(.0013	.0558)	(.0006	.0672)	(.0001	.0924)
2	69	(.0012	.0551)	(.0006	.0663)	(.0001	.0912)
2	70	(.0012	.0543)	(.0006	.0654)	(.0001	.0899)
2	71	(.0012	.0536)	(.0006	.0645)	(.0001	.0887)
2	72	(.0012	.0528)	(.0006	.0636)	(.0001	.0876)
2	73	(.0012	.0521)	(.0006	.0628)	(.0001	.0864)

ro	yo	90%		95%		99%	
2	74	(.0012	.0515)	(.0006	.0620)	(.0001	.0853)
2	75	(.0011	.0508)	(.0006	.0612)	(.0001	.0842)
2	76	(.0011	.0501)	(.0006	.0604)	(.0001	.0832)
2	77	(.0011	.0495)	(.0006	.0597)	(.0001	.0822)
2	78	(.0011	.0489)	(.0006	.0589)	(.0001	.0812)
2	79	(.0011	.0483)	(.0006	.0582)	(.0001	.0802)
2	80	(.0011	.0477)	(.0005	.0575)	(.0001	.0792)
2	81	(.0011	.0471)	(.0005	.0568)	(.0001	.0783)
2	82	(.0010	.0466)	(.0005	.0561)	(.0001	.0774)
2	83	(.0010	.0460)	(.0005	.0555)	(.0001	.0765)
2	84	(.0010	.0455)	(.0005	.0549)	(.0001	.0756)
2	85	(.0010	.0450)	(.0005	.0542)	(.0001	.0748)
2	86	(.0010	.0445)	(.0005	.0536)	(.0001	.0739)
2	87	(.0010	.0440)	(.0005	.0530)	(.0001	.0731)
2	88	(.0010	.0435)	(.0005	.0524)	(.0001	.0723)
2	89	(.0010	.0430)	(.0005	.0519)	(.0001	.0715)
2	90	(.0009	.0425)	(.0005	.0513)	(.0001	.0708)
2	91	(.0009	.0421)	(.0005	.0508)	(.0001	.0700)
2	92	(.0009	.0416)	(.0005	.0502)	(.0001	.0693)
2	93	(.0009	.0412)	(.0005	.0497)	(.0001	.0686)
2	94	(.0009	.0408)	(.0005	.0492)	(.0001	.0679)
2	95	(.0009	.0404)	(.0005	.0487)	(.0001	.0672)
2	96	(.0009	.0400)	(.0005	.0482)	(.0001	.0665)
2	97	(.0009	.0396)	(.0004	.0477)	(.0001	.0659)
2	98	(.0009	.0392)	(.0004	.0472)	(.0001	.0652)
2	99	(.0009	.0388)	(.0004	.0468)	(.0001	.0646)
2	100	(.0008	.0384)	(.0004	.0463)	(.0001	.0640)

ro	yo	90%		95%		99%	
3	0	(.4642	1.0000)	(.3684	1.0000)	(.2154	1.0000)
3	1	(.3205	1.0000)	(.2486	1.0000)	(.1409	1.0000)
3	2	(.2088	.9192)	(.1648	.9472)	(.0964	.9802)
3	3	(.1429	.7994)	(.1105	.8449)	(.0621	.9126)
3	4	(.1082	.7028)	(.0821	.7551)	(.0442	.8407)
3	5	(.0871	.6256)	(.0651	.6802)	(.0339	.7746)
3	6	(.0728	.5631)	(.0538	.6176)	(.0274	.7157)
3	7	(.0625	.5116)	(.0459	.5650)	(.0229	.6638)
3	8	(.0548	.4685)	(.0399	.5204)	(.0196	.6182)
3	9	(.0487	.4321)	(.0353	.4821)	(.0172	.5780)
3	10	(.0439	.4008)	(.0317	.4489)	(.0152	.5424)
3	11	(.0399	.3737)	(.0287	.4199)	(.0137	.5107)
3	12	(.0366	.3500)	(.0262	.3943)	(.0124	.4824)
3	13	(.0338	.3291)	(.0242	.3717)	(.0114	.4570)
3	14	(.0314	.3106)	(.0224	.3515)	(.0105	.4340)
3	15	(.0293	.2940)	(.0209	.3333)	(.0097	.4132)
3	16	(.0275	.2791)	(.0195	.3170)	(.0091	.3942)
3	17	(.0259	.2656)	(.0183	.3021)	(.0085	.3769)
3	18	(.0245	.2534)	(.0173	.2886)	(.0080	.3610)
3	19	(.0232	.2422)	(.0164	.2762)	(.0075	.3464)
3	20	(.0220	.2320)	(.0155	.2648)	(.0071	.3329)
3	21	(.0210	.2226)	(.0148	.2543)	(.0068	.3204)
3	22	(.0200	.2139)	(.0141	.2447)	(.0064	.3088)
3	23	(.0192	.2059)	(.0135	.2357)	(.0061	.2980)
3	24	(.0184	.1984)	(.0129	.2273)	(.0059	.2879)
3	25	(.0176	.1915)	(.0124	.2196)	(.0056	.2785)
3	26	(.0170	.1851)	(.0119	.2123)	(.0054	.2697)
3	27	(.0163	.1790)	(.0114	.2055)	(.0052	.2614)
3	28	(.0157	.1734)	(.0110	.1991)	(.0050	.2536)
3	29	(.0152	.1681)	(.0106	.1931)	(.0048	.2462)
3	30	(.0147	.1631)	(.0103	.1875)	(.0046	.2393)
3	31	(.0142	.1584)	(.0099	.1822)	(.0045	.2327)
3	32	(.0138	.1539)	(.0096	.1771)	(.0043	.2265)
3	33	(.0134	.1497)	(.0093	.1724)	(.0042	.2206)
3	34	(.0130	.1457)	(.0091	.1679)	(.0041	.2150)
3	35	(.0126	.1420)	(.0088	.1636)	(.0039	.2097)
3	36	(.0122	.1384)	(.0085	.1595)	(.0038	.2047)

ro	yo	90%		95%		99%	
3	37	(.0119	.1350)	(.0083	.1556)	(.0037	.1998)
3	38	(.0116	.1317)	(.0081	.1519)	(.0036	.1952)
3	39	(.0113	.1286)	(.0079	.1484)	(.0035	.1908)
3	40	(.0110	.1257)	(.0077	.1451)	(.0034	.1866)
3	41	(.0108	.1229)	(.0075	.1419)	(.0033	.1826)
3	42	(.0105	.1202)	(.0073	.1388)	(.0033	.1788)
3	43	(.0103	.1176)	(.0071	.1358)	(.0032	.1751)
3	44	(.0100	.1151)	(.0070	.1330)	(.0031	.1715)
3	45	(.0098	.1128)	(.0068	.1303)	(.0030	.1681)
3	46	(.0096	.1105)	(.0067	.1277)	(.0030	.1648)
3	47	(.0094	.1083)	(.0065	.1252)	(.0029	.1617)
3	48	(.0092	.1062)	(.0064	.1228)	(.0028	.1587)
3	49	(.0090	.1042)	(.0063	.1205)	(.0028	.1557)
3	50	(.0088	.1022)	(.0061	.1183)	(.0027	.1529)
3	51	(.0086	.1004)	(.0060	.1161)	(.0027	.1502)
3	52	(.0085	.0986)	(.0059	.1141)	(.0026	.1476)
3	53	(.0083	.0968)	(.0058	.1121)	(.0026	.1451)
3	54	(.0082	.0951)	(.0057	.1102)	(.0025	.1426)
3	55	(.0080	.0935)	(.0056	.1083)	(.0025	.1403)
3	56	(.0079	.0920)	(.0055	.1065)	(.0024	.1380)
3	57	(.0077	.0904)	(.0054	.1047)	(.0024	.1358)
3	58	(.0076	.0890)	(.0053	.1031)	(.0023	.1336)
3	59	(.0075	.0876)	(.0052	.1014)	(.0023	.1315)
3	60	(.0074	.0862)	(.0051	.0999)	(.0023	.1295)
3	61	(.0072	.0848)	(.0050	.0983)	(.0022	.1276)
3	62	(.0071	.0835)	(.0049	.0968)	(.0022	.1257)
3	63	(.0070	.0823)	(.0049	.0954)	(.0022	.1238)
3	64	(.0069	.0811)	(.0048	.0940)	(.0021	.1221)
3	65	(.0068	.0799)	(.0047	.0926)	(.0021	.1203)
3	66	(.0067	.0787)	(.0046	.0913)	(.0021	.1186)
3	67	(.0066	.0776)	(.0046	.0900)	(.0020	.1170)
3	68	(.0065	.0765)	(.0045	.0888)	(.0020	.1154)
3	69	(.0064	.0755)	(.0044	.0876)	(.0020	.1138)
3	70	(.0063	.0745)	(.0044	.0864)	(.0019	.1123)
3	71	(.0062	.0735)	(.0043	.0852)	(.0019	.1109)
3	72	(.0061	.0725)	(.0042	.0841)	(.0019	.1094)
3	73	(.0060	.0715)	(.0042	.0830)	(.0018	.1080)

ro	yo	90%		95%		99%	
3	74	(.0060	.0706)	(.0041	.0820)	(.0018	.1067)
3	75	(.0059	.0697)	(.0041	.0809)	(.0018	.1053)
3	76	(.0058	.0689)	(.0040	.0799)	(.0018	.1040)
3	77	(.0057	.0680)	(.0040	.0789)	(.0017	.1028)
3	78	(.0057	.0672)	(.0039	.0780)	(.0017	.1015)
3	79	(.0056	.0664)	(.0039	.0770)	(.0017	.1003)
3	80	(.0055	.0656)	(.0038	.0761)	(.0017	.0992)
3	81	(.0054	.0648)	(.0038	.0752)	(.0017	.0980)
3	82	(.0054	.0640)	(.0037	.0743)	(.0016	.0969)
3	83	(.0053	.0633)	(.0037	.0735)	(.0016	.0958)
3	84	(.0053	.0626)	(.0036	.0727)	(.0016	.0947)
3	85	(.0052	.0619)	(.0036	.0718)	(.0016	.0937)
3	86	(.0051	.0612)	(.0036	.0710)	(.0016	.0926)
3	87	(.0051	.0605)	(.0035	.0703)	(.0015	.0916)
3	88	(.0050	.0598)	(.0035	.0695)	(.0015	.0907)
3	89	(.0050	.0592)	(.0034	.0688)	(.0015	.0897)
3	90	(.0049	.0586)	(.0034	.0680)	(.0015	.0888)
3	91	(.0048	.0579)	(.0034	.0673)	(.0015	.0878)
3	92	(.0048	.0573)	(.0033	.0666)	(.0015	.0869)
3	93	(.0047	.0567)	(.0033	.0659)	(.0014	.0860)
3	94	(.0047	.0562)	(.0032	.0653)	(.0014	.0852)
3	95	(.0046	.0556)	(.0032	.0646)	(.0014	.0843)
3	96	(.0046	.0550)	(.0032	.0640)	(.0014	.0835)
3	97	(.0045	.0545)	(.0031	.0633)	(.0014	.0827)
3	98	(.0045	.0539)	(.0031	.0627)	(.0014	.0819)
3	99	(.0045	.0534)	(.0031	.0621)	(.0014	.0811)
3	100	(.0044	.0529)	(.0031	.0615)	(.0013	.0803)

ro	yo	90%		95%		99%	
4	0	(.5623	1.0000)	(.4729	1.0000)	(.3162	1.0000)
4	1	(.4161	1.0000)	(.3426	1.0000)	(.2221	1.0000)
4	2	(.3092	.9507)	(.2565	.9693)	(.1681	.9898)
4	3	(.2328	.8538)	(.1917	.8888)	(.1246	.9396)
4	4	(.1864	.7677)	(.1519	.8104)	(.0967	.8789)
4	5	(.1554	.6951)	(.1256	.7414)	(.0785	.8199)
4	6	(.1332	.6341)	(.1069	.6818)	(.0659	.7657)
4	7	(.1166	.5825)	(.0931	.6302)	(.0567	.7166)
4	8	(.1037	.5384)	(.0824	.5855)	(.0497	.6726)
4	9	(.0934	.5003)	(.0739	.5464)	(.0442	.6332)
4	10	(.0849	.4672)	(.0670	.5121)	(.0398	.5977)
4	11	(.0779	.4381)	(.0613	.4817)	(.0362	.5658)
4	12	(.0719	.4124)	(.0564	.4546)	(.0332	.5369)
4	13	(.0668	.3894)	(.0523	.4303)	(.0306	.5107)
4	14	(.0623	.3689)	(.0487	.4085)	(.0284	.4868)
4	15	(.0584	.3504)	(.0456	.3888)	(.0265	.4650)
4	16	(.0550	.3337)	(.0429	.3708)	(.0249	.4451)
4	17	(.0520	.3185)	(.0405	.3544)	(.0234	.4267)
4	18	(.0492	.3046)	(.0383	.3394)	(.0221	.4098)
4	19	(.0468	.2919)	(.0363	.3256)	(.0209	.3941)
4	20	(.0446	.2801)	(.0346	.3129)	(.0199	.3795)
4	21	(.0425	.2693)	(.0330	.3011)	(.0189	.3660)
4	22	(.0407	.2593)	(.0315	.2902)	(.0181	.3534)
4	23	(.0390	.2500)	(.0302	.2800)	(.0173	.3416)
4	24	(.0374	.2413)	(.0290	.2705)	(.0165	.3306)
4	25	(.0360	.2332)	(.0278	.2616)	(.0159	.3203)
4	26	(.0347	.2257)	(.0268	.2533)	(.0153	.3106)
4	27	(.0334	.2186)	(.0258	.2455)	(.0147	.3014)
4	28	(.0323	.2119)	(.0249	.2382)	(.0142	.2928)
4	29	(.0312	.2057)	(.0241	.2313)	(.0137	.2846)
4	30	(.0302	.1998)	(.0233	.2248)	(.0132	.2769)
4	31	(.0293	.1942)	(.0226	.2186)	(.0128	.2696)
4	32	(.0284	.1889)	(.0219	.2128)	(.0124	.2626)
4	33	(.0275	.1839)	(.0212	.2072)	(.0120	.2561)
4	34	(.0267	.1792)	(.0206	.2020)	(.0116	.2498)
4	35	(.0260	.1747)	(.0200	.1970)	(.0113	.2438)
4	36	(.0253	.1704)	(.0195	.1922)	(.0110	.2381)

ro	yo	90%		95%		99%	
4	37	(.0246	.1663)	(.0190	.1877)	(.0107	.2327)
4	38	(.0240	.1625)	(.0185	.1834)	(.0104	.2275)
4	39	(.0234	.1587)	(.0180	.1793)	(.0101	.2225)
4	40	(.0228	.1552)	(.0176	.1753)	(.0099	.2178)
4	41	(.0223	.1518)	(.0171	.1715)	(.0096	.2132)
4	42	(.0218	.1486)	(.0167	.1679)	(.0094	.2088)
4	43	(.0213	.1455)	(.0163	.1644)	(.0092	.2046)
4	44	(.0208	.1425)	(.0160	.1611)	(.0090	.2006)
4	45	(.0204	.1396)	(.0156	.1579)	(.0088	.1967)
4	46	(.0199	.1369)	(.0153	.1548)	(.0086	.1930)
4	47	(.0195	.1342)	(.0150	.1519)	(.0084	.1894)
4	48	(.0191	.1317)	(.0147	.1490)	(.0082	.1859)
4	49	(.0187	.1292)	(.0144	.1463)	(.0081	.1826)
4	50	(.0184	.1269)	(.0141	.1437)	(.0079	.1794)
4	51	(.0180	.1246)	(.0138	.1411)	(.0077	.1763)
4	52	(.0177	.1224)	(.0135	.1387)	(.0076	.1733)
4	53	(.0173	.1203)	(.0133	.1363)	(.0075	.1704)
4	54	(.0170	.1182)	(.0131	.1340)	(.0073	.1675)
4	55	(.0167	.1163)	(.0128	.1318)	(.0072	.1648)
4	56	(.0164	.1144)	(.0126	.1296)	(.0071	.1622)
4	57	(.0161	.1125)	(.0124	.1275)	(.0069	.1597)
4	58	(.0159	.1107)	(.0122	.1255)	(.0068	.1572)
4	59	(.0156	.1090)	(.0120	.1236)	(.0067	.1548)
4	60	(.0154	.1073)	(.0118	.1217)	(.0066	.1525)
4	61	(.0151	.1057)	(.0116	.1199)	(.0065	.1502)
4	62	(.0149	.1041)	(.0114	.1181)	(.0064	.1480)
4	63	(.0146	.1025)	(.0112	.1163)	(.0063	.1459)
4	64	(.0144	.1010)	(.0110	.1147)	(.0062	.1438)
4	65	(.0142	.0996)	(.0109	.1130)	(.0061	.1418)
4	66	(.0140	.0982)	(.0107	.1115)	(.0060	.1399)
4	67	(.0138	.0968)	(.0105	.1099)	(.0059	.1380)
4	68	(.0136	.0955)	(.0104	.1084)	(.0058	.1361)
4	69	(.0134	.0942)	(.0102	.1070)	(.0057	.1343)
4	70	(.0132	.0929)	(.0101	.1055)	(.0056	.1326)
4	71	(.0130	.0917)	(.0100	.1042)	(.0056	.1309)
4	72	(.0128	.0905)	(.0098	.1028)	(.0055	.1292)
4	73	(.0127	.0894)	(.0097	.1015)	(.0054	.1276)

ro	yo	90%		95%		99%	
4	74	(.0125	.0882)	(.0096	.1002)	(.0053	.1260)
4	75	(.0123	.0871)	(.0094	.0990)	(.0053	.1245)
4	76	(.0122	.0860)	(.0093	.0978)	(.0052	.1230)
4	77	(.0120	.0850)	(.0092	.0966)	(.0051	.1215)
4	78	(.0119	.0840)	(.0091	.0954)	(.0051	.1200)
4	79	(.0117	.0830)	(.0090	.0943)	(.0050	.1186)
4	80	(.0116	.0820)	(.0088	.0932)	(.0049	.1173)
4	81	(.0114	.0810)	(.0087	.0921)	(.0049	.1159)
4	82	(.0113	.0801)	(.0086	.0910)	(.0048	.1146)
4	83	(.0112	.0792)	(.0085	.0900)	(.0048	.1133)
4	84	(.0110	.0783)	(.0084	.0890)	(.0047	.1121)
4	85	(.0109	.0774)	(.0083	.0880)	(.0046	.1109)
4	86	(.0108	.0766)	(.0082	.0871)	(.0046	.1097)
4	87	(.0106	.0757)	(.0081	.0861)	(.0045	.1085)
4	88	(.0105	.0749)	(.0080	.0852)	(.0045	.1074)
4	89	(.0104	.0741)	(.0080	.0843)	(.0044	.1062)
4	90	(.0103	.0733)	(.0079	.0834)	(.0044	.1051)
4	91	(.0102	.0726)	(.0078	.0825)	(.0043	.1041)
4	92	(.0101	.0718)	(.0077	.0817)	(.0043	.1030)
4	93	(.0100	.0711)	(.0076	.0809)	(.0042	.1020)
4	94	(.0099	.0704)	(.0075	.0800)	(.0042	.1010)
4	95	(.0098	.0696)	(.0075	.0792)	(.0041	.1000)
4	96	(.0097	.0690)	(.0074	.0785)	(.0041	.0990)
4	97	(.0096	.0683)	(.0073	.0777)	(.0041	.0980)
4	98	(.0095	.0676)	(.0072	.0769)	(.0040	.0971)
4	99	(.0094	.0670)	(.0072	.0762)	(.0040	.0962)
4	100	(.0093	.0663)	(.0071	.0755)	(.0039	.0953)

