

StatsInvBetaCDF

$$f(x; m, n, k) = \frac{\binom{n}{x} \binom{m-n}{k-x}}{\binom{m}{k}},$$

where $\binom{a}{b}$ is the **binomial** function. All parameters must be positive integers and must have $m > n$ and $x < k$.

References

Klotz, J.H., *Computational Approach to Statistics*.

See Also

Chapter III-12, **Statistics** for a function and operation overview; **StatsHyperGCDF**.

StatsInvBetaCDF

StatsInvBetaCDF(cdf, p, q [, a, b])

The StatsInvBetaCDF function returns the inverse of the beta cumulative distribution function. There is no closed form expression for the inverse beta CDF; it is evaluated numerically.

The defaults ($a=0$ and $b=1$) correspond to the standard beta distribution.

See Also

Chapter III-12, **Statistics** for a function and operation overview; **StatsBetaCDF** and **StatsBetaPDF**.

StatsInvBinomialCDF

StatsInvBinomialCDF(cdf, p, N)

The StatsInvBinomialCDF function returns the inverse of the binomial cumulative distribution function. The inverse function returns the value at which the binomial *CDF* with probability *p* and total elements *N*, has the value 0.95. There is no closed form expression for the inverse binomial CDF; it is evaluated numerically.

See Also

Chapter III-12, **Statistics** for a function and operation overview; **StatsBinomialCDF** and **StatsBinomialPDF**.

StatsInvCauchyCDF

StatsInvCauchyCDF(cdf, μ, σ)

The StatsInvCauchyCDF function returns the inverse of the Cauchy-Lorentz cumulative distribution function

$$x = \mu + \sigma \tan\left[\pi\left(cdf - \frac{1}{2}\right)\right].$$

It returns NaN for $cdf < 0$ or $cdf > 1$.

See Also

Chapter III-12, **Statistics** for a function and operation overview; **StatsCauchyCDF** and **StatsCauchyPDF**.

StatsInvChiCDF

StatsInvChiCDF(x, n)

The StatsInvChiCDF function returns the inverse of the chi-squared distribution of *x* and shape parameter *n*. The inverse of the distribution is also known as the percent point function.