How can I use the T.DIST.2T function in Excel?

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The T.DIST.2T function is a statistical function in Microsoft Excel that allows users to calculate the probability density of a Student's t-distribution. This function is useful for analyzing data sets with small sample sizes and unknown population variances. To use the T.DIST.2T function, users must input the desired probability level and the degrees of freedom of the data set. The output will be the probability density at the given probability level. This function can be accessed through the "Formulas" tab in Excel and is useful for conducting statistical analyses and making data-driven decisions.

Returns the two-tailed Student's t-distribution.

The Student's t-distribution is used in the hypothesis testing of small sample data sets. Use this function in place of a table of critical values for the t-distribution.

Syntax

T.DIST.2T(x,deg_freedom)

The T.DIST.2T function syntax has the following arguments:

X Required. The numeric value at which to evaluate the distribution.

Deg_freedom Required. An integer indicating the number of degrees of freedom.

Remarks

If any argument is nonnumeric, T.DIST.2T returns the #VALUE! error value.

If deg_freedom < 1, T.DIST.2T returns the #NUM! error value.

If x < 0, then T.DIST.2T returns the #NUM! error value.

Example

Copy the example data in the following table, and paste it in cell A1 of a new Excel worksheet. For formulas to show results, select them, press F2, and then press Enter. If you need to, you can adjust the column widths to see all the data.

Data	Description	
1.959999998	Value at which to evaluate the distribution	
60	Degrees of freedom	

Data	Description	
Formula	**Description (Result)**	**Result**
=T.DIST.2T(A2,A3)	Two-tailed distribution (0.054645, or 5.46 percent)	5.46%