ro	yo	90%		95%		99%	
5	0	(.6310	1.0000)	(.5493	1.0000)	(.3981	1.0000)
5	1	(.4897	1.0000)	(.4182	1.0000)	(.2943	1.0000)
5	2	(.3871	.9661)	(.3312	.9795)	(.2332	.9938)
5	3	(.3077	.8867)	(.2623	.9149)	(.1844	.9552)
5	4	(.2550	.8106)	(.2160	.8468)	(.1500	.9037)
5	5	(.2179	.7438)	(.1834	.7841)	(.1259	.8514)
5	6	(.1902	.6859)	(.1593	.7283)	(.1082	.8017)
5	7	(.1688	.6358)	(.1408	.6789)	(.0949	.7559)
5	8	(.1517	.5921)	(.1261	.6353)	(.0844	.7140)
5	9	(.1378	.5538)	(.1142	.5966)	(.0759	.6759)
5	10	(.1263	.5200)	(.1044	.5621)	(.0690	.6412)
5	11	(.1165	.4900)	(.0961	.5313)	(.0633	.6096)
5	12	(.1081	.4633)	(.0890	.5035)	(.0584	.5808)
5	13	(.1009	.4392)	(.0829	.4785)	(.0542	.5544)
5	14	(.0946	.4175)	(.0776	.4557)	(.0506	.5303)
5	15	(.0890	.3978)	(.0729	.4350)	(.0474	.5080)
5	16	(.0840	.3799)	(.0687	.4161)	(.0446	.4875)
5	17	(.0796	.3635)	(.0650	.3987)	(.0421	.4685)
5	18	(.0756	.3484)	(.0617	.3827)	(.0398	.4509)
5	19	(.0720	.3345)	(.0587	.3679)	(.0378	.4346)
5	20	(.0687	.3217)	(.0560	.3542)	(.0360	.4193)
5	21	(.0657	.3099)	(.0535	.3414)	(.0344	.4051)
5	22	(.0630	.2988)	(.0512	.3296)	(.0329	.3918)
5	23	(.0604	.2886)	(.0492	.3185)	(.0315	.3793)
5	24	(.0581	.2790)	(.0472	.3082)	(.0302	.3676)
5	25	(.0560	.2700)	(.0455	.2985)	(.0291	.3566)
5	26	(.0540	.2616)	(.0438	.2894)	(.0280	.3462)
5	27	(.0521	.2536)	(.0423	.2808)	(.0270	.3364)
5	28	(.0504	.2462)	(.0408	.2727)	(.0260	.3271)
5	29	(.0487	.2392)	(.0395	.2651)	(.0252	.3184)
5	30	(.0472	.2325)	(.0383	.2579)	(.0243	.3100)
5	31	(.0458	.2262)	(.0371	.2510)	(.0236	.3021)
5	32	(.0444	.2203)	(.0360	.2445)	(.0229	.2946)
5	33	(.0431	.2146)	(.0349	.2384)	(.0222	.2875)
5	34	(.0419	.2093)	(.0340	.2325)	(.0215	.2807)
5	35	(.0408	.2042)	(.0330	.2269)	(.0209	.2741)
5	36	(.0397	.1993)	(.0321	.2216)	(.0204	.2679)

ro	yo	90%		95%		99%	
5	37	(.0387	.1947)	(.0313	.2165)	(.0198	.2620)
5	38	(.0377	.1903)	(.0305	.2117)	(.0193	.2563)
5	39	(.0368	.1860)	(.0298	.2071)	(.0188	.2509)
5	40	(.0360	.1820)	(.0291	.2026)	(.0184	.2457)
5	41	(.0351	.1781)	(.0284	.1984)	(.0179	.2407)
5	42	(.0343	.1744)	(.0277	.1943)	(.0175	.2359)
5	43	(.0336	.1708)	(.0271	.1904)	(.0171	.2312)
5	44	(.0328	.1674)	(.0265	.1866)	(.0167	.2268)
5	45	(.0321	.1641)	(.0259	.1830)	(.0164	.2225)
5	46	(.0315	.1610)	(.0254	.1795)	(.0160	.2184)
5	47	(.0308	.1579)	(.0249	.1762)	(.0157	.2144)
5	48	(.0302	.1550)	(.0244	.1729)	(.0154	.2106)
5	49	(.0296	.1522)	(.0239	.1698)	(.0151	.2069)
5	50	(.0290	.1495)	(.0234	.1668)	(.0148	.2034)
5	51	(.0285	.1468)	(.0230	.1639)	(.0145	.1999)
5	52	(.0280	.1443)	(.0225	.1611)	(.0142	.1966)
5	53	(.0274	.1419)	(.0221	.1584)	(.0139	.1934)
5	54	(.0270	.1395)	(.0217	.1558)	(.0137	.1902)
5	55	(.0265	.1372)	(.0213	.1533)	(.0134	.1872)
5	56	(.0260	.1350)	(.0210	.1508)	(.0132	.1843)
5	57	(.0256	.1328)	(.0206	.1485)	(.0130	.1815)
5	58	(.0252	.1308)	(.0203	.1462)	(.0128	.1787)
5	59	(.0247	.1287)	(.0199	.1439)	(.0125	.1760)
5	60	(.0243	.1268)	(.0196	.1418)	(.0123	.1735)
5	61	(.0240	.1249)	(.0193	.1397)	(.0121	.1709)
5	62	(.0236	.1231)	(.0190	.1376)	(.0119	.1685)
5	63	(.0232	.1213)	(.0187	.1357)	(.0118	.1661)
5	64	(.0229	.1195)	(.0184	.1337)	(.0116	.1638)
5	65	(.0225	.1179)	(.0181	.1319)	(.0114	.1616)
5	66	(.0222	.1162)	(.0179	.1301)	(.0112	.1594)
5	67	(.0219	.1146)	(.0176	.1283)	(.0111	.1573)
5	68	(.0216	.1131)	(.0174	.1266)	(.0109	.1552)
5	69	(.0213	.1116)	(.0171	.1249)	(.0107	.1532)
5	70	(.0210	.1101)	(.0169	.1233)	(.0106	.1512)
5	71	(.0207	.1087)	(.0166	.1217)	(.0104	.1493)
5	72	(.0204	.1073)	(.0164	.1201)	(.0103	.1474)
5	73	(.0201	.1059)	(.0162	.1186)	(.0102	.1456)

ro	yo	90%		95%		99%	
5	74	(.0199	.1046)	(.0160	.1171)	(.0100	.1438)
5	75	(.0196	.1033)	(.0158	.1157)	(.0099	.1421)
5	76	(.0193	.1020)	(.0156	.1143)	(.0098	.1404)
5	77	(.0191	.1008)	(.0154	.1129)	(.0096	.1387)
5	78	(.0189	.0996)	(.0152	.1116)	(.0095	.1371)
5	79	(.0186	.0984)	(.0150	.1103)	(.0094	.1355)
5	80	(.0184	.0973)	(.0148	.1090)	(.0093	.1340)
5	81	(.0182	.0962)	(.0146	.1078)	(.0092	.1325)
5	82	(.0180	.0951)	(.0144	.1066)	(.0091	.1310)
5	83	(.0178	.0940)	(.0143	.1054)	(.0089	.1296)
5	84	(.0175	.0930)	(.0141	.1042)	(.0088	.1282)
5	85	(.0173	.0919)	(.0139	.1031)	(.0087	.1268)
5	86	(.0172	.0909)	(.0138	.1020)	(.0086	.1254)
5	87	(.0170	.0900)	(.0136	.1009)	(.0085	.1241)
5	88	(.0168	.0890)	(.0135	.0998)	(.0084	.1228)
5	89	(.0166	.0881)	(.0133	.0988)	(.0083	.1216)
5	90	(.0164	.0871)	(.0132	.0977)	(.0083	.1203)
5	91	(.0162	.0862)	(.0130	.0967)	(.0082	.1191)
5	92	(.0161	.0854)	(.0129	.0957)	(.0081	.1179)
5	93	(.0159	.0845)	(.0128	.0948)	(.0080	.1167)
5	94	(.0157	.0837)	(.0126	.0938)	(.0079	.1156)
5	95	(.0156	.0828)	(.0125	.0929)	(.0078	.1145)
5	96	(.0154	.0820)	(.0124	.0920)	(.0077	.1134)
5	97	(.0152	.0812)	(.0122	.0911)	(.0077	.1123)
5	98	(.0151	.0804)	(.0121	.0903)	(.0076	.1112)
5	99	(.0149	.0797)	(.0120	.0894)	(.0075	.1102)
5	100	(.0148	.0789)	(.0119	.0886)	(.0074	.1092)



ro	yo	90%		95%		99%	
6	0	(.6813	1.0000)	(.6070	1.0000)	(.4642	1.0000)
6	1	(.5474	1.0000)	(.4793	1.0000)	(.3566	1.0000)
6	2	(.4492	.9748)	(.3929	.9851)	(.2911	.9957)
6	3	(.3700	.9082)	(.3228	.9318)	(.2389	.9649)
6	4	(.3143	.8408)	(.2728	.8720)	(.2003	.9208)
6	5	(.2733	.7796)	(.2361	.8152)	(.1718	.8741)
6	6	(.2419	.7252)	(.2081	.7633)	(.1503	.8287)
6	7	(.2170	.6771)	(.1861	.7165)	(.1334	.7860)
6	8	(.1968	.6346)	(.1683	.6745)	(.1200	.7464)
6	9	(.1801	.5969)	(.1536	.6367)	(.1089	.7099)
6	10	(.1660	.5632)	(.1412	.6027)	(.0997	.6763)
6	11	(.1539	.5330)	(.1307	.5720)	(.0920	.6454)
6	12	(.1435	.5057)	(.1217	.5441)	(.0853	.6170)
6	13	(.1344	.4811)	(.1138	.5187)	(.0796	.5908)
6	14	(.1264	.4587)	(.1069	.4956)	(.0745	.5666)
6	15	(.1193	.4383)	(.1007	.4743)	(.0701	.5442)
6	16	(.1130	.4196)	(.0953	.4548)	(.0662	.5235)
6	17	(.1073	.4024)	(.0904	.4367)	(.0626	.5042)
6	18	(.1021	.3865)	(.0860	.4201)	(.0595	.4863)
6	19	(.0974	.3719)	(.0820	.4046)	(.0566	.4695)
6	20	(.0932	.3583)	(.0783	.3902)	(.0540	.4538)
6	21	(.0893	.3456)	(.0750	.3768)	(.0516	.4391)
6	22	(.0857	.3338)	(.0719	.3643)	(.0495	.4253)
6	23	(.0823	.3228)	(.0691	.3526)	(.0475	.4124)
6	24	(.0793	.3125)	(.0665	.3416)	(.0456	.4002)
6	25	(.0764	.3028)	(.0640	.3312)	(.0439	.3886)
6	26	(.0738	.2937)	(.0618	.3215)	(.0423	.3778)
6	27	(.0713	.2851)	(.0597	.3123)	(.0409	.3675)
6	28	(.0690	.2770)	(.0577	.3036)	(.0395	.3577)
6	29	(.0668	.2694)	(.0559	.2954)	(.0382	.3484)
6	30	(.0648	.2621)	(.0542	.2876)	(.0370	.3396)
6	31	(.0629	.2553)	(.0526	.2802)	(.0359	.3313)
6	32	(.0611	.2488)	(.0510	.2732)	(.0348	.3233)
6	33	(.0594	.2426)	(.0496	.2666)	(.0338	.3157)
6	34	(.0578	.2367)	(.0482	.2602)	(.0329	.3084)
6	35	(.0562	.2311)	(.0469	.2541)	(.0320	.3015)
6	36	(.0548	.2257)	(.0457	.2483)	(.0311	.2949)

ro	yo	90%		95%		99%	
6	37	(.0534	.2206)	(.0446	.2428)	(.0303	.2885)
6	38	(.0521	.2157)	(.0435	.2375)	(.0295	.2825)
6	39	(.0509	.2110)	(.0424	.2325)	(.0288	.2766)
6	40	(.0497	.2066)	(.0414	.2276)	(.0281	.2710)
6	41	(.0485	.2023)	(.0405	.2229)	(.0275	.2657)
6	42	(.0475	.1982)	(.0396	.2185)	(.0268	.2605)
6	43	(.0464	.1942)	(.0387	.2142)	(.0262	.2555)
6	44	(.0454	.1904)	(.0379	.2100)	(.0257	.2507)
6	45	(.0445	.1868)	(.0371	.2061)	(.0251	.2461)
6	46	(.0436	.1832)	(.0363	.2022)	(.0246	.2417)
6	47	(.0427	.1799)	(.0356	.1985)	(.0241	.2374)
6	48	(.0419	.1766)	(.0348	.1950)	(.0236	.2333)
6	49	(.0411	.1735)	(.0342	.1916)	(.0231	.2293)
6	50	(.0403	.1704)	(.0335	.1882)	(.0227	.2254)
6	51	(.0395	.1675)	(.0329	.1850)	(.0223	.2217)
6	52	(.0388	.1647)	(.0323	.1820)	(.0218	.2180)
6	53	(.0381	.1619)	(.0317	.1790)	(.0214	.2145)
6	54	(.0374	.1593)	(.0311	.1761)	(.0211	.2112)
6	55	(.0368	.1567)	(.0306	.1733)	(.0207	.2079)
6	56	(.0362	.1542)	(.0301	.1705)	(.0203	.2047)
6	57	(.0356	.1518)	(.0296	.1679)	(.0200	.2016)
6	58	(.0350	.1495)	(.0291	.1654)	(.0196	.1986)
6	59	(.0344	.1472)	(.0286	.1629)	(.0193	.1957)
6	60	(.0339	.1450)	(.0282	.1605)	(.0190	.1929)
6	61	(.0333	.1429)	(.0277	.1581)	(.0187	.1901)
6	62	(.0328	.1408)	(.0273	.1559)	(.0184	.1875)
6	63	(.0323	.1388)	(.0269	.1537)	(.0181	.1849)
6	64	(.0318	.1369)	(.0265	.1515)	(.0179	.1823)
6	65	(.0314	.1350)	(.0261	.1495)	(.0176	.1799)
6	66	(.0309	.1331)	(.0257	.1474)	(.0173	.1775)
6	67	(.0305	.1313)	(.0253	.1455)	(.0171	.1752)
6	68	(.0300	.1296)	(.0250	.1435)	(.0168	.1729)
6	69	(.0296	.1279)	(.0246	.1417)	(.0166	.1707)
6	70	(.0292	.1262)	(.0243	.1398)	(.0164	.1685)
6	71	(.0288	.1246)	(.0239	.1381)	(.0161	.1664)
6	72	(.0284	.1230)	(.0236	.1363)	(.0159	.1644)
6	73	(.0281	.1215)	(.0233	.1347)	(.0157	.1624)

ro	yo	90%		95%		99%	
6	74	(.0277	.1200)	(.0230	.1330)	(.0155	.1604)
6	75	(.0273	.1185)	(.0227	.1314)	(.0153	.1585)
6	76	(.0270	.1171)	(.0224	.1298)	(.0151	.1567)
6	77	(.0267	.1157)	(.0221	.1283)	(.0149	.1548)
6	78	(.0263	.1143)	(.0219	.1268)	(.0147	.1531)
6	79	(.0260	.1130)	(.0216	.1253)	(.0145	.1513)
6	80	(.0257	.1117)	(.0213	.1239)	(.0144	.1496)
6	81	(.0254	.1105)	(.0211	.1225)	(.0142	.1480)
6	82	(.0251	.1092)	(.0208	.1211)	(.0140	.1464)
6	83	(.0248	.1080)	(.0206	.1198)	(.0138	.1448)
6	84	(.0245	.1068)	(.0203	.1185)	(.0137	.1432)
6	85	(.0242	.1057)	(.0201	.1172)	(.0135	.1417)
6	86	(.0240	.1045)	(.0199	.1160)	(.0134	.1402)
6	87	(.0237	.1034)	(.0197	.1148)	(.0132	.1387)
6	88	(.0234	.1023)	(.0194	.1136)	(.0131	.1373)
6	89	(.0232	.1013)	(.0192	.1124)	(.0129	.1359)
6	90	(.0229	.1002)	(.0190	.1112)	(.0128	.1345)
6	91	(.0227	.0992)	(.0188	.1101)	(.0127	.1332)
6	92	(.0224	.0982)	(.0186	.1090)	(.0125	.1319)
6	93	(.0222	.0972)	(.0184	.1079)	(.0124	.1306)
6	94	(.0220	.0962)	(.0182	.1069)	(.0123	.1293)
6	95	(.0218	.0953)	(.0180	.1058)	(.0121	.1281)
6	96	(.0215	.0944)	(.0179	.1048)	(.0120	.1269)
6	97	(.0213	.0935)	(.0177	.1038)	(.0119	.1257)
6	98	(.0211	.0926)	(.0175	.1028)	(.0118	.1245)
6	99	(.0209	.0917)	(.0173	.1019)	(.0116	.1233)
6	100	(.0207	.0909)	(.0172	.1009)	(.0115	.1222)

ro	yo	90%		95%		99%	
7	0	(.7197	1.0000)	(.6518	1.0000)	(.5179	1.0000)
7	1	(.5938	1.0000)	(.5293	1.0000)	(.4101	1.0000)
7	2	(.5000	.9802)	(.4446	.9885)	(.3421	.9968)
7	3	(.4224	.9233)	(.3747	.9434)	(.2879	.9714)
7	4	(.3654	.8631)	(.3229	.8905)	(.2464	.9330)
7	5	(.3222	.8068)	(.2836	.8387)	(.2149	.8910)
7	6	(.2883	.7559)	(.2528	.7905)	(.1904	.8494)
7	7	(.2609	.7102)	(.2281	.7464)	(.1708	.8097)
7	8	(.2384	.6692)	(.2079	.7062)	(.1549	.7723)
7	9	(.2194	.6323)	(.1909	.6696)	(.1416	.7375)
7	10	(.2033	.5991)	(.1765	.6364)	(.1305	.7051)
7	11	(.1894	.5691)	(.1642	.6061)	(.1209	.6751)
7	12	(.1773	.5418)	(.1534	.5784)	(.1127	.6474)
7	13	(.1666	.5170)	(.1440	.5531)	(.1055	.6216)
7	14	(.1572	.4943)	(.1357	.5297)	(.0991	.5976)
7	15	(.1488	.4734)	(.1283	.5083)	(.0935	.5753)
7	16	(.1412	.4542)	(.1216	.4884)	(.0885	.5546)
7	17	(.1344	.4365)	(.1156	.4700)	(.0840	.5352)
7	18	(.1282	.4201)	(.1102	.4529)	(.0799	.5170)
7	19	(.1225	.4049)	(.1053	.4370)	(.0762	.5000)
7	20	(.1173	.3907)	(.1008	.4221)	(.0729	.4841)
7	21	(.1126	.3775)	(.0966	.4082)	(.0698	.4691)
7	22	(.1082	.3651)	(.0928	.3952)	(.0669	.4550)
7	23	(.1042	.3535)	(.0893	.3830)	(.0643	.4417)
7	24	(.1004	.3426)	(.0860	.3715)	(.0619	.4291)
7	25	(.0969	.3324)	(.0830	.3607)	(.0597	.4173)
7	26	(.0936	.3227)	(.0801	.3504)	(.0576	.4060)
7	27	(.0906	.3136)	(.0775	.3408)	(.0556	.3953)
7	28	(.0877	.3050)	(.0750	.3316)	(.0538	.3852)
7	29	(.0850	.2969)	(.0727	.3229)	(.0521	.3756)
7	30	(.0825	.2891)	(.0705	.3147)	(.0505	.3664)
7	31	(.0801	.2818)	(.0685	.3069)	(.0490	.3576)
7	32	(.0779	.2748)	(.0665	.2994)	(.0476	.3493)
7	33	(.0758	.2682)	(.0647	.2923)	(.0463	.3413)
7	34	(.0738	.2619)	(.0630	.2855)	(.0450	.3337)
7	35	(.0719	.2558)	(.0613	.2791)	(.0438	.3265)
7	36	(.0701	.2500)	(.0598	.2729)	(.0427	.3195)

