How do I use the POISSON.DIST function in Google Sheets?

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The POISSON.DIST function in Google Sheets is a statistical tool that calculates the probability of a certain number of events occurring within a given time frame, based on a specific rate of occurrence. To use this function, first select a cell where you want the result to appear. Then, type "=POISSON.DIST(" into the cell, followed by the required arguments: the value of interest, the mean or average number of events, and the optional boolean value for cumulative calculation. Press enter or click on the check mark to see the result. This function is useful in various situations such as risk assessment, inventory management, and financial forecasting.

POISSON.DIST

Returns the value of the Poisson distribution function (or Poisson cumulative distribution function) for a specified value and mean.

Sample Usage

`POISSON.DIST(2.4,1,FALSE)`

`POISSON.DIST(A2,A3,TRUE)`

Syntax

`POISSON.DIST(x, mean, cumulative)`

`x` - The input to the Poisson distribution function.

`mean` - The mean (mu) of the Poisson distribution function.

`cumulative` - Whether to use the Poisson cumulative distribution function rather than the distribution function..

Notes

The Poisson distribution function is typically used to calculate the number of 'arrivals' or 'events' over a period of time, such as the number of network packets or login attempts given some mean.

If `cumulative` is `TRUE` then `POISSON.DIST` returns the probability of `x` or fewer events, otherwise the probability of exactly `x` events.

You can use `POISSON` or `POISSON.DIST` to perform this function.

See Also

`WEIBULL`: Returns the value of the Weibull distribution function (or Weibull cumulative distribution function) for a specified shape and scale.

`NORMSINV`: Returns the value of the inverse standard normal distribution function for a specified value.

`NORMSDIST`: Returns the value of the standard normal cumulative distribution function for a specified value.

`NORMINV`: Returns the value of the inverse normal distribution function for a specified value, mean, and standard deviation.

`NORMDIST`: The NORMDIST function returns the value of the normal distribution function (or normal cumulative distribution function) for a specified value, mean, and standard deviation.

`NEGBINOMDIST`: Calculates the probability of drawing a certain number of failures before a certain number of successes given a probability of success in independent trials.

`LOGNORMDIST`: Returns the value of the log-normal cumulative distribution with given mean and standard deviation at a specified value.

`LOGINV`: Returns the value of the inverse log-normal cumulative distribution with given mean and standard deviation at a specified value.

`EXPONDIST`: Returns the value of the exponential distribution function with a specified lambda at a specified value.

`BINOMDIST`: Calculates the probability of drawing a certain number of successes (or a maximum number of successes) in a certain number of tries given a population of a certain size containing a certain number of successes, with replacement of draws.

Examples