Excel for Statistics

Chapter 8

Excel Statistical Functions 7

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1. GAMMA

a function used to returns the gamma function value.

The syntax of the function is:
=GAMMA(number)

number	Returns a number (**required**).

2. GAMMA.DIST

a function used to returns the gamma distribution.

The syntax of the function is:
=GAMMA.DIST(x; alpha; beta; cumulative)

x	The value at which you want to evaluate the distribution (**required**).
alpha	A parameter to the distribution (**required**).
beta	A parameter to the distribution. If beta = 1, GAMMA.DIST returns the standard gamma distribution (**required**).
cumulative	A logical value that determines the form of the function. If cumulative is TRUE, GAMMA.DIST ret probability density function (**required**).

3. GAMMA.INV

a function used to returns the inverse of the gamma cumulative distribution.

The syntax of the function is:
=GAMMA.INV(probability; alpha; beta)

probability	The probability associated with the gamma distribution (**required**).
alpha	A parameter to the distribution (**required**).
beta	A parameter to the distribution. If beta = 1, GAMMA.DIST returns the standard gamma distribution (**required**).

4. GAMMALN

a function used to returns the natural logarithm of the gamma function.

The syntax of the function is:
=GAMMALN(x)

x The value for which you want to calculate GAMMALN (**required**).

5. GAMMALN.PRECISE

a function used to returns the natural logarithm of the gamma function.

The syntax of the function is:
=GAMMALN.PRECISE(x)

x The value for which you want to calculate GAMMALN.PRECISE (**required**).

6. GAUSS

a function used to calculates the probability that a member of a standard normal population will fall between the mean and z standard deviations from the mean.

The syntax of the function is:
=GAUSS(x)

x The value you want to use to calculate the GAUSS function (**required**).

7. KURT

a function used to returns the kurtosis of a data set.

The syntax of the function is:
=KURT(number1; [number2]; ...)

number1; [number2]; … Number1 is required, subsequent numbers are optional. 1 to 255 arguments for which you want to calculate kurtosis.

8. LOGNORM.DIST

a function used to returns the lognormal distribution of x, where ln(x) is normally distributed with parameters Mean and Standard_dev.

The syntax of the function is:
=LOGNORM.DIST(x; mean; standard_dev; cumulative)

x	The value at which to evaluate the function (**required**).
mean	The mean of ln(x) (**required**).
standard_dev	The standard deviation of ln(x) (**required**).
cumulative	A logical value that determines the form of the function. If cumulative is TRUE, LOGNORM.DIST returns the cumulative distribution function; if FALSE, it returns the probability density function (**required**).

9. NORM.DIST

a function used to returns the normal distribution for the specified mean and standard deviation.

The syntax of the function is:
=NORM.DIST(x; mean; standard_dev; cumulative)

x	The value at which to evaluate the function (**required**).
mean	The arithmetic mean of the distribution (**required**).
standard_dev	The standard deviation of the distribution (**required**).
cumulative	A logical value that determines the form of the function. If cumulative is TRUE, NORM.DIST returns the cumulative distribution function; if FALSE, it returns the probability density function (**required**).

10. NORM.INV

a function used to returns the inverse of the normal cumulative distribution for the specified mean and standard deviation.

The syntax of the function is:
=NORM.INV(probability; mean; standard_dev)

probability	A probability corresponding to the normal distribution (**required**).
mean	The arithmetic mean of the distribution (**required**).
standard_dev	The standard deviation of the distribution (**required**).

11. NORM.S.DIST

a function used to returns the standard normal distribution (has a mean of zero and a standard deviation of one).

The syntax of the function is:
=NORM.S.DIST(z; cumulative)

z	The value for which you want the distribution (**required**).
cumulative	Cumulative is a logical value that determines the form of the function. If cumulative is TRUE, NORM.S.DIST returns the cumulative distribution function; if FALSE, it returns the probability mass function (**required**).

12. NORM.S.INV

a function used to returns the inverse of the standard normal cumulative distribution.

The syntax of the function is:
=NORM.S.INV(probability)

probability	A probability corresponding to the normal distribution (**required**).

Reference: https://support.microsoft.com/