ro	yo	90%		95%		99%	
7	37	(.0683	.2445)	(.0583	.2670)	(.0416	.3128)
7	38	(.0667	.2393)	(.0569	.2613)	(.0406	.3064)
7	39	(.0651	.2342)	(.0555	.2559)	(.0396	.3002)
7	40	(.0636	.2294)	(.0542	.2507)	(.0387	.2943)
7	41	(.0622	.2247)	(.0530	.2456)	(.0378	.2886)
7	42	(.0609	.2202)	(.0518	.2408)	(.0369	.2831)
7	43	(.0596	.2160)	(.0507	.2362)	(.0361	.2779)
7	44	(.0583	.2118)	(.0497	.2318)	(.0353	.2728)
7	45	(.0571	.2078)	(.0486	.2275)	(.0346	.2679)
7	46	(.0560	.2040)	(.0476	.2233)	(.0339	.2632)
7	47	(.0549	.2003)	(.0467	.2194)	(.0332	.2586)
7	48	(.0538	.1968)	(.0458	.2155)	(.0325	.2542)
7	49	(.0528	.1933)	(.0449	.2118)	(.0319	.2499)
7	50	(.0518	.1900)	(.0441	.2082)	(.0313	.2458)
7	51	(.0509	.1868)	(.0433	.2047)	(.0307	.2418)
7	52	(.0499	.1837)	(.0425	.2014)	(.0302	.2380)
7	53	(.0491	.1807)	(.0417	.1981)	(.0296	.2342)
7	54	(.0482	.1778)	(.0410	.1950)	(.0291	.2306)
7	55	(.0474	.1750)	(.0403	.1919)	(.0286	.2271)
7	56	(.0466	.1723)	(.0396	.1890)	(.0281	.2237)
7	57	(.0458	.1696)	(.0390	.1861)	(.0276	.2204)
7	58	(.0451	.1671)	(.0383	.1833)	(.0272	.2171)
7	59	(.0444	.1646)	(.0377	.1807)	(.0267	.2140)
7	60	(.0437	.1622)	(.0371	.1780)	(.0263	.2110)
7	61	(.0430	.1598)	(.0365	.1755)	(.0259	.2080)
7	62	(.0423	.1576)	(.0360	.1730)	(.0255	.2052)
7	63	(.0417	.1554)	(.0354	.1706)	(.0251	.2024)
7	64	(.0411	.1532)	(.0349	.1683)	(.0247	.1997)
7	65	(.0405	.1511)	(.0344	.1660)	(.0244	.1970)
7	66	(.0399	.1491)	(.0339	.1638)	(.0240	.1944)
7	67	(.0394	.1471)	(.0334	.1616)	(.0237	.1919)
7	68	(.0388	.1452)	(.0329	.1595)	(.0233	.1895)
7	69	(.0383	.1433)	(.0325	.1575)	(.0230	.1871)
7	70	(.0378	.1415)	(.0320	.1555)	(.0227	.1848)
7	71	(.0372	.1397)	(.0316	.1535)	(.0224	.1825)
7	72	(.0368	.1379)	(.0312	.1516)	(.0221	.1803)
7	73	(.0363	.1362)	(.0308	.1498)	(.0218	.1781)

ro	yo	90%		95%		99%	
7	74	(.0358	.1346)	(.0304	.1480)	(.0215	.1760)
7	75	(.0354	.1330)	(.0300	.1462)	(.0212	.1740)
7	76	(.0349	.1314)	(.0296	.1445)	(.0209	.1720)
7	77	(.0345	.1298)	(.0293	.1428)	(.0207	.1700)
7	78	(.0341	.1283)	(.0289	.1412)	(.0204	.1681)
7	79	(.0336	.1269)	(.0285	.1396)	(.0202	.1662)
7	80	(.0332	.1254)	(.0282	.1380)	(.0199	.1644)
7	81	(.0329	.1240)	(.0279	.1365)	(.0197	.1626)
7	82	(.0325	.1227)	(.0275	.1350)	(.0195	.1608)
7	83	(.0321	.1213)	(.0272	.1335)	(.0192	.1591)
7	84	(.0317	.1200)	(.0269	.1321)	(.0190	.1574)
7	85	(.0314	.1187)	(.0266	.1307)	(.0188	.1557)
7	86	(.0310	.1174)	(.0263	.1293)	(.0186	.1541)
7	87	(.0307	.1162)	(.0260	.1279)	(.0184	.1525)
7	88	(.0303	.1150)	(.0257	.1266)	(.0182	.1510)
7	89	(.0300	.1138)	(.0255	.1253)	(.0180	.1495)
7	90	(.0297	.1127)	(.0252	.1241)	(.0178	.1480)
7	91	(.0294	.1115)	(.0249	.1228)	(.0176	.1465)
7	92	(.0291	.1104)	(.0247	.1216)	(.0174	.1451)
7	93	(.0288	.1093)	(.0244	.1204)	(.0172	.1437)
7	94	(.0285	.1083)	(.0241	.1192)	(.0170	.1423)
7	95	(.0282	.1072)	(.0239	.1181)	(.0169	.1410)
7	96	(.0279	.1062)	(.0237	.1170)	(.0167	.1396)
7	97	(.0276	.1052)	(.0234	.1159)	(.0165	.1383)
7	98	(.0274	.1042)	(.0232	.1148)	(.0164	.1371)
7	99	(.0271	.1032)	(.0230	.1137)	(.0162	.1358)
7	100	(.0268	.1022)	(.0227	.1127)	(.0160	.1346)

ro	yo	90%		95%		99%	
8	0	(.7499	1.0000)	(.6877	1.0000)	(.5623	1.0000)
8	1	(.6316	1.0000)	(.5709	1.0000)	(.4560	1.0000)
8	2	(.5423	.9838)	(.4885	.9907)	(.3870	.9975)
8	3	(.4668	.9343)	(.4196	.9518)	(.3318	.9760)
8	4	(.4097	.8800)	(.3669	.9045)	(.2885	.9421)
8	5	(.3654	.8283)	(.3261	.8571)	(.2548	.9042)
8	6	(.3299	.7806)	(.2935	.8123)	(.2281	.8659)
8	7	(.3008	.7372)	(.2669	.7706)	(.2063	.8288)
8	8	(.2765	.6978)	(.2447	.7323)	(.1884	.7935)
8	9	(.2558	.6621)	(.2260	.6971)	(.1733	.7603)
8	10	(.2381	.6296)	(.2099	.6648)	(.1604	.7293)
8	11	(.2227	.6000)	(.1960	.6351)	(.1494	.7003)
8	12	(.2092	.5729)	(.1839	.6079)	(.1397	.6732)
8	13	(.1972	.5481)	(.1731	.5827)	(.1312	.6479)
8	14	(.1865	.5253)	(.1636	.5595)	(.1237	.6243)
8	15	(.1770	.5042)	(.1550	.5379)	(.1170	.6023)
8	16	(.1683	.4848)	(.1473	.5179)	(.1110	.5817)
8	17	(.1605	.4668)	(.1404	.4993)	(.1056	.5623)
8	18	(.1534	.4500)	(.1340	.4820)	(.1007	.5441)
8	19	(.1469	.4344)	(.1282	.4658)	(.0962	.5271)
8	20	(.1409	.4198)	(.1229	.4506)	(.0921	.5110)
8	21	(.1354	.4061)	(.1180	.4364)	(.0883	.4958)
8	22	(.1303	.3933)	(.1135	.4230)	(.0848	.4815)
8	23	(.1256	.3813)	(.1093	.4104)	(.0816	.4680)
8	24	(.1212	.3700)	(.1055	.3985)	(.0787	.4552)
8	25	(.1171	.3593)	(.1018	.3873)	(.0759	.4430)
8	26	(.1132	.3492)	(.0985	.3767)	(.0733	.4315)
8	27	(.1096	.3397)	(.0953	.3667)	(.0709	.4205)
8	28	(.1063	.3307)	(.0924	.3571)	(.0687	.4101)
8	29	(.1031	.3221)	(.0896	.3481)	(.0665	.4002)
8	30	(.1001	.3140)	(.0869	.3395)	(.0646	.3907)
8	31	(.0973	.3062)	(.0845	.3313)	(.0627	.3817)
8	32	(.0947	.2989)	(.0821	.3235)	(.0609	.3731)
8	33	(.0921	.2919)	(.0799	.3160)	(.0592	.3648)
8	34	(.0898	.2852)	(.0778	.3089)	(.0577	.3569)
8	35	(.0875	.2787)	(.0759	.3021)	(.0562	.3493)
8	36	(.0853	.2726)	(.0740	.2956)	(.0547	.3421)

ro	yo	90%		95%		99%	
8	37	(.0833	.2668)	(.0722	.2893)	(.0534	.3351)
8	38	(.0813	.2612)	(.0705	.2833)	(.0521	.3284)
8	39	(.0795	.2558)	(.0688	.2776)	(.0509	.3220)
8	40	(.0777	.2506)	(.0673	.2721)	(.0497	.3158)
8	41	(.0760	.2456)	(.0658	.2668)	(.0486	.3099)
8	42	(.0743	.2409)	(.0644	.2617)	(.0475	.3041)
8	43	(.0728	.2363)	(.0630	.2568)	(.0465	.2986)
8	44	(.0713	.2319)	(.0617	.2520)	(.0455	.2933)
8	45	(.0699	.2276)	(.0604	.2475)	(.0446	.2881)
8	46	(.0685	.2235)	(.0592	.2431)	(.0437	.2831)
8	47	(.0671	.2195)	(.0581	.2388)	(.0428	.2783)
8	48	(.0659	.2157)	(.0570	.2347)	(.0420	.2737)
8	49	(.0646	.2120)	(.0559	.2308)	(.0412	.2692)
8	50	(.0635	.2085)	(.0549	.2269)	(.0404	.2649)
8	51	(.0623	.2050)	(.0539	.2232)	(.0397	.2606)
8	52	(.0612	.2017)	(.0529	.2196)	(.0389	.2566)
8	53	(.0602	.1985)	(.0520	.2162)	(.0382	.2526)
8	54	(.0591	.1953)	(.0511	.2128)	(.0376	.2488)
8	55	(.0581	.1923)	(.0502	.2095)	(.0369	.2451)
8	56	(.0572	.1894)	(.0494	.2064)	(.0363	.2414)
8	57	(.0562	.1865)	(.0486	.2033)	(.0357	.2379)
8	58	(.0554	.1837)	(.0478	.2003)	(.0351	.2345)
8	59	(.0545	.1811)	(.0470	.1974)	(.0346	.2312)
8	60	(.0536	.1784)	(.0463	.1946)	(.0340	.2280)
8	61	(.0528	.1759)	(.0456	.1919)	(.0335	.2249)
8	62	(.0520	.1734)	(.0449	.1892)	(.0330	.2218)
8	63	(.0513	.1711)	(.0442	.1866)	(.0325	.2189)
8	64	(.0505	.1687)	(.0436	.1841)	(.0320	.2160)
8	65	(.0498	.1665)	(.0430	.1817)	(.0315	.2132)
8	66	(.0491	.1642)	(.0424	.1793)	(.0311	.2104)
8	67	(.0484	.1621)	(.0418	.1770)	(.0306	.2077)
8	68	(.0477	.1600)	(.0412	.1747)	(.0302	.2051)
8	69	(.0471	.1580)	(.0406	.1725)	(.0298	.2026)
8	70	(.0464	.1560)	(.0401	.1703)	(.0294	.2001)
8	71	(.0458	.1540)	(.0395	.1682)	(.0290	.1977)
8	72	(.0452	.1521)	(.0390	.1662)	(.0286	.1953)
8	73	(.0447	.1503)	(.0385	.1642)	(.0282	.1930)

ro	yo	90%		95%		99%	
8	74	(.0441	.1485)	(.0380	.1622)	(.0279	.1908)
8	75	(.0435	.1467)	(.0375	.1603)	(.0275	.1886)
8	76	(.0430	.1450)	(.0371	.1585)	(.0272	.1864)
8	77	(.0425	.1433)	(.0366	.1566)	(.0268	.1843)
8	78	(.0420	.1417)	(.0362	.1549)	(.0265	.1823)
8	79	(.0415	.1401)	(.0357	.1531)	(.0262	.1803)
8	80	(.0410	.1385)	(.0353	.1514)	(.0259	.1783)
8	81	(.0405	.1370)	(.0349	.1498)	(.0256	.1764)
8	82	(.0400	.1355)	(.0345	.1481)	(.0253	.1745)
8	83	(.0396	.1340)	(.0341	.1466)	(.0250	.1727)
8	84	(.0391	.1326)	(.0337	.1450)	(.0247	.1709)
8	85	(.0387	.1312)	(.0333	.1435)	(.0244	.1691)
8	86	(.0382	.1298)	(.0330	.1420)	(.0241	.1674)
8	87	(.0378	.1285)	(.0326	.1405)	(.0239	.1657)
8	88	(.0374	.1271)	(.0322	.1391)	(.0236	.1640)
8	89	(.0370	.1258)	(.0319	.1377)	(.0234	.1624)
8	90	(.0366	.1246)	(.0316	.1363)	(.0231	.1608)
8	91	(.0363	.1233)	(.0312	.1350)	(.0229	.1592)
8	92	(.0359	.1221)	(.0309	.1336)	(.0226	.1577)
8	93	(.0355	.1209)	(.0306	.1323)	(.0224	.1562)
8	94	(.0351	.1198)	(.0303	.1311)	(.0222	.1547)
8	95	(.0348	.1186)	(.0300	.1298)	(.0219	.1532)
8	96	(.0344	.1175)	(.0297	.1286)	(.0217	.1518)
8	97	(.0341	.1164)	(.0294	.1274)	(.0215	.1504)
8	98	(.0338	.1153)	(.0291	.1262)	(.0213	.1490)
8	99	(.0335	.1142)	(.0288	.1251)	(.0211	.1477)
8	100	(.0331	.1132)	(.0285	.1239)	(.0209	.1464)

ro	yo	90%		95%		99%	
9	0	(.7743	1.0000)	(.7169	1.0000)	(.5995	1.0000)
9	1	(.6632	1.0000)	(.6058	1.0000)	(.4956	1.0000)
9	2	(.5780	.9864)	(.5261	.9923)	(.4267	.9980)
9	3	(.5050	.9426)	(.4587	.9582)	(.3711	.9795)
9	4	(.4484	.8934)	(.4059	.9154)	(.3267	.9491)
9	5	(.4036	.8455)	(.3642	.8719)	(.2915	.9146)
9	6	(.3672	.8008)	(.3303	.8300)	(.2631	.8792)
9	7	(.3369	.7596)	(.3024	.7907)	(.2397	.8445)
9	8	(.3113	.7219)	(.2788	.7542)	(.2202	.8112)
9	9	(.2894	.6874)	(.2587	.7203)	(.2036	.7796)
9	10	(.2704	.6557)	(.2413	.6891)	(.1893	.7498)
9	11	(.2538	.6267)	(.2261	.6602)	(.1769	.7218)
9	12	(.2392	.6000)	(.2128	.6334)	(.1660	.6955)
9	13	(.2261	.5754)	(.2009	.6086)	(.1564	.6708)
9	14	(.2144	.5526)	(.1903	.5855)	(.1478	.6477)
9	15	(.2039	.5316)	(.1808	.5641)	(.1402	.6260)
9	16	(.1943	.5120)	(.1722	.5441)	(.1332	.6055)
9	17	(.1856	.4938)	(.1643	.5255)	(.1270	.5863)
9	18	(.1777	.4768)	(.1572	.5080)	(.1213	.5682)
9	19	(.1704	.4609)	(.1506	.4916)	(.1161	.5512)
9	20	(.1637	.4461)	(.1446	.4763)	(.1113	.5350)
9	21	(.1575	.4321)	(.1390	.4618)	(.1069	.5198)
9	22	(.1517	.4190)	(.1339	.4482)	(.1028	.5054)
9	23	(.1464	.4066)	(.1291	.4353)	(.0990	.4917)
9	24	(.1414	.3950)	(.1246	.4232)	(.0955	.4787)
9	25	(.1368	.3840)	(.1205	.4117)	(.0923	.4664)
9	26	(.1324	.3736)	(.1166	.4008)	(.0892	.4547)
9	27	(.1283	.3637)	(.1130	.3904)	(.0864	.4435)
9	28	(.1245	.3543)	(.1096	.3806)	(.0837	.4329)
9	29	(.1209	.3454)	(.1063	.3712)	(.0812	.4227)
9	30	(.1175	.3369)	(.1033	.3623)	(.0788	.4131)
9	31	(.1143	.3289)	(.1004	.3538)	(.0766	.4038)
9	32	(.1112	.3212)	(.0977	.3457)	(.0745	.3949)
9	33	(.1083	.3138)	(.0951	.3380)	(.0725	.3864)
9	34	(.1056	.3068)	(.0927	.3306)	(.0706	.3783)
9	35	(.1030	.3001)	(.0904	.3235)	(.0688	.3705)
9	36	(.1005	.2937)	(.0882	.3167)	(.0671	.3630)

