

# How can I use the EXPON.DIST function in Google Sheets?

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## RECOMMENDED CITATION

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The EXPON.DIST function in Google Sheets is a statistical function that allows users to calculate the probability of a specific value occurring in a set of data that follows an exponential distribution. To use this function, users must input the value, mean, and cumulative value of the data set. The result will be a decimal number representing the probability of the given value occurring. This function can be helpful in analyzing data sets that follow an exponential pattern, such as time between occurrences or decay rates. By utilizing the EXPON.DIST function, users can gain valuable insights and make informed decisions based on the probability of certain values occurring in their data.

## EXPON.DIST

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

### Sample Usage

```
EXPON.DIST(4,0.5,FALSE)
```

```
EXPON.DIST(A2,A3,A4)
```

### Syntax

```
EXPON.DIST(x, lambda, cumulative)
```

**x** - The input to the exponential distribution function.

If **cumulative** is **TRUE** then **EXPON.DIST** returns the cumulative probability of all values up to **x**.

**lambda** - The lambda to specify the exponential distribution function.

**cumulative** - Whether to use the exponential cumulative distribution.

### Note

You can use **EXPONDIST** or **EXPON.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.

**POISSON**: Returns the value of the Poisson distribution function (or Poisson cumulative distribution

function) for a specified value and mean.

**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.

**HYPGEOMDIST:** Calculates the probability of drawing a certain number of successes in a certain number of tries given a population of a certain size containing a certain number of successes, without replacement of draws.

**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