How do I use the CHISQ.INV function in Excel?

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The CHISQ.INV function in Excel is used to calculate the inverse of the chi-square distribution. This function is primarily used in statistical analysis to determine the critical value of a chi-square test. To use this function, simply enter the probability and the degrees of freedom as arguments. The function will then return the critical value associated with the given probability and degrees of freedom. This can be useful in determining if the observed data fits a particular theoretical distribution. The CHISQ.INV function is a powerful tool for conducting statistical analysis and making informed decisions.

This article describes the formula syntax and usage of the **CHISQ.INV** function in Microsoft Excel.

Returns the inverse of the left-tailed probability of the chi-squared distribution.

The chi-squared distribution is commonly used to study variation in the percentage of something across samples, such as the fraction of the day people spend watching television.

Syntax

CHISQ.INV(probability,deg_freedom)

The CHISQ.INV function syntax has the following arguments:

Probability Required. A probability associated with the chi-squared distribution.

Deg_freedom Required. The number of degrees of freedom.

Remarks

If argument is nonnumeric, CHISQ.INV returns the #VALUE! error value.

If probability < 0 or probability > 1, CHISQ.INV returns the #NUM! error value.

If deg_freedom is not an integer, it is truncated.

If deg_freedom < 1 or deg_freedom > 10^10, CHISQ.INV 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.

Formula	Description	Result
=CHISQ.INV(0.93,1)	Inverse of the left-tailed probability of the chi-squared distribution for 0.93, using 1 degree of freedom.	3.283020286
=CHISQ.INV(0.6,2)	Inverse of the left-tailed probability of the chi-squared distribution for 0.6, using 2 degrees of freedom.	1.832581464

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