ro	yo	90%		95%		99%	
9	37	(.0981	.2875)	(.0861	.3102)	(.0655	.3558)
9	38	(.0959	.2816)	(.0841	.3039)	(.0639	.3489)
9	39	(.0937	.2760)	(.0822	.2979)	(.0624	.3422)
9	40	(.0916	.2705)	(.0804	.2921)	(.0610	.3358)
9	41	(.0897	.2653)	(.0786	.2865)	(.0597	.3296)
9	42	(.0878	.2602)	(.0769	.2812)	(.0584	.3237)
9	43	(.0860	.2554)	(.0753	.2760)	(.0571	.3179)
9	44	(.0842	.2507)	(.0738	.2710)	(.0560	.3124)
9	45	(.0826	.2462)	(.0723	.2662)	(.0548	.3070)
9	46	(.0810	.2419)	(.0709	.2616)	(.0537	.3018)
9	47	(.0794	.2377)	(.0696	.2571)	(.0527	.2968)
9	48	(.0779	.2336)	(.0682	.2528)	(.0517	.2920)
9	49	(.0765	.2297)	(.0670	.2486)	(.0507	.2873)
9	50	(.0751	.2259)	(.0658	.2446)	(.0498	.2827)
9	51	(.0738	.2222)	(.0646	.2407)	(.0489	.2783)
9	52	(.0725	.2187)	(.0635	.2369)	(.0480	.2741)
9	53	(.0713	.2153)	(.0624	.2332)	(.0472	.2699)
9	54	(.0701	.2119)	(.0613	.2296)	(.0464	.2659)
9	55	(.0689	.2087)	(.0603	.2262)	(.0456	.2620)
9	56	(.0678	.2056)	(.0593	.2228)	(.0448	.2582)
9	57	(.0667	.2025)	(.0583	.2195)	(.0441	.2545)
9	58	(.0657	.1996)	(.0574	.2164)	(.0434	.2509)
9	59	(.0646	.1967)	(.0565	.2133)	(.0427	.2475)
9	60	(.0637	.1939)	(.0557	.2103)	(.0420	.2441)
9	61	(.0627	.1912)	(.0548	.2074)	(.0414	.2408)
9	62	(.0618	.1886)	(.0540	.2046)	(.0408	.2376)
9	63	(.0609	.1860)	(.0532	.2018)	(.0402	.2344)
9	64	(.0600	.1835)	(.0524	.1992)	(.0396	.2314)
9	65	(.0591	.1811)	(.0517	.1965)	(.0390	.2284)
9	66	(.0583	.1787)	(.0510	.1940)	(.0384	.2255)
9	67	(.0575	.1764)	(.0503	.1915)	(.0379	.2227)
9	68	(.0567	.1742)	(.0496	.1891)	(.0374	.2200)
9	69	(.0560	.1720)	(.0489	.1868)	(.0369	.2173)
9	70	(.0552	.1698)	(.0482	.1845)	(.0364	.2147)
9	71	(.0545	.1678)	(.0476	.1822)	(.0359	.2121)
9	72	(.0538	.1657)	(.0470	.1800)	(.0354	.2096)
9	73	(.0531	.1637)	(.0464	.1779)	(.0350	.2072)

ro	yo	90%		95%		99%	
9	74	(.0524	.1618)	(.0458	.1758)	(.0345	.2048)
9	75	(.0518	.1599)	(.0452	.1738)	(.0341	.2025)
9	76	(.0512	.1581)	(.0447	.1718)	(.0337	.2002)
9	77	(.0505	.1563)	(.0441	.1698)	(.0332	.1980)
9	78	(.0499	.1545)	(.0436	.1679)	(.0328	.1958)
9	79	(.0493	.1528)	(.0431	.1661)	(.0324	.1937)
9	80	(.0488	.1511)	(.0426	.1643)	(.0321	.1916)
9	81	(.0482	.1494)	(.0421	.1625)	(.0317	.1895)
9	82	(.0477	.1478)	(.0416	.1607)	(.0313	.1876)
9	83	(.0471	.1462)	(.0411	.1590)	(.0310	.1856)
9	84	(.0466	.1447)	(.0407	.1574)	(.0306	.1837)
9	85	(.0461	.1432)	(.0402	.1557)	(.0303	.1818)
9	86	(.0456	.1417)	(.0398	.1541)	(.0299	.1800)
9	87	(.0451	.1402)	(.0393	.1526)	(.0296	.1782)
9	88	(.0446	.1388)	(.0389	.1510)	(.0293	.1764)
9	89	(.0441	.1374)	(.0385	.1495)	(.0290	.1747)
9	90	(.0437	.1360)	(.0381	.1480)	(.0287	.1730)
9	91	(.0432	.1347)	(.0377	.1466)	(.0284	.1713)
9	92	(.0428	.1334)	(.0373	.1452)	(.0281	.1697)
9	93	(.0423	.1321)	(.0369	.1438)	(.0278	.1681)
9	94	(.0419	.1308)	(.0366	.1424)	(.0275	.1665)
9	95	(.0415	.1296)	(.0362	.1411)	(.0272	.1650)
9	96	(.0411	.1284)	(.0358	.1398)	(.0269	.1634)
9	97	(.0407	.1272)	(.0355	.1385)	(.0267	.1620)
9	98	(.0403	.1260)	(.0351	.1372)	(.0264	.1605)
9	99	(.0399	.1249)	(.0348	.1360)	(.0262	.1591)
9	100	(.0395	.1237)	(.0345	.1347)	(.0259	.1577)

ro	yo	90%		95%		99%	
10	0	(.7943	1.0000)	(.7411	1.0000)	(.6310	1.0000)
10	1	(.6898	1.0000)	(.6356	1.0000)	(.5302	1.0000)
10	2	(.6086	.9883)	(.5586	.9934)	(.4618	.9983)
10	3	(.5382	.9491)	(.4929	.9631)	(.4063	.9821)
10	4	(.4825	.9041)	(.4406	.9242)	(.3614	.9547)
10	5	(.4377	.8597)	(.3985	.8839)	(.3252	.9230)
10	6	(.4007	.8177)	(.3639	.8448)	(.2956	.8901)
10	7	(.3697	.7786)	(.3349	.8076)	(.2710	.8576)
10	8	(.3433	.7425)	(.3103	.7728)	(.2501	.8261)
10	9	(.3204	.7091)	(.2891	.7403)	(.2323	.7960)
10	10	(.3005	.6784)	(.2707	.7101)	(.2168	.7674)
10	11	(.2829	.6500)	(.2545	.6819)	(.2033	.7404)
10	12	(.2673	.6238)	(.2401	.6558)	(.1913	.7149)
10	13	(.2533	.5995)	(.2273	.6314)	(.1807	.6909)
10	14	(.2407	.5769)	(.2158	.6086)	(.1713	.6683)
10	15	(.2294	.5559)	(.2054	.5874)	(.1627	.6469)
10	16	(.2190	.5364)	(.1960	.5675)	(.1550	.6268)
10	17	(.2096	.5181)	(.1874	.5489)	(.1480	.6078)
10	18	(.2010	.5010)	(.1795	.5314)	(.1416	.5898)
10	19	(.1930	.4850)	(.1723	.5150)	(.1357	.5728)
10	20	(.1856	.4700)	(.1656	.4995)	(.1303	.5567)
10	21	(.1788	.4558)	(.1595	.4849)	(.1253	.5415)
10	22	(.1725	.4425)	(.1537	.4711)	(.1207	.5270)
10	23	(.1666	.4299)	(.1484	.4581)	(.1164	.5133)
10	24	(.1611	.4179)	(.1434	.4457)	(.1124	.5002)
10	25	(.1560	.4067)	(.1388	.4340)	(.1086	.4878)
10	26	(.1511	.3960)	(.1344	.4229)	(.1051	.4759)
10	27	(.1466	.3858)	(.1303	.4123)	(.1019	.4646)
10	28	(.1423	.3762)	(.1265	.4022)	(.0988	.4538)
10	29	(.1383	.3670)	(.1229	.3926)	(.0959	.4435)
10	30	(.1345	.3583)	(.1194	.3835)	(.0932	.4336)
10	31	(.1309	.3499)	(.1162	.3748)	(.0906	.4242)
10	32	(.1275	.3420)	(.1131	.3664)	(.0881	.4151)
10	33	(.1242	.3344)	(.1102	.3584)	(.0858	.4065)
10	34	(.1211	.3271)	(.1075	.3508)	(.0836	.3981)
10	35	(.1182	.3201)	(.1048	.3434)	(.0815	.3901)
10	36	(.1154	.3134)	(.1023	.3364)	(.0796	.3825)

ro	yo	90%		95%		99%	
10	37	(.1127	.3070)	(.0999	.3296)	(.0777	.3751)
10	38	(.1102	.3008)	(.0977	.3231)	(.0759	.3679)
10	39	(.1078	.2949)	(.0955	.3169)	(.0742	.3611)
10	40	(.1054	.2892)	(.0934	.3109)	(.0725	.3545)
10	41	(.1032	.2838)	(.0914	.3051)	(.0709	.3481)
10	42	(.1011	.2785)	(.0895	.2995)	(.0694	.3420)
10	43	(.0990	.2734)	(.0877	.2941)	(.0680	.3360)
10	44	(.0971	.2685)	(.0859	.2889)	(.0666	.3303)
10	45	(.0952	.2638)	(.0842	.2839)	(.0653	.3247)
10	46	(.0934	.2592)	(.0826	.2791)	(.0640	.3194)
10	47	(.0916	.2548)	(.0811	.2744)	(.0628	.3142)
10	48	(.0899	.2506)	(.0796	.2699)	(.0616	.3092)
10	49	(.0883	.2464)	(.0781	.2655)	(.0604	.3043)
10	50	(.0867	.2424)	(.0767	.2613)	(.0594	.2996)
10	51	(.0852	.2386)	(.0754	.2572)	(.0583	.2950)
10	52	(.0838	.2348)	(.0741	.2532)	(.0573	.2905)
10	53	(.0824	.2312)	(.0728	.2493)	(.0563	.2862)
10	54	(.0810	.2277)	(.0716	.2456)	(.0553	.2820)
10	55	(.0797	.2243)	(.0704	.2419)	(.0544	.2780)
10	56	(.0784	.2210)	(.0693	.2384)	(.0535	.2740)
10	57	(.0772	.2178)	(.0682	.2350)	(.0527	.2702)
10	58	(.0760	.2146)	(.0671	.2317)	(.0518	.2665)
10	59	(.0748	.2116)	(.0661	.2284)	(.0510	.2628)
10	60	(.0737	.2087)	(.0651	.2253)	(.0502	.2593)
10	61	(.0726	.2058)	(.0641	.2222)	(.0495	.2559)
10	62	(.0715	.2030)	(.0632	.2192)	(.0487	.2525)
10	63	(.0705	.2003)	(.0622	.2163)	(.0480	.2492)
10	64	(.0695	.1976)	(.0613	.2135)	(.0473	.2461)
10	65	(.0685	.1951)	(.0605	.2107)	(.0467	.2429)
10	66	(.0676	.1925)	(.0596	.2081)	(.0460	.2399)
10	67	(.0666	.1901)	(.0588	.2054)	(.0454	.2370)
10	68	(.0657	.1877)	(.0580	.2029)	(.0447	.2341)
10	69	(.0649	.1854)	(.0573	.2004)	(.0441	.2313)
10	70	(.0640	.1831)	(.0565	.1980)	(.0436	.2285)
10	71	(.0632	.1809)	(.0558	.1956)	(.0430	.2259)
10	72	(.0624	.1787)	(.0551	.1933)	(.0424	.2232)
10	73	(.0616	.1766)	(.0544	.1910)	(.0419	.2207)

ro	yo	90%		95%		99%	
10	74	(.0608	.1746)	(.0537	.1888)	(.0414	.2182)
10	75	(.0601	.1726)	(.0530	.1867)	(.0408	.2157)
10	76	(.0594	.1706)	(.0524	.1846)	(.0403	.2133)
10	77	(.0587	.1687)	(.0517	.1825)	(.0398	.2110)
10	78	(.0580	.1668)	(.0511	.1805)	(.0394	.2087)
10	79	(.0573	.1649)	(.0505	.1785)	(.0389	.2065)
10	80	(.0566	.1631)	(.0499	.1766)	(.0384	.2043)
10	81	(.0560	.1614)	(.0494	.1747)	(.0380	.2021)
10	82	(.0553	.1597)	(.0488	.1728)	(.0376	.2000)
10	83	(.0547	.1580)	(.0482	.1710)	(.0371	.1980)
10	84	(.0541	.1563)	(.0477	.1692)	(.0367	.1960)
10	85	(.0535	.1547)	(.0472	.1675)	(.0363	.1940)
10	86	(.0529	.1531)	(.0467	.1658)	(.0359	.1920)
10	87	(.0524	.1516)	(.0462	.1641)	(.0355	.1901)
10	88	(.0518	.1500)	(.0457	.1625)	(.0351	.1883)
10	89	(.0513	.1486)	(.0452	.1609)	(.0348	.1865)
10	90	(.0507	.1471)	(.0447	.1593)	(.0344	.1847)
10	91	(.0502	.1457)	(.0443	.1578)	(.0340	.1829)
10	92	(.0497	.1443)	(.0438	.1563)	(.0337	.1812)
10	93	(.0492	.1429)	(.0434	.1548)	(.0333	.1795)
10	94	(.0487	.1415)	(.0429	.1533)	(.0330	.1778)
10	95	(.0482	.1402)	(.0425	.1519)	(.0327	.1762)
10	96	(.0478	.1389)	(.0421	.1505)	(.0324	.1746)
10	97	(.0473	.1376)	(.0417	.1491)	(.0320	.1730)
10	98	(.0469	.1364)	(.0413	.1478)	(.0317	.1715)
10	99	(.0464	.1351)	(.0409	.1465)	(.0314	.1700)
10	100	(.0460	.1339)	(.0405	.1452)	(.0311	.1685)

ro	yo	90%		95%		99%	
11	0	(.8111	1.0000)	(.7616	1.0000)	(.6579	1.0000)
11	1	(.7125	1.0000)	(.6613	1.0000)	(.5605	1.0000)
11	2	(.6351	.9898)	(.5870	.9943)	(.4931	.9986)
11	3	(.5672	.9544)	(.5232	.9670)	(.4381	.9841)
11	4	(.5127	.9130)	(.4715	.9313)	(.3930	.9592)
11	5	(.4682	.8715)	(.4294	.8939)	(.3562	.9300)
11	6	(.4311	.8320)	(.3944	.8572)	(.3257	.8993)
11	7	(.3996	.7948)	(.3648	.8220)	(.3001	.8687)
11	8	(.3726	.7602)	(.3394	.7888)	(.2783	.8389)
11	9	(.3490	.7281)	(.3174	.7576)	(.2594	.8102)
11	10	(.3283	.6983)	(.2982	.7284)	(.2430	.7828)
11	11	(.3100	.6706)	(.2811	.7011)	(.2285	.7567)
11	12	(.2936	.6449)	(.2660	.6755)	(.2157	.7320)
11	13	(.2789	.6210)	(.2523	.6516)	(.2042	.7086)
11	14	(.2656	.5987)	(.2401	.6293)	(.1939	.6865)
11	15	(.2536	.5779)	(.2290	.6083)	(.1846	.6656)
11	16	(.2426	.5584)	(.2188	.5886)	(.1762	.6458)
11	17	(.2325	.5401)	(.2096	.5701)	(.1685	.6270)
11	18	(.2232	.5230)	(.2011	.5526)	(.1614	.6093)
11	19	(.2146	.5069)	(.1932	.5362)	(.1549	.5924)
11	20	(.2067	.4918)	(.1860	.5207)	(.1489	.5764)
11	21	(.1994	.4775)	(.1793	.5060)	(.1434	.5612)
11	22	(.1925	.4640)	(.1730	.4921)	(.1383	.5467)
11	23	(.1861	.4512)	(.1672	.4790)	(.1335	.5330)
11	24	(.1801	.4391)	(.1617	.4665)	(.1290	.5199)
11	25	(.1745	.4277)	(.1566	.4546)	(.1248	.5074)
11	26	(.1693	.4168)	(.1518	.4433)	(.1209	.4954)
11	27	(.1643	.4064)	(.1473	.4326)	(.1172	.4840)
11	28	(.1596	.3965)	(.1431	.4223)	(.1138	.4731)
11	29	(.1552	.3871)	(.1391	.4125)	(.1105	.4627)
11	30	(.1511	.3782)	(.1353	.4032)	(.1075	.4527)
11	31	(.1471	.3696)	(.1317	.3942)	(.1045	.4431)
11	32	(.1433	.3614)	(.1283	.3857)	(.1018	.4339)
11	33	(.1398	.3536)	(.1251	.3775)	(.0992	.4251)
11	34	(.1364	.3461)	(.1220	.3696)	(.0967	.4166)
11	35	(.1332	.3389)	(.1191	.3621)	(.0943	.4085)
11	36	(.1301	.3320)	(.1163	.3549)	(.0921	.4006)

ro	yo	90%		95%		99%	
11	37	(.1271	.3253)	(.1136	.3479)	(.0899	.3930)
11	38	(.1243	.3189)	(.1111	.3412)	(.0879	.3858)
11	39	(.1216	.3128)	(.1087	.3348)	(.0859	.3788)
11	40	(.1190	.3069)	(.1063	.3285)	(.0841	.3720)
11	41	(.1166	.3012)	(.1041	.3226)	(.0823	.3654)
11	42	(.1142	.2958)	(.1020	.3168)	(.0806	.3591)
11	43	(.1119	.2905)	(.0999	.3112)	(.0789	.3530)
11	44	(.1098	.2854)	(.0980	.3059)	(.0773	.3471)
11	45	(.1077	.2805)	(.0961	.3007)	(.0758	.3414)
11	46	(.1056	.2757)	(.0943	.2956)	(.0744	.3359)
11	47	(.1037	.2711)	(.0925	.2908)	(.0729	.3306)
11	48	(.1018	.2666)	(.0908	.2861)	(.0716	.3254)
11	49	(.1000	.2623)	(.0892	.2815)	(.0703	.3203)
11	50	(.0982	.2582)	(.0876	.2771)	(.0690	.3155)
11	51	(.0966	.2541)	(.0861	.2728)	(.0678	.3107)
11	52	(.0949	.2502)	(.0846	.2687)	(.0667	.3062)
11	53	(.0934	.2464)	(.0832	.2647)	(.0655	.3017)
11	54	(.0918	.2427)	(.0819	.2608)	(.0644	.2974)
11	55	(.0904	.2392)	(.0805	.2570)	(.0634	.2932)
11	56	(.0889	.2357)	(.0792	.2533)	(.0624	.2891)
11	57	(.0875	.2323)	(.0780	.2497)	(.0614	.2851)
11	58	(.0862	.2290)	(.0768	.2462)	(.0604	.2812)
11	59	(.0849	.2259)	(.0756	.2428)	(.0595	.2774)
11	60	(.0836	.2228)	(.0745	.2395)	(.0586	.2738)
11	61	(.0824	.2197)	(.0734	.2363)	(.0577	.2702)
11	62	(.0812	.2168)	(.0723	.2332)	(.0568	.2667)
11	63	(.0801	.2139)	(.0713	.2302)	(.0560	.2633)
11	64	(.0789	.2112)	(.0703	.2272)	(.0552	.2600)
11	65	(.0779	.2085)	(.0693	.2243)	(.0544	.2568)
11	66	(.0768	.2058)	(.0684	.2215)	(.0537	.2536)
11	67	(.0758	.2032)	(.0674	.2188)	(.0530	.2506)
11	68	(.0747	.2007)	(.0665	.2161)	(.0522	.2476)
11	69	(.0738	.1983)	(.0657	.2135)	(.0515	.2446)
11	70	(.0728	.1959)	(.0648	.2109)	(.0509	.2418)
11	71	(.0719	.1935)	(.0640	.2084)	(.0502	.2390)
11	72	(.0710	.1913)	(.0632	.2060)	(.0496	.2362)
11	73	(.0701	.1890)	(.0624	.2036)	(.0489	.2336)

