How do I use the F.DIST.RT function in Excel?

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The F.DIST.RT function in Excel is a statistical tool used to calculate the right-tailed F probability distribution. This function takes in three arguments: the observed value, the degrees of freedom numerator, and the degrees of freedom denominator. It returns the probability of an F-distribution value being equal to or less than the observed value. This function is useful in statistical analysis and hypothesis testing. To use the F.DIST.RT function, simply input the required arguments into the formula bar and press enter. The result will be the probability value, which can be interpreted to make informed decisions.

This article describes the formula syntax and usage of the **F.DIST.RT** function in Microsoft Excel.

Returns the (right-tailed) F probability distribution (degree of diversity) for two data sets. You can use this function to determine whether two data sets have different degrees of diversity. For example, you can examine the test scores of men and women entering high school and determine if the variability in the females is different from that found in the males.

Syntax

F.DIST.RT(x,deg_freedom1,deg_freedom2)

The F.DIST.RT function syntax has the following arguments:

X Required. The value at which to evaluate the function.

Deg_freedom1 Required. The numerator degrees of freedom.

Deg_freedom2 Required. The denominator degrees of freedom.

Remarks

If any argument is nonnumeric, F.DIST.RT returns the #VALUE! error value.

If x is negative, F.DIST.RT returns the #NUM! error value.

If deg_freedom1 or deg_freedom2 is not an integer, it is truncated.

If deg_freedom1 < 1 F.DIST.RT returns the #NUM! error value.

If deg_freedom2 < 1 F.DIST.RT returns the #NUM! error value.

F.DIST.RT is calculated as F.DIST.RT=P(F>x), where F is a random variable that has an F distribution with deg_freedom1 and deg_freedom2 degrees of freedom.

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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**	
15.2068649	Value at which to evaluate the function	
6	Numerator degrees of freedom	
4	Denominator degrees of freedom	
Formula	**Description**	**Result**
=F.DIST.RT(A2,A3,A4)	F probability distribution for the terms above.	0.01

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