

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

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The T.DIST function in Google Sheets is a statistical tool that calculates the probability density of a Student's t-distribution. This function can be used to determine the likelihood of a specific value occurring within a given range in a data set. To use the T.DIST function, simply enter the required parameters such as the value, degrees of freedom, and whether the function should return cumulative or non-cumulative values. This function is useful for conducting statistical analysis and making informed decisions based on the data. By using the T.DIST function in Google Sheets, users can easily calculate and visualize the distribution of their data and make more accurate and reliable conclusions.

T.DIST function

The T.DIST function returns the right tailed Student distribution for a value x. Along with `T.DIST.2T`, this function replaces `TDIST` and is equivalent to calling `TDIST` with the tails argument set to 1.

Parts of a T.DIST function

`T.DIST(x, degrees_freedom, cumulative)`

Part	Description
<code>x</code>	Required. The x value to evaluate the distribution at.
<code>degrees_freedom</code>	Required. The degrees of freedom.
<code>cumulative</code>	Required. True/false value field. If true, returns the cumulative probability for x. If false, returns the probability density function for x.

Sample formulas

Example 1: A1 has `T.DIST(1.96, 60, false)` Example 2: A1 has `T.DIST(-1.98, 2, false)` Example 3: A1 has `T.DIST(1.96, 60, true)` Example 4: A1 has `T.DIST(-1.98, 2, true)`

Notes

If `deg_freedom` is less than 1, returns as #NUM error.

Examples

Result for A1=`T.DIST(1.96, 60, false)`

	A	B
1	0.059847906211419	
2		

Result for A1=T.DIST(-1.98, 2, false)

	A	B
1	0.06941821226899947	
2		

Result for A1=T.DIST(1.96, 60, true)

	A	B
1	0.972677535131736	
2		

Result for A1=T.DIST(-1.98, 2, true)

	A	B
1	0.09312625192178947	
2		

Related functions

TDIST: Calculates the probability for Student's t-distribution with a given input (x).T.DIST.2T: The T.DIST.2T function returns the two tailed Student distribution for a value x.T.DIST.RT: Returns the right tailed Student distribution for a value x.