ro	yo	90%		95%		99%	
11	74	(.0692	.1868)	(.0616	.2013)	(.0483	.2310)
11	75	(.0684	.1847)	(.0608	.1990)	(.0477	.2284)
11	76	(.0676	.1826)	(.0601	.1968)	(.0471	.2259)
11	77	(.0668	.1806)	(.0594	.1946)	(.0466	.2235)
11	78	(.0660	.1786)	(.0587	.1925)	(.0460	.2211)
11	79	(.0652	.1767)	(.0580	.1904)	(.0455	.2187)
11	80	(.0645	.1748)	(.0573	.1884)	(.0449	.2164)
11	81	(.0637	.1729)	(.0567	.1864)	(.0444	.2142)
11	82	(.0630	.1711)	(.0560	.1845)	(.0439	.2120)
11	83	(.0623	.1693)	(.0554	.1826)	(.0434	.2098)
11	84	(.0616	.1675)	(.0548	.1807)	(.0429	.2077)
11	85	(.0610	.1658)	(.0542	.1789)	(.0425	.2057)
11	86	(.0603	.1642)	(.0536	.1771)	(.0420	.2036)
11	87	(.0597	.1625)	(.0531	.1753)	(.0416	.2016)
11	88	(.0591	.1609)	(.0525	.1736)	(.0411	.1997)
11	89	(.0584	.1593)	(.0519	.1719)	(.0407	.1978)
11	90	(.0578	.1578)	(.0514	.1702)	(.0403	.1959)
11	91	(.0573	.1562)	(.0509	.1686)	(.0398	.1941)
11	92	(.0567	.1548)	(.0504	.1670)	(.0394	.1923)
11	93	(.0561	.1533)	(.0499	.1654)	(.0390	.1905)
11	94	(.0556	.1519)	(.0494	.1639)	(.0387	.1887)
11	95	(.0550	.1504)	(.0489	.1624)	(.0383	.1870)
11	96	(.0545	.1491)	(.0484	.1609)	(.0379	.1854)
11	97	(.0540	.1477)	(.0479	.1595)	(.0375	.1837)
11	98	(.0534	.1464)	(.0475	.1580)	(.0372	.1821)
11	99	(.0529	.1451)	(.0470	.1566)	(.0368	.1805)
11	100	(.0525	.1438)	(.0466	.1552)	(.0365	.1789)

ro	yo	90%		95%		99%	
12	0	(.8254	1.0000)	(.7791	1.0000)	(.6813	1.0000)
12	1	(.7322	1.0000)	(.6837	1.0000)	(.5872	1.0000)
12	2	(.6582	.9909)	(.6121	.9950)	(.5211	.9987)
12	3	(.5928	.9587)	(.5501	.9702)	(.4667	.9857)
12	4	(.5396	.9203)	(.4993	.9373)	(.4218	.9629)
12	5	(.4956	.8816)	(.4574	.9024)	(.3847	.9358)
12	6	(.4586	.8442)	(.4222	.8678)	(.3536	.9071)
12	7	(.4269	.8088)	(.3923	.8344)	(.3273	.8782)
12	8	(.3995	.7757)	(.3664	.8027)	(.3047	.8499)
12	9	(.3754	.7447)	(.3438	.7728)	(.2850	.8225)
12	10	(.3542	.7158)	(.3238	.7446)	(.2678	.7962)
12	11	(.3353	.6889)	(.3061	.7180)	(.2525	.7711)
12	12	(.3183	.6637)	(.2903	.6932)	(.2389	.7472)
12	13	(.3030	.6402)	(.2760	.6698)	(.2267	.7244)
12	14	(.2891	.6183)	(.2631	.6478)	(.2157	.7029)
12	15	(.2765	.5977)	(.2514	.6271)	(.2057	.6824)
12	16	(.2649	.5784)	(.2406	.6076)	(.1966	.6629)
12	17	(.2542	.5602)	(.2308	.5893)	(.1883	.6444)
12	18	(.2444	.5431)	(.2217	.5720)	(.1807	.6269)
12	19	(.2353	.5270)	(.2134	.5556)	(.1737	.6102)
12	20	(.2269	.5118)	(.2056	.5401)	(.1671	.5943)
12	21	(.2191	.4975)	(.1984	.5254)	(.1611	.5792)
12	22	(.2118	.4839)	(.1917	.5115)	(.1555	.5648)
12	23	(.2049	.4710)	(.1854	.4982)	(.1503	.5511)
12	24	(.1985	.4588)	(.1795	.4856)	(.1454	.5380)
12	25	(.1925	.4471)	(.1740	.4737)	(.1408	.5254)
12	26	(.1869	.4361)	(.1688	.4623)	(.1365	.5134)
12	27	(.1815	.4255)	(.1639	.4514)	(.1324	.5020)
12	28	(.1765	.4155)	(.1593	.4410)	(.1286	.4910)
12	29	(.1717	.4059)	(.1549	.4310)	(.1250	.4805)
12	30	(.1672	.3968)	(.1508	.4215)	(.1216	.4704)
12	31	(.1629	.3880)	(.1469	.4125)	(.1184	.4607)
12	32	(.1588	.3796)	(.1432	.4037)	(.1153	.4514)
12	33	(.1550	.3716)	(.1397	.3954)	(.1124	.4425)
12	34	(.1513	.3639)	(.1363	.3873)	(.1097	.4339)
12	35	(.1478	.3565)	(.1331	.3796)	(.1071	.4256)
12	36	(.1444	.3494)	(.1301	.3722)	(.1045	.4176)

ro	yo	90%		95%		99%	
12	37	(.1412	.3426)	(.1271	.3651)	(.1022	.4099)
12	38	(.1382	.3360)	(.1243	.3582)	(.0999	.4025)
12	39	(.1352	.3297)	(.1217	.3516)	(.0977	.3954)
12	40	(.1324	.3236)	(.1191	.3452)	(.0956	.3884)
12	41	(.1297	.3178)	(.1167	.3391)	(.0936	.3818)
12	42	(.1271	.3121)	(.1143	.3331)	(.0917	.3753)
12	43	(.1246	.3067)	(.1121	.3274)	(.0898	.3691)
12	44	(.1222	.3014)	(.1099	.3219)	(.0881	.3630)
12	45	(.1199	.2963)	(.1078	.3165)	(.0864	.3572)
12	46	(.1177	.2913)	(.1058	.3113)	(.0847	.3515)
12	47	(.1156	.2866)	(.1039	.3063)	(.0832	.3460)
12	48	(.1135	.2820)	(.1020	.3015)	(.0816	.3407)
12	49	(.1115	.2775)	(.1002	.2967)	(.0802	.3356)
12	50	(.1096	.2732)	(.0985	.2922)	(.0788	.3306)
12	51	(.1078	.2690)	(.0968	.2878)	(.0774	.3257)
12	52	(.1060	.2649)	(.0952	.2835)	(.0761	.3210)
12	53	(.1042	.2609)	(.0936	.2793)	(.0748	.3164)
12	54	(.1026	.2571)	(.0921	.2752)	(.0736	.3119)
12	55	(.1009	.2534)	(.0906	.2713)	(.0724	.3076)
12	56	(.0994	.2498)	(.0892	.2675)	(.0712	.3034)
12	57	(.0978	.2463)	(.0878	.2638)	(.0701	.2993)
12	58	(.0964	.2428)	(.0865	.2601)	(.0690	.2953)
12	59	(.0949	.2395)	(.0852	.2566)	(.0680	.2914)
12	60	(.0935	.2363)	(.0839	.2532)	(.0670	.2876)
12	61	(.0922	.2331)	(.0827	.2499)	(.0660	.2839)
12	62	(.0909	.2301)	(.0815	.2466)	(.0650	.2803)
12	63	(.0896	.2271)	(.0803	.2434)	(.0641	.2768)
12	64	(.0883	.2242)	(.0792	.2404)	(.0632	.2733)
12	65	(.0871	.2213)	(.0781	.2374)	(.0623	.2700)
12	66	(.0860	.2186)	(.0771	.2344)	(.0615	.2667)
12	67	(.0848	.2159)	(.0760	.2316)	(.0606	.2636)
12	68	(.0837	.2132)	(.0750	.2288)	(.0598	.2604)
12	69	(.0826	.2107)	(.0741	.2260)	(.0590	.2574)
12	70	(.0816	.2081)	(.0731	.2234)	(.0583	.2544)
12	71	(.0805	.2057)	(.0722	.2208)	(.0575	.2515)
12	72	(.0795	.2033)	(.0713	.2182)	(.0568	.2487)
12	73	(.0785	.2010)	(.0704	.2157)	(.0561	.2459)

ro	yo	90%		95%		99%	
12	74	(.0776	.1987)	(.0695	.2133)	(.0554	.2432)
12	75	(.0767	.1964)	(.0687	.2109)	(.0547	.2406)
12	76	(.0757	.1943)	(.0679	.2086)	(.0540	.2380)
12	77	(.0749	.1921)	(.0671	.2063)	(.0534	.2354)
12	78	(.0740	.1900)	(.0663	.2041)	(.0528	.2329)
12	79	(.0731	.1880)	(.0655	.2019)	(.0521	.2305)
12	80	(.0723	.1860)	(.0648	.1998)	(.0515	.2281)
12	81	(.0715	.1840)	(.0640	.1977)	(.0510	.2258)
12	82	(.0707	.1821)	(.0633	.1957)	(.0504	.2235)
12	83	(.0699	.1802)	(.0626	.1937)	(.0498	.2213)
12	84	(.0692	.1784)	(.0619	.1917)	(.0493	.2191)
12	85	(.0684	.1766)	(.0613	.1898)	(.0487	.2169)
12	86	(.0677	.1748)	(.0606	.1879)	(.0482	.2148)
12	87	(.0670	.1731)	(.0600	.1861)	(.0477	.2127)
12	88	(.0663	.1714)	(.0593	.1843)	(.0472	.2107)
12	89	(.0656	.1697)	(.0587	.1825)	(.0467	.2087)
12	90	(.0649	.1681)	(.0581	.1807)	(.0462	.2067)
12	91	(.0643	.1665)	(.0575	.1790)	(.0457	.2048)
12	92	(.0636	.1649)	(.0570	.1774)	(.0453	.2029)
12	93	(.0630	.1634)	(.0564	.1757)	(.0448	.2011)
12	94	(.0624	.1619)	(.0558	.1741)	(.0444	.1993)
12	95	(.0618	.1604)	(.0553	.1725)	(.0440	.1975)
12	96	(.0612	.1589)	(.0548	.1710)	(.0435	.1957)
12	97	(.0606	.1575)	(.0542	.1694)	(.0431	.1940)
12	98	(.0601	.1561)	(.0537	.1679)	(.0427	.1923)
12	99	(.0595	.1547)	(.0532	.1664)	(.0423	.1906)
12	100	(.0589	.1533)	(.0527	.1650)	(.0419	.1890)

ro	yo	90%		95%		99%	
13	0	(.8377	1.0000)	(.7942	1.0000)	(.7017	1.0000)
13	1	(.7493	1.0000)	(.7033	1.0000)	(.6109	1.0000)
13	2	(.6786	.9919)	(.6343	.9955)	(.5463	.9989)
13	3	(.6156	.9623)	(.5742	.9729)	(.4928	.9871)
13	4	(.5637	.9266)	(.5244	.9423)	(.4481	.9661)
13	5	(.5204	.8902)	(.4829	.9096)	(.4109	.9408)
13	6	(.4836	.8548)	(.4478	.8770)	(.3795	.9138)
13	7	(.4519	.8211)	(.4176	.8453)	(.3526	.8865)
13	8	(.4243	.7893)	(.3913	.8149)	(.3294	.8596)
13	9	(.3999	.7594)	(.3683	.7861)	(.3091	.8334)
13	10	(.3783	.7314)	(.3479	.7589)	(.2912	.8081)
13	11	(.3589	.7052)	(.3296	.7332)	(.2753	.7839)
13	12	(.3415	.6807)	(.3133	.7090)	(.2611	.7607)
13	13	(.3257	.6576)	(.2984	.6861)	(.2482	.7386)
13	14	(.3113	.6360)	(.2850	.6645)	(.2366	.7176)
13	15	(.2981	.6157)	(.2727	.6442)	(.2261	.6975)
13	16	(.2861	.5966)	(.2615	.6250)	(.2164	.6784)
13	17	(.2750	.5785)	(.2511	.6068)	(.2076	.6603)
13	18	(.2647	.5616)	(.2415	.5896)	(.1994	.6430)
13	19	(.2551	.5455)	(.2327	.5734)	(.1919	.6265)
13	20	(.2463	.5303)	(.2245	.5579)	(.1849	.6108)
13	21	(.2380	.5159)	(.2168	.5432)	(.1784	.5958)
13	22	(.2303	.5023)	(.2097	.5293)	(.1723	.5814)
13	23	(.2231	.4893)	(.2030	.5161)	(.1667	.5678)
13	24	(.2163	.4770)	(.1967	.5034)	(.1614	.5547)
13	25	(.2099	.4653)	(.1908	.4914)	(.1564	.5422)
13	26	(.2039	.4541)	(.1853	.4799)	(.1518	.5302)
13	27	(.1982	.4434)	(.1800	.4689)	(.1474	.5187)
13	28	(.1928	.4333)	(.1751	.4584)	(.1432	.5077)
13	29	(.1877	.4235)	(.1704	.4484)	(.1393	.4971)
13	30	(.1829	.4142)	(.1660	.4387)	(.1356	.4869)
13	31	(.1783	.4053)	(.1618	.4295)	(.1321	.4772)
13	32	(.1739	.3968)	(.1578	.4207)	(.1287	.4678)
13	33	(.1698	.3886)	(.1540	.4122)	(.1256	.4587)
13	34	(.1658	.3807)	(.1503	.4040)	(.1225	.4500)
13	35	(.1621	.3732)	(.1469	.3962)	(.1197	.4417)
13	36	(.1585	.3659)	(.1436	.3886)	(.1169	.4336)

ro	yo	90%		95%		99%	
13	37	(.1550	.3589)	(.1404	.3813)	(.1143	.4258)
13	38	(.1517	.3522)	(.1374	.3743)	(.1118	.4183)
13	39	(.1485	.3457)	(.1345	.3676)	(.1094	.4110)
13	40	(.1455	.3395)	(.1317	.3610)	(.1071	.4040)
13	41	(.1426	.3335)	(.1290	.3547)	(.1049	.3972)
13	42	(.1398	.3276)	(.1265	.3487)	(.1028	.3906)
13	43	(.1371	.3220)	(.1240	.3428)	(.1007	.3843)
13	44	(.1345	.3166)	(.1217	.3371)	(.0988	.3781)
13	45	(.1320	.3113)	(.1194	.3316)	(.0969	.3721)
13	46	(.1296	.3063)	(.1172	.3263)	(.0951	.3663)
13	47	(.1273	.3013)	(.1151	.3211)	(.0934	.3607)
13	48	(.1251	.2966)	(.1131	.3161)	(.0917	.3553)
13	49	(.1229	.2920)	(.1111	.3112)	(.0901	.3500)
13	50	(.1208	.2875)	(.1092	.3065)	(.0885	.3449)
13	51	(.1188	.2832)	(.1074	.3020)	(.0870	.3399)
13	52	(.1169	.2789)	(.1056	.2976)	(.0855	.3351)
13	53	(.1150	.2748)	(.1039	.2933)	(.0841	.3304)
13	54	(.1132	.2709)	(.1022	.2891)	(.0828	.3258)
13	55	(.1114	.2670)	(.1006	.2850)	(.0814	.3213)
13	56	(.1097	.2633)	(.0990	.2811)	(.0802	.3170)
13	57	(.1080	.2596)	(.0975	.2772)	(.0789	.3128)
13	58	(.1064	.2561)	(.0961	.2735)	(.0777	.3087)
13	59	(.1048	.2526)	(.0946	.2698)	(.0765	.3047)
13	60	(.1033	.2493)	(.0933	.2663)	(.0754	.3008)
13	61	(.1018	.2460)	(.0919	.2628)	(.0743	.2970)
13	62	(.1004	.2428)	(.0906	.2595)	(.0732	.2933)
13	63	(.0990	.2397)	(.0893	.2562)	(.0722	.2896)
13	64	(.0977	.2367)	(.0881	.2530)	(.0712	.2861)
13	65	(.0963	.2337)	(.0869	.2499)	(.0702	.2827)
13	66	(.0951	.2308)	(.0857	.2468)	(.0693	.2793)
13	67	(.0938	.2280)	(.0846	.2438)	(.0683	.2760)
13	68	(.0926	.2253)	(.0835	.2409)	(.0674	.2728)
13	69	(.0914	.2226)	(.0824	.2381)	(.0666	.2697)
13	70	(.0903	.2200)	(.0814	.2353)	(.0657	.2666)
13	71	(.0891	.2174)	(.0804	.2326)	(.0649	.2636)
13	72	(.0880	.2149)	(.0794	.2300)	(.0641	.2607)
13	73	(.0870	.2125)	(.0784	.2274)	(.0633	.2578)

ro	yo	90%		95%		99%	
13	74	(.0859	.2101)	(.0774	.2249)	(.0625	.2550)
13	75	(.0849	.2078)	(.0765	.2224)	(.0617	.2523)
13	76	(.0839	.2055)	(.0756	.2200)	(.0610	.2496)
13	77	(.0829	.2033)	(.0747	.2176)	(.0603	.2469)
13	78	(.0820	.2011)	(.0739	.2153)	(.0596	.2444)
13	79	(.0810	.1989)	(.0730	.2130)	(.0589	.2418)
13	80	(.0801	.1968)	(.0722	.2108)	(.0582	.2394)
13	81	(.0792	.1948)	(.0714	.2087)	(.0575	.2370)
13	82	(.0784	.1928)	(.0706	.2065)	(.0569	.2346)
13	83	(.0775	.1908)	(.0698	.2044)	(.0563	.2323)
13	84	(.0767	.1889)	(.0691	.2024)	(.0557	.2300)
13	85	(.0759	.1870)	(.0683	.2004)	(.0551	.2277)
13	86	(.0751	.1852)	(.0676	.1984)	(.0545	.2255)
13	87	(.0743	.1833)	(.0669	.1965)	(.0539	.2234)
13	88	(.0735	.1816)	(.0662	.1946)	(.0533	.2213)
13	89	(.0728	.1798)	(.0655	.1927)	(.0528	.2192)
13	90	(.0720	.1781)	(.0649	.1909)	(.0522	.2172)
13	91	(.0713	.1764)	(.0642	.1891)	(.0517	.2152)
13	92	(.0706	.1748)	(.0636	.1874)	(.0512	.2132)
13	93	(.0699	.1732)	(.0629	.1857)	(.0507	.2113)
13	94	(.0692	.1716)	(.0623	.1840)	(.0502	.2094)
13	95	(.0686	.1700)	(.0617	.1823)	(.0497	.2076)
13	96	(.0679	.1685)	(.0611	.1807)	(.0492	.2057)
13	97	(.0673	.1670)	(.0606	.1791)	(.0487	.2039)
13	98	(.0666	.1655)	(.0600	.1775)	(.0483	.2022)
13	99	(.0660	.1641)	(.0594	.1760)	(.0478	.2004)
13	100	(.0654	.1626)	(.0589	.1745)	(.0474	.1987)

ro	yo	90%		95%		99%	
14	0	(.8483	1.0000)	(.8074	1.0000)	(.7197	1.0000)
14	1	(.7644	1.0000)	(.7206	1.0000)	(.6321	1.0000)
14	2	(.6967	.9926)	(.6541	.9959)	(.5690	.9990)
14	3	(.6360	.9653)	(.5959	.9751)	(.5164	.9882)
14	4	(.5855	.9319)	(.5471	.9466)	(.4722	.9687)
14	5	(.5429	.8976)	(.5061	.9159)	(.4351	.9450)
14	6	(.5065	.8640)	(.4712	.8850)	(.4035	.9196)
14	7	(.4749	.8319)	(.4409	.8548)	(.3763	.8937)
14	8	(.4472	.8014)	(.4145	.8257)	(.3526	.8681)
14	9	(.4226	.7726)	(.3912	.7980)	(.3318	.8430)
14	10	(.4007	.7454)	(.3704	.7717)	(.3134	.8187)
14	11	(.3810	.7199)	(.3517	.7468)	(.2970	.7953)
14	12	(.3632	.6960)	(.3349	.7232)	(.2822	.7728)
14	13	(.3470	.6734)	(.3196	.7009)	(.2688	.7514)
14	14	(.3322	.6522)	(.3057	.6798)	(.2567	.7309)
14	15	(.3187	.6321)	(.2930	.6598)	(.2456	.7113)
14	16	(.3062	.6132)	(.2813	.6408)	(.2354	.6926)
14	17	(.2947	.5954)	(.2705	.6229)	(.2261	.6747)
14	18	(.2840	.5785)	(.2605	.6059)	(.2175	.6577)
14	19	(.2741	.5625)	(.2513	.5897)	(.2095	.6414)
14	20	(.2648	.5474)	(.2426	.5744)	(.2021	.6259)
14	21	(.2562	.5330)	(.2346	.5598)	(.1952	.6110)
14	22	(.2481	.5194)	(.2271	.5459)	(.1887	.5968)
14	23	(.2405	.5064)	(.2200	.5326)	(.1827	.5832)
14	24	(.2334	.4940)	(.2134	.5200)	(.1771	.5702)
14	25	(.2266	.4822)	(.2071	.5079)	(.1717	.5577)
14	26	(.2203	.4709)	(.2013	.4963)	(.1667	.5457)
14	27	(.2143	.4602)	(.1957	.4853)	(.1620	.5342)
14	28	(.2086	.4499)	(.1904	.4747)	(.1576	.5232)
14	29	(.2032	.4401)	(.1855	.4646)	(.1533	.5126)
14	30	(.1981	.4307)	(.1807	.4549)	(.1493	.5024)
14	31	(.1933	.4216)	(.1763	.4456)	(.1456	.4926)
14	32	(.1886	.4130)	(.1720	.4366)	(.1419	.4831)
14	33	(.1842	.4046)	(.1679	.4280)	(.1385	.4740)
14	34	(.1800	.3966)	(.1640	.4197)	(.1352	.4653)
14	35	(.1760	.3890)	(.1603	.4118)	(.1321	.4568)
14	36	(.1722	.3816)	(.1568	.4041)	(.1292	.4486)

ro	yo	90%		95%		99%	
14	37	(.1685	.3744)	(.1534	.3967)	(.1263	.4408)
14	38	(.1649	.3676)	(.1502	.3896)	(.1236	.4331)
14	39	(.1616	.3610)	(.1471	.3827)	(.1210	.4258)
14	40	(.1583	.3546)	(.1441	.3760)	(.1185	.4187)
14	41	(.1552	.3484)	(.1412	.3696)	(.1161	.4118)
14	42	(.1522	.3424)	(.1385	.3634)	(.1138	.4051)
14	43	(.1493	.3367)	(.1358	.3574)	(.1116	.3986)
14	44	(.1466	.3311)	(.1333	.3516)	(.1094	.3924)
14	45	(.1439	.3257)	(.1308	.3459)	(.1074	.3863)
14	46	(.1413	.3205)	(.1285	.3405)	(.1054	.3804)
14	47	(.1388	.3155)	(.1262	.3352)	(.1035	.3747)
14	48	(.1364	.3106)	(.1240	.3301)	(.1017	.3692)
14	49	(.1341	.3058)	(.1218	.3251)	(.0999	.3638)
14	50	(.1319	.3012)	(.1198	.3203)	(.0982	.3585)
14	51	(.1297	.2967)	(.1178	.3156)	(.0966	.3535)
14	52	(.1276	.2924)	(.1159	.3110)	(.0950	.3485)
14	53	(.1256	.2882)	(.1140	.3066)	(.0934	.3437)
14	54	(.1236	.2841)	(.1122	.3023)	(.0919	.3390)
14	55	(.1217	.2801)	(.1105	.2981)	(.0905	.3345)
14	56	(.1199	.2762)	(.1088	.2941)	(.0891	.3300)
14	57	(.1181	.2725)	(.1072	.2901)	(.0877	.3257)
14	58	(.1163	.2688)	(.1056	.2863)	(.0864	.3215)
14	59	(.1146	.2652)	(.1040	.2825)	(.0851	.3174)
14	60	(.1130	.2617)	(.1025	.2789)	(.0839	.3134)
14	61	(.1114	.2584)	(.1011	.2753)	(.0827	.3095)
14	62	(.1099	.2551)	(.0997	.2718)	(.0815	.3057)
14	63	(.1084	.2518)	(.0983	.2684)	(.0803	.3020)
14	64	(.1069	.2487)	(.0969	.2651)	(.0792	.2983)
14	65	(.1055	.2456)	(.0956	.2619)	(.0782	.2948)
14	66	(.1041	.2427)	(.0944	.2588)	(.0771	.2913)
14	67	(.1027	.2397)	(.0931	.2557)	(.0761	.2880)
14	68	(.1014	.2369)	(.0919	.2527)	(.0751	.2847)
14	69	(.1001	.2341)	(.0908	.2497)	(.0741	.2814)
14	70	(.0989	.2314)	(.0896	.2469)	(.0732	.2783)
14	71	(.0976	.2288)	(.0885	.2441)	(.0723	.2752)
14	72	(.0964	.2262)	(.0874	.2413)	(.0714	.2722)
14	73	(.0953	.2236)	(.0864	.2387)	(.0705	.2692)

ro	yo	90%		95%		99%	
14	74	(.0942	.2211)	(.0853	.2361)	(.0696	.2663)
14	75	(.0930	.2187)	(.0843	.2335)	(.0688	.2635)
14	76	(.0920	.2164)	(.0833	.2310)	(.0680	.2607)
14	77	(.0909	.2140)	(.0824	.2285)	(.0672	.2580)
14	78	(.0899	.2118)	(.0814	.2261)	(.0664	.2554)
14	79	(.0889	.2095)	(.0805	.2238)	(.0656	.2528)
14	80	(.0879	.2074)	(.0796	.2215)	(.0649	.2502)
14	81	(.0869	.2052)	(.0787	.2192)	(.0642	.2477)
14	82	(.0860	.2031)	(.0779	.2170)	(.0635	.2453)
14	83	(.0850	.2011)	(.0770	.2148)	(.0628	.2429)
14	84	(.0841	.1991)	(.0762	.2127)	(.0621	.2405)
14	85	(.0832	.1971)	(.0754	.2106)	(.0614	.2382)
14	86	(.0824	.1952)	(.0746	.2086)	(.0608	.2359)
14	87	(.0815	.1933)	(.0738	.2066)	(.0601	.2337)
14	88	(.0807	.1914)	(.0731	.2046)	(.0595	.2315)
14	89	(.0799	.1896)	(.0723	.2027)	(.0589	.2294)
14	90	(.0791	.1878)	(.0716	.2008)	(.0583	.2273)
14	91	(.0783	.1861)	(.0709	.1989)	(.0577	.2252)
14	92	(.0775	.1844)	(.0702	.1971)	(.0572	.2232)
14	93	(.0768	.1827)	(.0695	.1953)	(.0566	.2212)
14	94	(.0760	.1810)	(.0688	.1936)	(.0560	.2192)
14	95	(.0753	.1794)	(.0682	.1918)	(.0555	.2173)
14	96	(.0746	.1778)	(.0675	.1901)	(.0550	.2154)
14	97	(.0739	.1762)	(.0669	.1885)	(.0544	.2136)
14	98	(.0732	.1747)	(.0663	.1868)	(.0539	.2117)
14	99	(.0725	.1731)	(.0656	.1852)	(.0534	.2099)
14	100	(.0719	.1717)	(.0650	.1836)	(.0529	.2082)

ro	yo	90%		95%		99%	
15	0	(.8577	1.0000)	(.8190	1.0000)	(.7356	1.0000)
15	1	(.7778	1.0000)	(.7360	1.0000)	(.6512	1.0000)
15	2	(.7129	.9933)	(.6720	.9963)	(.5896	.9991)
15	3	(.6543	.9679)	(.6155	.9770)	(.5381	.9892)
15	4	(.6052	.9366)	(.5678	.9503)	(.4944	.9710)
15	5	(.5634	.9041)	(.5274	.9213)	(.4574	.9487)
15	6	(.5275	.8722)	(.4928	.8920)	(.4258	.9247)
15	7	(.4961	.8414)	(.4626	.8632)	(.3984	.9001)
15	8	(.4684	.8121)	(.4360	.8354)	(.3744	.8756)
15	9	(.4437	.7843)	(.4125	.8087)	(.3533	.8515)
15	10	(.4217	.7581)	(.3914	.7832)	(.3344	.8281)
15	11	(.4017	.7333)	(.3725	.7591)	(.3175	.8056)
15	12	(.3836	.7099)	(.3553	.7361)	(.3023	.7838)
15	13	(.3671	.6878)	(.3397	.7143)	(.2885	.7630)
15	14	(.3520	.6669)	(.3254	.6936)	(.2759	.7430)
15	15	(.3381	.6472)	(.3123	.6740)	(.2643	.7238)
15	16	(.3253	.6286)	(.3002	.6554)	(.2537	.7055)
15	17	(.3134	.6109)	(.2891	.6377)	(.2440	.6880)
15	18	(.3024	.5942)	(.2787	.6209)	(.2350	.6712)
15	19	(.2921	.5783)	(.2691	.6049)	(.2266	.6552)
15	20	(.2826	.5633)	(.2601	.5896)	(.2188	.6398)
15	21	(.2736	.5489)	(.2517	.5751)	(.2115	.6251)
15	22	(.2652	.5353)	(.2438	.5613)	(.2047	.6111)
15	23	(.2573	.5223)	(.2364	.5480)	(.1983	.5975)
15	24	(.2498	.5099)	(.2295	.5354)	(.1923	.5846)
15	25	(.2428	.4980)	(.2229	.5233)	(.1867	.5722)
15	26	(.2361	.4867)	(.2168	.5118)	(.1814	.5602)
15	27	(.2299	.4759)	(.2109	.5007)	(.1763	.5487)
15	28	(.2239	.4656)	(.2054	.4901)	(.1716	.5377)
15	29	(.2183	.4556)	(.2001	.4799)	(.1671	.5271)
15	30	(.2129	.4461)	(.1951	.4701)	(.1628	.5169)
15	31	(.2078	.4370)	(.1904	.4607)	(.1588	.5070)
15	32	(.2029	.4282)	(.1859	.4517)	(.1549	.4976)
15	33	(.1982	.4198)	(.1816	.4430)	(.1513	.4884)
15	34	(.1938	.4117)	(.1774	.4346)	(.1478	.4796)
15	35	(.1896	.4039)	(.1735	.4265)	(.1444	.4711)
15	36	(.1855	.3964)	(.1697	.4187)	(.1412	.4628)

ro	yo	90%		95%		99%	
15	37	(.1816	.3891)	(.1661	.4112)	(.1382	.4549)
15	38	(.1779	.3822)	(.1627	.4040)	(.1352	.4472)
15	39	(.1743	.3754)	(.1594	.3970)	(.1324	.4398)
15	40	(.1709	.3689)	(.1562	.3903)	(.1297	.4326)
15	41	(.1676	.3626)	(.1532	.3837)	(.1272	.4256)
15	42	(.1644	.3565)	(.1502	.3774)	(.1247	.4188)
15	43	(.1613	.3507)	(.1474	.3713)	(.1223	.4123)
15	44	(.1584	.3450)	(.1447	.3654)	(.1200	.4059)
15	45	(.1555	.3395)	(.1421	.3596)	(.1178	.3998)
15	46	(.1528	.3341)	(.1395	.3541)	(.1157	.3938)
15	47	(.1501	.3289)	(.1371	.3487)	(.1136	.3880)
15	48	(.1476	.3239)	(.1347	.3434)	(.1116	.3824)
15	49	(.1451	.3191)	(.1325	.3383)	(.1097	.3769)
15	50	(.1427	.3143)	(.1303	.3334)	(.1078	.3716)
15	51	(.1404	.3097)	(.1281	.3286)	(.1061	.3664)
15	52	(.1382	.3053)	(.1261	.3240)	(.1043	.3613)
15	53	(.1360	.3010)	(.1241	.3194)	(.1027	.3564)
15	54	(.1339	.2968)	(.1222	.3150)	(.1010	.3517)
15	55	(.1319	.2927)	(.1203	.3107)	(.0995	.3470)
15	56	(.1299	.2887)	(.1185	.3066)	(.0979	.3425)
15	57	(.1280	.2848)	(.1167	.3025)	(.0965	.3381)
15	58	(.1261	.2810)	(.1150	.2985)	(.0950	.3338)
15	59	(.1243	.2773)	(.1133	.2947)	(.0936	.3296)
15	60	(.1226	.2738)	(.1117	.2909)	(.0923	.3255)
15	61	(.1209	.2703)	(.1101	.2873)	(.0910	.3215)
15	62	(.1192	.2669)	(.1086	.2837)	(.0897	.3176)
15	63	(.1176	.2636)	(.1071	.2802)	(.0885	.3138)
15	64	(.1160	.2603)	(.1057	.2768)	(.0872	.3101)
15	65	(.1145	.2572)	(.1043	.2735)	(.0861	.3065)
15	66	(.1130	.2541)	(.1029	.2703)	(.0849	.3029)
15	67	(.1115	.2511)	(.1016	.2671)	(.0838	.2995)
15	68	(.1101	.2481)	(.1003	.2640)	(.0827	.2961)
15	69	(.1087	.2453)	(.0990	.2610)	(.0817	.2928)
15	70	(.1074	.2424)	(.0978	.2580)	(.0806	.2895)
15	71	(.1061	.2397)	(.0966	.2551)	(.0796	.2864)
15	72	(.1048	.2370)	(.0954	.2523)	(.0787	.2833)
15	73	(.1035	.2344)	(.0943	.2495)	(.0777	.2802)

ro	yo	90%		95%		99%	
15	74	(.1023	.2318)	(.0932	.2468)	(.0768	.2773)
15	75	(.1011	.2293)	(.0921	.2442)	(.0759	.2744)
15	76	(.1000	.2269)	(.0910	.2416)	(.0750	.2715)
15	77	(.0988	.2245)	(.0900	.2391)	(.0741	.2687)
15	78	(.0977	.2221)	(.0889	.2366)	(.0733	.2660)
15	79	(.0966	.2198)	(.0879	.2342)	(.0724	.2633)
15	80	(.0956	.2175)	(.0870	.2318)	(.0716	.2607)
15	81	(.0945	.2153)	(.0860	.2294)	(.0708	.2581)
15	82	(.0935	.2132)	(.0851	.2272)	(.0701	.2556)
15	83	(.0925	.2110)	(.0842	.2249)	(.0693	.2531)
15	84	(.0915	.2090)	(.0833	.2227)	(.0685	.2507)
15	85	(.0906	.2069)	(.0824	.2206)	(.0678	.2483)
15	86	(.0896	.2049)	(.0815	.2184)	(.0671	.2460)
15	87	(.0887	.2029)	(.0807	.2164)	(.0664	.2437)
15	88	(.0878	.2010)	(.0799	.2143)	(.0657	.2414)
15	89	(.0869	.1991)	(.0791	.2123)	(.0651	.2392)
15	90	(.0861	.1973)	(.0783	.2104)	(.0644	.2370)
15	91	(.0852	.1955)	(.0775	.2084)	(.0638	.2349)
15	92	(.0844	.1937)	(.0768	.2066)	(.0631	.2328)
15	93	(.0836	.1919)	(.0760	.2047)	(.0625	.2308)
15	94	(.0828	.1902)	(.0753	.2029)	(.0619	.2287)
15	95	(.0820	.1885)	(.0746	.2011)	(.0613	.2268)
15	96	(.0813	.1868)	(.0739	.1993)	(.0607	.2248)
15	97	(.0805	.1852)	(.0732	.1976)	(.0602	.2229)
15	98	(.0798	.1836)	(.0725	.1959)	(.0596	.2210)
15	99	(.0790	.1820)	(.0718	.1942)	(.0591	.2192)
15	100	(.0783	.1805)	(.0712	.1926)	(.0585	.2173)

ro	yo	90%		95%		99%	
16	0	(.8660	1.0000)	(.8293	1.0000)	(.7499	1.0000)
16	1	(.7898	1.0000)	(.7499	1.0000)	(.6684	1.0000)
16	2	(.7274	.9938)	(.6880	.9966)	(.6084	.9992)
16	3	(.6709	.9701)	(.6333	.9786)	(.5579	.9900)
16	4	(.6231	.9406)	(.5867	.9536)	(.5149	.9729)
16	5	(.5822	.9099)	(.5470	.9262)	(.4782	.9520)
16	6	(.5468	.8794)	(.5127	.8982)	(.4466	.9292)
16	7	(.5156	.8500)	(.4827	.8707)	(.4191	.9058)
16	8	(.4881	.8218)	(.4561	.8440)	(.3949	.8823)
16	9	(.4634	.7949)	(.4325	.8183)	(.3735	.8592)
16	10	(.4412	.7695)	(.4112	.7937)	(.3543	.8367)
16	11	(.4211	.7454)	(.3920	.7702)	(.3370	.8149)
16	12	(.4028	.7225)	(.3746	.7479)	(.3214	.7938)
16	13	(.3861	.7009)	(.3587	.7266)	(.3072	.7735)
16	14	(.3707	.6805)	(.3441	.7064)	(.2942	.7540)
16	15	(.3566	.6611)	(.3307	.6871)	(.2823	.7353)
16	16	(.3435	.6427)	(.3183	.6688)	(.2713	.7174)
16	17	(.3313	.6253)	(.3068	.6514)	(.2612	.7002)
16	18	(.3200	.6087)	(.2961	.6347)	(.2518	.6837)
16	19	(.3094	.5930)	(.2862	.6189)	(.2431	.6679)
16	20	(.2995	.5780)	(.2769	.6038)	(.2349	.6528)
16	21	(.2903	.5638)	(.2682	.5894)	(.2273	.6382)
16	22	(.2816	.5502)	(.2600	.5756)	(.2202	.6243)
16	23	(.2734	.5372)	(.2523	.5625)	(.2135	.6109)
16	24	(.2657	.5248)	(.2451	.5498)	(.2072	.5980)
16	25	(.2584	.5129)	(.2382	.5378)	(.2012	.5857)
16	26	(.2515	.5016)	(.2318	.5262)	(.1956	.5738)
16	27	(.2449	.4907)	(.2257	.5151)	(.1903	.5624)
16	28	(.2387	.4803)	(.2199	.5045)	(.1853	.5513)
16	29	(.2328	.4703)	(.2144	.4943)	(.1806	.5407)
16	30	(.2272	.4608)	(.2091	.4844)	(.1761	.5305)
16	31	(.2219	.4516)	(.2041	.4750)	(.1718	.5207)
16	32	(.2168	.4427)	(.1994	.4659)	(.1677	.5112)
16	33	(.2119	.4342)	(.1948	.4571)	(.1638	.5020)
16	34	(.2072	.4260)	(.1905	.4487)	(.1601	.4931)
16	35	(.2028	.4181)	(.1864	.4405)	(.1565	.4846)
16	36	(.1985	.4105)	(.1824	.4327)	(.1531	.4763)

ro	yo	90%		95%		99%	
16	37	(.1944	.4031)	(.1786	.4251)	(.1498	.4683)
16	38	(.1905	.3961)	(.1750	.4177)	(.1467	.4605)
16	39	(.1867	.3892)	(.1715	.4107)	(.1437	.4530)
16	40	(.1831	.3826)	(.1681	.4038)	(.1409	.4458)
16	41	(.1796	.3762)	(.1649	.3972)	(.1381	.4387)
16	42	(.1763	.3700)	(.1618	.3908)	(.1354	.4319)
16	43	(.1730	.3640)	(.1588	.3846)	(.1329	.4253)
16	44	(.1699	.3582)	(.1559	.3785)	(.1304	.4189)
16	45	(.1669	.3526)	(.1531	.3727)	(.1281	.4126)
16	46	(.1640	.3472)	(.1504	.3670)	(.1258	.4066)
16	47	(.1612	.3419)	(.1478	.3615)	(.1236	.4007)
16	48	(.1585	.3367)	(.1453	.3562)	(.1215	.3950)
16	49	(.1559	.3318)	(.1429	.3510)	(.1194	.3894)
16	50	(.1534	.3269)	(.1406	.3460)	(.1174	.3840)
16	51	(.1509	.3222)	(.1383	.3411)	(.1155	.3788)
16	52	(.1486	.3177)	(.1361	.3363)	(.1136	.3736)
16	53	(.1463	.3133)	(.1340	.3317)	(.1118	.3686)
16	54	(.1440	.3089)	(.1319	.3272)	(.1101	.3638)
16	55	(.1419	.3047)	(.1299	.3228)	(.1084	.3591)
16	56	(.1398	.3007)	(.1280	.3186)	(.1068	.3545)
16	57	(.1377	.2967)	(.1261	.3144)	(.1052	.3500)
16	58	(.1358	.2928)	(.1243	.3104)	(.1036	.3456)
16	59	(.1338	.2890)	(.1225	.3064)	(.1021	.3413)
16	60	(.1320	.2854)	(.1208	.3026)	(.1007	.3371)
16	61	(.1302	.2818)	(.1191	.2988)	(.0993	.3331)
16	62	(.1284	.2783)	(.1175	.2951)	(.0979	.3291)
16	63	(.1267	.2749)	(.1159	.2916)	(.0965	.3252)
16	64	(.1250	.2715)	(.1144	.2881)	(.0952	.3214)
16	65	(.1234	.2683)	(.1129	.2847)	(.0940	.3177)
16	66	(.1218	.2651)	(.1114	.2814)	(.0927	.3141)
16	67	(.1202	.2620)	(.1100	.2781)	(.0915	.3105)
16	68	(.1187	.2590)	(.1086	.2749)	(.0904	.3071)
16	69	(.1173	.2560)	(.1072	.2718)	(.0892	.3037)
16	70	(.1158	.2531)	(.1059	.2688)	(.0881	.3004)
16	71	(.1144	.2503)	(.1046	.2658)	(.0870	.2971)
16	72	(.1131	.2475)	(.1034	.2629)	(.0860	.2940)
16	73	(.1117	.2448)	(.1021	.2601)	(.0849	.2909)

ro	yo	90%		95%		99%	
16	74	(.1104	.2422)	(.1009	.2573)	(.0839	.2878)
16	75	(.1091	.2396)	(.0998	.2546)	(.0829	.2848)
16	76	(.1079	.2371)	(.0986	.2519)	(.0820	.2819)
16	77	(.1067	.2346)	(.0975	.2493)	(.0810	.2791)
16	78	(.1055	.2321)	(.0964	.2467)	(.0801	.2762)
16	79	(.1043	.2298)	(.0953	.2442)	(.0792	.2735)
16	80	(.1032	.2274)	(.0943	.2418)	(.0783	.2708)
16	81	(.1021	.2251)	(.0933	.2394)	(.0775	.2682)
16	82	(.1010	.2229)	(.0923	.2370)	(.0766	.2656)
16	83	(.0999	.2207)	(.0913	.2347)	(.0758	.2630)
16	84	(.0989	.2186)	(.0903	.2324)	(.0750	.2605)
16	85	(.0979	.2164)	(.0894	.2302)	(.0742	.2581)
16	86	(.0969	.2144)	(.0885	.2280)	(.0734	.2557)
16	87	(.0959	.2123)	(.0876	.2259)	(.0727	.2533)
16	88	(.0949	.2103)	(.0867	.2238)	(.0720	.2510)
16	89	(.0940	.2084)	(.0858	.2217)	(.0712	.2488)
16	90	(.0930	.2065)	(.0850	.2197)	(.0705	.2465)
16	91	(.0921	.2046)	(.0841	.2177)	(.0698	.2443)
16	92	(.0913	.2027)	(.0833	.2157)	(.0691	.2422)
16	93	(.0904	.2009)	(.0825	.2138)	(.0685	.2401)
16	94	(.0895	.1991)	(.0817	.2119)	(.0678	.2380)
16	95	(.0887	.1974)	(.0810	.2101)	(.0672	.2359)
16	96	(.0879	.1956)	(.0802	.2082)	(.0665	.2339)
16	97	(.0871	.1939)	(.0795	.2065)	(.0659	.2319)
16	98	(.0863	.1923)	(.0787	.2047)	(.0653	.2300)
16	99	(.0855	.1906)	(.0780	.2030)	(.0647	.2281)
16	100	(.0847	.1890)	(.0773	.2013)	(.0641	.2262)

ro	yo	90%		95%		99%	
17	0	(.8733	1.0000)	(.8384	1.0000)	(.7627	1.0000)
17	1	(.8005	1.0000)	(.7623	1.0000)	(.6840	1.0000)
17	2	(.7406	.9943)	(.7026	.9969)	(.6256	.9993)
17	3	(.6860	.9720)	(.6495	.9801)	(.5761	.9907)
17	4	(.6395	.9442)	(.6041	.9564)	(.5338	.9747)
17	5	(.5994	.9150)	(.5650	.9304)	(.4975	.9549)
17	6	(.5645	.8859)	(.5311	.9038)	(.4660	.9332)
17	7	(.5338	.8577)	(.5013	.8774)	(.4385	.9108)
17	8	(.5064	.8305)	(.4749	.8517)	(.4142	.8884)
17	9	(.4818	.8046)	(.4512	.8269)	(.3925	.8662)
17	10	(.4596	.7799)	(.4298	.8031)	(.3731	.8444)
17	11	(.4394	.7564)	(.4105	.7804)	(.3555	.8233)
17	12	(.4209	.7342)	(.3928	.7586)	(.3396	.8029)
17	13	(.4040	.7130)	(.3767	.7378)	(.3251	.7831)
17	14	(.3885	.6930)	(.3619	.7181)	(.3118	.7642)
17	15	(.3741	.6739)	(.3482	.6992)	(.2995	.7459)
17	16	(.3607	.6558)	(.3355	.6812)	(.2882	.7283)
17	17	(.3483	.6386)	(.3237	.6640)	(.2778	.7115)
17	18	(.3367	.6223)	(.3128	.6476)	(.2680	.6953)
17	19	(.3259	.6067)	(.3025	.6320)	(.2590	.6797)
17	20	(.3158	.5918)	(.2930	.6170)	(.2505	.6648)
17	21	(.3063	.5776)	(.2840	.6027)	(.2426	.6504)
17	22	(.2973	.5641)	(.2755	.5890)	(.2352	.6366)
17	23	(.2889	.5511)	(.2676	.5759)	(.2282	.6234)
17	24	(.2809	.5388)	(.2601	.5634)	(.2216	.6106)
17	25	(.2734	.5269)	(.2530	.5514)	(.2154	.5983)
17	26	(.2662	.5156)	(.2463	.5398)	(.2095	.5865)
17	27	(.2595	.5047)	(.2400	.5287)	(.2040	.5751)
17	28	(.2530	.4943)	(.2339	.5181)	(.1987	.5642)
17	29	(.2469	.4842)	(.2282	.5078)	(.1937	.5536)
17	30	(.2411	.4746)	(.2227	.4980)	(.1890	.5434)
17	31	(.2355	.4653)	(.2175	.4885)	(.1845	.5335)
17	32	(.2302	.4564)	(.2126	.4793)	(.1802	.5240)
17	33	(.2251	.4478)	(.2078	.4705)	(.1760	.5148)
17	34	(.2203	.4396)	(.2033	.4620)	(.1721	.5059)
17	35	(.2156	.4316)	(.1989	.4538)	(.1684	.4974)
17	36	(.2112	.4239)	(.1948	.4459)	(.1648	.4890)

ro	yo	90%		95%		99%	
17	37	(.2069	.4165)	(.1908	.4382)	(.1613	.4810)
17	38	(.2028	.4093)	(.1870	.4308)	(.1580	.4732)
17	39	(.1989	.4024)	(.1833	.4237)	(.1549	.4657)
17	40	(.1951	.3957)	(.1798	.4167)	(.1518	.4583)
17	41	(.1914	.3892)	(.1764	.4100)	(.1489	.4512)
17	42	(.1879	.3829)	(.1731	.4035)	(.1461	.4444)
17	43	(.1845	.3768)	(.1699	.3972)	(.1434	.4377)
17	44	(.1813	.3709)	(.1669	.3911)	(.1407	.4312)
17	45	(.1781	.3652)	(.1640	.3852)	(.1382	.4249)
17	46	(.1751	.3596)	(.1611	.3795)	(.1358	.4188)
17	47	(.1721	.3543)	(.1584	.3739)	(.1335	.4128)
17	48	(.1693	.3490)	(.1558	.3685)	(.1312	.4070)
17	49	(.1665	.3440)	(.1532	.3632)	(.1290	.4014)
17	50	(.1638	.3391)	(.1507	.3581)	(.1269	.3959)
17	51	(.1613	.3343)	(.1483	.3531)	(.1248	.3906)
17	52	(.1588	.3296)	(.1460	.3482)	(.1229	.3854)
17	53	(.1563	.3251)	(.1438	.3435)	(.1209	.3803)
17	54	(.1540	.3207)	(.1416	.3389)	(.1191	.3754)
17	55	(.1517	.3164)	(.1395	.3345)	(.1173	.3706)
17	56	(.1495	.3122)	(.1374	.3301)	(.1155	.3659)
17	57	(.1474	.3081)	(.1354	.3259)	(.1138	.3614)
17	58	(.1453	.3042)	(.1335	.3217)	(.1122	.3569)
17	59	(.1432	.3003)	(.1316	.3177)	(.1106	.3526)
17	60	(.1413	.2966)	(.1298	.3138)	(.1090	.3483)
17	61	(.1393	.2929)	(.1280	.3099)	(.1075	.3442)
17	62	(.1375	.2893)	(.1263	.3062)	(.1060	.3401)
17	63	(.1356	.2858)	(.1246	.3025)	(.1046	.3362)
17	64	(.1339	.2824)	(.1229	.2990)	(.1032	.3323)
17	65	(.1322	.2790)	(.1213	.2955)	(.1018	.3285)
17	66	(.1305	.2758)	(.1198	.2921)	(.1005	.3248)
17	67	(.1288	.2726)	(.1183	.2887)	(.0992	.3212)
17	68	(.1272	.2695)	(.1168	.2855)	(.0980	.3177)
17	69	(.1257	.2665)	(.1154	.2823)	(.0967	.3142)
17	70	(.1241	.2635)	(.1140	.2792)	(.0955	.3108)
17	71	(.1227	.2606)	(.1126	.2761)	(.0944	.3075)
17	72	(.1212	.2577)	(.1112	.2732)	(.0932	.3043)
17	73	(.1198	.2550)	(.1099	.2703)	(.0921	.3011)

ro	yo	90%		95%		99%	
17	74	(.1184	.2522)	(.1087	.2674)	(.0910	.2980)
17	75	(.1171	.2496)	(.1074	.2646)	(.0900	.2950)
17	76	(.1157	.2470)	(.1062	.2619)	(.0890	.2920)
17	77	(.1144	.2444)	(.1050	.2592)	(.0879	.2890)
17	78	(.1132	.2419)	(.1038	.2566)	(.0870	.2862)
17	79	(.1119	.2394)	(.1027	.2540)	(.0860	.2834)
17	80	(.1107	.2370)	(.1016	.2515)	(.0850	.2806)
17	81	(.1096	.2347)	(.1005	.2490)	(.0841	.2779)
17	82	(.1084	.2324)	(.0994	.2466)	(.0832	.2752)
17	83	(.1073	.2301)	(.0984	.2442)	(.0823	.2726)
17	84	(.1062	.2279)	(.0973	.2418)	(.0815	.2701)
17	85	(.1051	.2257)	(.0963	.2395)	(.0806	.2676)
17	86	(.1040	.2236)	(.0954	.2373)	(.0798	.2651)
17	87	(.1030	.2215)	(.0944	.2351)	(.0790	.2627)
17	88	(.1019	.2194)	(.0934	.2329)	(.0782	.2603)
17	89	(.1009	.2174)	(.0925	.2308)	(.0774	.2580)
17	90	(.0999	.2154)	(.0916	.2287)	(.0766	.2557)
17	91	(.0990	.2135)	(.0907	.2267)	(.0759	.2535)
17	92	(.0980	.2115)	(.0899	.2246)	(.0751	.2512)
17	93	(.0971	.2097)	(.0890	.2227)	(.0744	.2491)
17	94	(.0962	.2078)	(.0882	.2207)	(.0737	.2469)
17	95	(.0953	.2060)	(.0873	.2188)	(.0730	.2448)
17	96	(.0944	.2042)	(.0865	.2169)	(.0723	.2428)
17	97	(.0936	.2025)	(.0857	.2151)	(.0717	.2407)
17	98	(.0927	.2007)	(.0850	.2133)	(.0710	.2387)
17	99	(.0919	.1990)	(.0842	.2115)	(.0704	.2368)
17	100	(.0911	.1974)	(.0834	.2097)	(.0697	.2349)

ro	yo	90%		95%		99%	
18	0	(.8799	1.0000)	(.8467	1.0000)	(.7743	1.0000)
18	1	(.8102	1.0000)	(.7736	1.0000)	(.6982	1.0000)
18	2	(.7525	.9947)	(.7159	.9971)	(.6413	.9993)
18	3	(.6998	.9738)	(.6644	.9813)	(.5930	.9913)
18	4	(.6545	.9474)	(.6200	.9590)	(.5513	.9762)
18	5	(.6153	.9195)	(.5817	.9342)	(.5154	.9574)
18	6	(.5810	.8917)	(.5483	.9088)	(.4842	.9368)
18	7	(.5506	.8646)	(.5187	.8835)	(.4567	.9154)
18	8	(.5234	.8384)	(.4924	.8588)	(.4323	.8938)
18	9	(.4990	.8133)	(.4687	.8348)	(.4105	.8724)
18	10	(.4768	.7894)	(.4473	.8118)	(.3909	.8515)
18	11	(.4565	.7666)	(.4279	.7897)	(.3731	.8310)
18	12	(.4380	.7448)	(.4101	.7685)	(.3570	.8112)
18	13	(.4210	.7242)	(.3938	.7482)	(.3422	.7920)
18	14	(.4053	.7045)	(.3787	.7288)	(.3286	.7735)
18	15	(.3907	.6858)	(.3648	.7103)	(.3161	.7556)
18	16	(.3772	.6680)	(.3519	.6927)	(.3045	.7385)
18	17	(.3645	.6510)	(.3399	.6758)	(.2937	.7219)
18	18	(.3528	.6349)	(.3287	.6596)	(.2837	.7060)
18	19	(.3417	.6194)	(.3183	.6442)	(.2744	.6907)
18	20	(.3314	.6047)	(.3084	.6294)	(.2656	.6760)
18	21	(.3216	.5906)	(.2992	.6152)	(.2574	.6618)
18	22	(.3125	.5772)	(.2905	.6016)	(.2497	.6482)
18	23	(.3038	.5643)	(.2824	.5886)	(.2425	.6351)
18	24	(.2956	.5519)	(.2746	.5761)	(.2357	.6224)
18	25	(.2879	.5401)	(.2673	.5641)	(.2292	.6102)
18	26	(.2805	.5288)	(.2604	.5526)	(.2231	.5985)
18	27	(.2735	.5179)	(.2538	.5416)	(.2173	.5872)
18	28	(.2669	.5074)	(.2476	.5309)	(.2118	.5762)
18	29	(.2606	.4974)	(.2416	.5207)	(.2066	.5657)
18	30	(.2545	.4877)	(.2359	.5108)	(.2016	.5555)
18	31	(.2488	.4784)	(.2305	.5013)	(.1969	.5457)
18	32	(.2433	.4695)	(.2254	.4921)	(.1924	.5362)
18	33	(.2380	.4608)	(.2204	.4833)	(.1881	.5270)
18	34	(.2330	.4525)	(.2157	.4747)	(.1839	.5181)
18	35	(.2281	.4445)	(.2112	.4665)	(.1800	.5095)
18	36	(.2235	.4367)	(.2068	.4585)	(.1762	.5012)

ro	yo	90%		95%		99%	
18	37	(.2191	.4292)	(.2027	.4508)	(.1726	.4931)
18	38	(.2148	.4219)	(.1987	.4433)	(.1691	.4853)
18	39	(.2107	.4149)	(.1948	.4361)	(.1658	.4777)
18	40	(.2067	.4081)	(.1912	.4291)	(.1626	.4703)
18	41	(.2029	.4016)	(.1876	.4223)	(.1595	.4632)
18	42	(.1993	.3952)	(.1842	.4157)	(.1565	.4562)
18	43	(.1957	.3890)	(.1809	.4094)	(.1537	.4495)
18	44	(.1923	.3831)	(.1777	.4032)	(.1509	.4430)
18	45	(.1890	.3773)	(.1746	.3972)	(.1483	.4366)
18	46	(.1858	.3716)	(.1716	.3914)	(.1457	.4304)
18	47	(.1828	.3662)	(.1688	.3857)	(.1432	.4244)
18	48	(.1798	.3609)	(.1660	.3802)	(.1408	.4186)
18	49	(.1769	.3557)	(.1633	.3749)	(.1385	.4129)
18	50	(.1741	.3507)	(.1607	.3697)	(.1362	.4073)
18	51	(.1714	.3458)	(.1582	.3646)	(.1341	.4020)
18	52	(.1688	.3411)	(.1557	.3597)	(.1320	.3967)
18	53	(.1662	.3365)	(.1534	.3549)	(.1299	.3916)
18	54	(.1638	.3320)	(.1511	.3502)	(.1280	.3866)
18	55	(.1614	.3276)	(.1489	.3457)	(.1260	.3817)
18	56	(.1591	.3234)	(.1467	.3413)	(.1242	.3770)
18	57	(.1568	.3192)	(.1446	.3369)	(.1224	.3723)
18	58	(.1546	.3152)	(.1425	.3327)	(.1206	.3678)
18	59	(.1525	.3112)	(.1406	.3286)	(.1189	.3634)
18	60	(.1504	.3074)	(.1386	.3246)	(.1173	.3591)
18	61	(.1484	.3036)	(.1368	.3207)	(.1157	.3549)
18	62	(.1464	.2999)	(.1349	.3169)	(.1141	.3508)
18	63	(.1445	.2964)	(.1332	.3131)	(.1126	.3467)
18	64	(.1426	.2929)	(.1314	.3095)	(.1111	.3428)
18	65	(.1408	.2895)	(.1297	.3059)	(.1096	.3390)
18	66	(.1390	.2861)	(.1281	.3024)	(.1082	.3352)
18	67	(.1373	.2829)	(.1265	.2990)	(.1069	.3315)
18	68	(.1356	.2797)	(.1249	.2957)	(.1055	.3279)
18	69	(.1340	.2766)	(.1234	.2925)	(.1042	.3244)
18	70	(.1324	.2735)	(.1219	.2893)	(.1029	.3210)
18	71	(.1308	.2705)	(.1205	.2862)	(.1017	.3176)
18	72	(.1293	.2676)	(.1190	.2831)	(.1005	.3143)
18	73	(.1278	.2648)	(.1176	.2801)	(.0993	.3110)

ro	yo	90%		95%		99%	
18	74	(.1263	.2620)	(.1163	.2772)	(.0981	.3079)
18	75	(.1249	.2592)	(.1150	.2743)	(.0970	.3048)
18	76	(.1235	.2566)	(.1137	.2715)	(.0959	.3017)
18	77	(.1221	.2539)	(.1124	.2688)	(.0948	.2987)
18	78	(.1208	.2514)	(.1112	.2661)	(.0938	.2958)
18	79	(.1195	.2488)	(.1100	.2634)	(.0927	.2929)
18	80	(.1182	.2464)	(.1088	.2609)	(.0917	.2901)
18	81	(.1170	.2439)	(.1076	.2583)	(.0907	.2873)
18	82	(.1157	.2416)	(.1065	.2558)	(.0898	.2846)
18	83	(.1145	.2392)	(.1054	.2534)	(.0888	.2820)
18	84	(.1134	.2370)	(.1043	.2510)	(.0879	.2793)
18	85	(.1122	.2347)	(.1032	.2486)	(.0870	.2768)
18	86	(.1111	.2325)	(.1022	.2463)	(.0861	.2743)
18	87	(.1100	.2304)	(.1012	.2441)	(.0852	.2718)
18	88	(.1089	.2282)	(.1002	.2418)	(.0844	.2694)
18	89	(.1078	.2262)	(.0992	.2397)	(.0835	.2670)
18	90	(.1068	.2241)	(.0982	.2375)	(.0827	.2646)
18	91	(.1058	.2221)	(.0973	.2354)	(.0819	.2623)
18	92	(.1048	.2201)	(.0963	.2333)	(.0811	.2601)
18	93	(.1038	.2182)	(.0954	.2313)	(.0804	.2578)
18	94	(.1028	.2163)	(.0945	.2293)	(.0796	.2556)
18	95	(.1019	.2144)	(.0937	.2273)	(.0789	.2535)
18	96	(.1009	.2126)	(.0928	.2254)	(.0781	.2514)
18	97	(.1000	.2108)	(.0920	.2235)	(.0774	.2493)
18	98	(.0991	.2090)	(.0911	.2216)	(.0767	.2473)
18	99	(.0982	.2073)	(.0903	.2198)	(.0760	.2452)
18	100	(.0974	.2055)	(.0895	.2180)	(.0753	.2433)

ro	yo	90%		95%		99%	
19	0	(.8859	1.0000)	(.8541	1.0000)	(.7848	1.0000)
19	1	(.8190	1.0000)	(.7839	1.0000)	(.7112	1.0000)
19	2	(.7634	.9950)	(.7281	.9973)	(.6558	.9994)
19	3	(.7124	.9753)	(.6780	.9824)	(.6085	.9918)
19	4	(.6683	.9502)	(.6348	.9612)	(.5676	.9776)
19	5	(.6300	.9236)	(.5972	.9376)	(.5321	.9597)
19	6	(.5963	.8970)	(.5642	.9133)	(.5011	.9400)
19	7	(.5663	.8709)	(.5350	.8890)	(.4738	.9195)
19	8	(.5394	.8456)	(.5088	.8652)	(.4494	.8988)
19	9	(.5151	.8213)	(.4852	.8420)	(.4275	.8782)
19	10	(.4929	.7981)	(.4638	.8197)	(.4078	.8579)
19	11	(.4727	.7759)	(.4443	.7982)	(.3899	.8381)
19	12	(.4542	.7547)	(.4264	.7776)	(.3735	.8188)
19	13	(.4370	.7345)	(.4100	.7578)	(.3585	.8002)
19	14	(.4212	.7152)	(.3948	.7388)	(.3447	.7821)
19	15	(.4065	.6969)	(.3807	.7207)	(.3319	.7647)
19	16	(.3928	.6793)	(.3676	.7033)	(.3200	.7479)
19	17	(.3800	.6626)	(.3554	.6867)	(.3090	.7316)
19	18	(.3681	.6466)	(.3440	.6708)	(.2988	.7160)
19	19	(.3568	.6314)	(.3333	.6555)	(.2892	.7010)
19	20	(.3463	.6168)	(.3233	.6409)	(.2802	.6865)
19	21	(.3364	.6028)	(.3139	.6269)	(.2718	.6725)
19	22	(.3270	.5895)	(.3050	.6135)	(.2638	.6590)
19	23	(.3182	.5767)	(.2966	.6005)	(.2563	.6460)
19	24	(.3098	.5644)	(.2887	.5881)	(.2493	.6335)
19	25	(.3018	.5526)	(.2811	.5762)	(.2426	.6214)
19	26	(.2943	.5413)	(.2740	.5647)	(.2363	.6098)
19	27	(.2871	.5304)	(.2672	.5537)	(.2303	.5985)
19	28	(.2803	.5199)	(.2608	.5431)	(.2246	.5877)
19	29	(.2738	.5099)	(.2546	.5328)	(.2191	.5772)
19	30	(.2676	.5002)	(.2488	.5230)	(.2140	.5670)
19	31	(.2616	.4909)	(.2432	.5134)	(.2090	.5572)
19	32	(.2559	.4819)	(.2378	.5042)	(.2043	.5477)
19	33	(.2505	.4732)	(.2327	.4954)	(.1998	.5385)
19	34	(.2453	.4648)	(.2278	.4868)	(.1955	.5296)
19	35	(.2403	.4567)	(.2231	.4785)	(.1914	.5210)
19	36	(.2355	.4489)	(.2186	.4705)	(.1875	.5127)

ro	yo	90%		95%		99%	
19	37	(.2309	.4413)	(.2143	.4627)	(.1837	.5046)
19	38	(.2265	.4340)	(.2101	.4552)	(.1800	.4967)
19	39	(.2222	.4270)	(.2061	.4479)	(.1765	.4891)
19	40	(.2181	.4201)	(.2023	.4409)	(.1732	.4817)
19	41	(.2142	.4135)	(.1986	.4341)	(.1699	.4746)
19	42	(.2104	.4070)	(.1950	.4274)	(.1668	.4676)
19	43	(.2067	.4008)	(.1916	.4210)	(.1638	.4608)
19	44	(.2031	.3947)	(.1883	.4148)	(.1609	.4542)
19	45	(.1997	.3889)	(.1850	.4087)	(.1581	.4478)
19	46	(.1964	.3832)	(.1819	.4028)	(.1554	.4416)
19	47	(.1932	.3776)	(.1789	.3971)	(.1528	.4355)
19	48	(.1901	.3722)	(.1760	.3915)	(.1503	.4296)
19	49	(.1871	.3670)	(.1732	.3861)	(.1479	.4239)
19	50	(.1842	.3619)	(.1705	.3808)	(.1455	.4183)
19	51	(.1814	.3570)	(.1679	.3757)	(.1432	.4129)
19	52	(.1786	.3522)	(.1653	.3707)	(.1410	.4075)
19	53	(.1760	.3475)	(.1628	.3658)	(.1388	.4024)
19	54	(.1734	.3429)	(.1604	.3611)	(.1368	.3973)
19	55	(.1709	.3384)	(.1581	.3565)	(.1347	.3924)
19	56	(.1685	.3341)	(.1558	.3520)	(.1328	.3876)
19	57	(.1661	.3299)	(.1536	.3476)	(.1309	.3829)
19	58	(.1638	.3258)	(.1515	.3433)	(.1290	.3783)
19	59	(.1616	.3217)	(.1494	.3391)	(.1272	.3738)
19	60	(.1594	.3178)	(.1474	.3351)	(.1255	.3695)
19	61	(.1573	.3140)	(.1454	.3311)	(.1238	.3652)
19	62	(.1552	.3102)	(.1435	.3272)	(.1221	.3610)
19	63	(.1532	.3066)	(.1416	.3234)	(.1205	.3569)
19	64	(.1512	.3030)	(.1398	.3197)	(.1189	.3529)
19	65	(.1493	.2995)	(.1380	.3160)	(.1174	.3490)
19	66	(.1475	.2961)	(.1363	.3125)	(.1159	.3452)
19	67	(.1457	.2928)	(.1346	.3090)	(.1144	.3415)
19	68	(.1439	.2896)	(.1329	.3056)	(.1130	.3378)
19	69	(.1422	.2864)	(.1313	.3023)	(.1116	.3342)
19	70	(.1405	.2833)	(.1298	.2990)	(.1103	.3307)
19	71	(.1388	.2802)	(.1282	.2959)	(.1090	.3273)
19	72	(.1372	.2772)	(.1267	.2927)	(.1077	.3239)
19	73	(.1357	.2743)	(.1253	.2897)	(.1064	.3206)

ro	yo	90%		95%		99%	
19	74	(.1341	.2714)	(.1239	.2867)	(.1052	.3174)
19	75	(.1326	.2686)	(.1225	.2838)	(.1040	.3142)
19	76	(.1312	.2659)	(.1211	.2809)	(.1028	.3111)
19	77	(.1297	.2632)	(.1198	.2781)	(.1017	.3081)
19	78	(.1283	.2606)	(.1185	.2754)	(.1006	.3051)
19	79	(.1269	.2580)	(.1172	.2726)	(.0995	.3022)
19	80	(.1256	.2554)	(.1159	.2700)	(.0984	.2993)
19	81	(.1243	.2530)	(.1147	.2674)	(.0973	.2965)
19	82	(.1230	.2505)	(.1135	.2649)	(.0963	.2937)
19	83	(.1217	.2481)	(.1123	.2623)	(.0953	.2910)
19	84	(.1205	.2458)	(.1112	.2599)	(.0943	.2883)
19	85	(.1193	.2435)	(.1101	.2575)	(.0933	.2857)
19	86	(.1181	.2412)	(.1090	.2551)	(.0924	.2831)
19	87	(.1169	.2390)	(.1079	.2528)	(.0915	.2806)
19	88	(.1158	.2368)	(.1068	.2505)	(.0906	.2781)
19	89	(.1147	.2347)	(.1058	.2483)	(.0897	.2757)
19	90	(.1136	.2326)	(.1048	.2461)	(.0888	.2733)
19	91	(.1125	.2305)	(.1038	.2439)	(.0879	.2709)
19	92	(.1114	.2285)	(.1028	.2418)	(.0871	.2686)
19	93	(.1104	.2265)	(.1018	.2397)	(.0863	.2664)
19	94	(.1094	.2246)	(.1009	.2377)	(.0855	.2641)
19	95	(.1084	.2226)	(.0999	.2356)	(.0847	.2619)
19	96	(.1074	.2208)	(.0990	.2337)	(.0839	.2598)
19	97	(.1064	.2189)	(.0981	.2317)	(.0831	.2576)
19	98	(.1055	.2171)	(.0973	.2298)	(.0824	.2555)
19	99	(.1046	.2153)	(.0964	.2279)	(.0817	.2535)
19	100	(.1036	.2135)	(.0956	.2260)	(.0809	.2514)

ro	yo	90%		95%		99%	
20	0	(.8913	1.0000)	(.8609	1.0000)	(.7943	1.0000)
20	1	(.8271	1.0000)	(.7933	1.0000)	(.7232	1.0000)
20	2	(.7734	.9953)	(.7393	.9975)	(.6692	.9994)
20	3	(.7240	.9766)	(.6907	.9834)	(.6230	.9923)
20	4	(.6811	.9528)	(.6484	.9632)	(.5828	.9788)
20	5	(.6436	.9274)	(.6116	.9407)	(.5478	.9617)
20	6	(.6105	.9018)	(.5791	.9174)	(.5171	.9429)
20	7	(.5810	.8766)	(.5502	.8940)	(.4899	.9232)
20	8	(.5543	.8522)	(.5242	.8710)	(.4656	.9033)
20	9	(.5302	.8287)	(.5008	.8486)	(.4437	.8834)
20	10	(.5082	.8061)	(.4794	.8270)	(.4238	.8638)
20	11	(.4880	.7845)	(.4599	.8061)	(.4058	.8446)
20	12	(.4694	.7638)	(.4419	.7860)	(.3893	.8259)
20	13	(.4522	.7441)	(.4254	.7667)	(.3741	.8077)
20	14	(.4363	.7252)	(.4101	.7481)	(.3600	.7901)
20	15	(.4215	.7071)	(.3959	.7304)	(.3471	.7731)
20	16	(.4077	.6899)	(.3826	.7133)	(.3350	.7566)
20	17	(.3948	.6734)	(.3702	.6970)	(.3238	.7407)
20	18	(.3827	.6577)	(.3587	.6813)	(.3133	.7253)
20	19	(.3713	.6426)	(.3478	.6662)	(.3035	.7105)
20	20	(.3606	.6282)	(.3376	.6518)	(.2943	.6963)
20	21	(.3505	.6143)	(.3280	.6379)	(.2856	.6825)
20	22	(.3410	.6011)	(.3189	.6246)	(.2775	.6692)
20	23	(.3320	.5883)	(.3103	.6118)	(.2698	.6563)
20	24	(.3234	.5761)	(.3022	.5995)	(.2625	.6439)
20	25	(.3153	.5644)	(.2945	.5876)	(.2556	.6320)
20	26	(.3076	.5531)	(.2872	.5762)	(.2491	.6204)
20	27	(.3002	.5423)	(.2802	.5652)	(.2429	.6092)
20	28	(.2932	.5318)	(.2736	.5546)	(.2370	.5984)
20	29	(.2866	.5217)	(.2673	.5444)	(.2314	.5880)
20	30	(.2802	.5121)	(.2612	.5345)	(.2260	.5779)
20	31	(.2741	.5027)	(.2555	.5250)	(.2209	.5681)
20	32	(.2682	.4937)	(.2500	.5158)	(.2160	.5587)
20	33	(.2627	.4850)	(.2447	.5069)	(.2113	.5495)
20	34	(.2573	.4766)	(.2396	.4983)	(.2069	.5406)
20	35	(.2521	.4684)	(.2348	.4900)	(.2026	.5320)
20	36	(.2472	.4606)	(.2301	.4819)	(.1985	.5236)

ro	yo	90%		95%		99%	
20	37	(.2425	.4530)	(.2256	.4742)	(.1945	.5155)
20	38	(.2379	.4456)	(.2213	.4666)	(.1907	.5077)
20	39	(.2335	.4385)	(.2172	.4593)	(.1871	.5001)
20	40	(.2292	.4316)	(.2132	.4522)	(.1836	.4926)
20	41	(.2252	.4249)	(.2094	.4453)	(.1802	.4854)
20	42	(.2212	.4184)	(.2056	.4386)	(.1769	.4784)
20	43	(.2174	.4121)	(.2021	.4322)	(.1738	.4716)
20	44	(.2137	.4060)	(.1986	.4259)	(.1708	.4650)
20	45	(.2102	.4000)	(.1953	.4197)	(.1679	.4586)
20	46	(.2067	.3943)	(.1920	.4138)	(.1650	.4523)
20	47	(.2034	.3886)	(.1889	.4080)	(.1623	.4462)
20	48	(.2002	.3832)	(.1859	.4024)	(.1597	.4403)
20	49	(.1971	.3779)	(.1830	.3969)	(.1571	.4345)
20	50	(.1940	.3727)	(.1801	.3916)	(.1546	.4288)
20	51	(.1911	.3677)	(.1774	.3864)	(.1522	.4233)
20	52	(.1883	.3628)	(.1747	.3813)	(.1499	.4180)
20	53	(.1855	.3581)	(.1721	.3764)	(.1476	.4128)
20	54	(.1828	.3534)	(.1696	.3716)	(.1454	.4076)
20	55	(.1802	.3489)	(.1672	.3669)	(.1433	.4027)
20	56	(.1777	.3445)	(.1648	.3623)	(.1413	.3978)
20	57	(.1752	.3402)	(.1625	.3579)	(.1393	.3931)
20	58	(.1728	.3360)	(.1603	.3535)	(.1373	.3884)
20	59	(.1705	.3319)	(.1581	.3493)	(.1354	.3839)
20	60	(.1682	.3279)	(.1560	.3452)	(.1336	.3795)
20	61	(.1660	.3240)	(.1539	.3411)	(.1318	.3751)
20	62	(.1639	.3202)	(.1519	.3372)	(.1300	.3709)
20	63	(.1618	.3165)	(.1499	.3333)	(.1283	.3668)
20	64	(.1597	.3129)	(.1480	.3295)	(.1267	.3627)
20	65	(.1577	.3093)	(.1462	.3258)	(.1251	.3588)
20	66	(.1558	.3059)	(.1444	.3222)	(.1235	.3549)
20	67	(.1539	.3025)	(.1426	.3187)	(.1219	.3511)
20	68	(.1521	.2991)	(.1409	.3152)	(.1205	.3474)
20	69	(.1502	.2959)	(.1392	.3118)	(.1190	.3438)
20	70	(.1485	.2927)	(.1375	.3085)	(.1176	.3402)
20	71	(.1468	.2896)	(.1359	.3053)	(.1162	.3367)
20	72	(.1451	.2865)	(.1344	.3021)	(.1148	.3333)
20	73	(.1434	.2836)	(.1328	.2990)	(.1135	.3299)

ro	yo	90%		95%		99%	
20	74	(.1418	.2806)	(.1313	.2959)	(.1122	.3267)
20	75	(.1403	.2778)	(.1299	.2930)	(.1109	.3234)
20	76	(.1387	.2750)	(.1284	.2900)	(.1097	.3203)
20	77	(.1372	.2722)	(.1270	.2872)	(.1085	.3172)
20	78	(.1357	.2695)	(.1257	.2844)	(.1073	.3141)
20	79	(.1343	.2669)	(.1243	.2816)	(.1061	.3112)
20	80	(.1329	.2643)	(.1230	.2789)	(.1050	.3082)
20	81	(.1315	.2617)	(.1217	.2762)	(.1039	.3054)
20	82	(.1302	.2593)	(.1205	.2736)	(.1028	.3026)
20	83	(.1288	.2568)	(.1192	.2711)	(.1017	.2998)
20	84	(.1275	.2544)	(.1180	.2686)	(.1007	.2971)
20	85	(.1263	.2520)	(.1168	.2661)	(.0997	.2944)
20	86	(.1250	.2497)	(.1157	.2637)	(.0987	.2918)
20	87	(.1238	.2475)	(.1145	.2613)	(.0977	.2892)
20	88	(.1226	.2452)	(.1134	.2590)	(.0967	.2867)
20	89	(.1214	.2430)	(.1123	.2567)	(.0958	.2842)
20	90	(.1203	.2409)	(.1113	.2544)	(.0949	.2817)
20	91	(.1191	.2388)	(.1102	.2522)	(.0940	.2793)
20	92	(.1180	.2367)	(.1092	.2500)	(.0931	.2770)
20	93	(.1169	.2346)	(.1082	.2479)	(.0922	.2747)
20	94	(.1159	.2326)	(.1072	.2458)	(.0913	.2724)
20	95	(.1148	.2307)	(.1062	.2437)	(.0905	.2701)
20	96	(.1138	.2287)	(.1052	.2417)	(.0897	.2679)
20	97	(.1128	.2268)	(.1043	.2397)	(.0889	.2657)
20	98	(.1118	.2249)	(.1034	.2377)	(.0881	.2636)
20	99	(.1108	.2231)	(.1025	.2358)	(.0873	.2615)
20	100	(.1098	.2213)	(.1016	.2339)	(.0865	.2594)

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