

How do I use the STANDARDIZE function in Excel to convert data into a standard normal distribution?

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The STANDARDIZE function in Excel is a powerful tool that allows users to easily convert their data into a standard normal distribution. This function takes in three arguments: the data point to be standardized, the mean of the data, and the standard deviation of the data. By using this function, users can standardize their data and bring it onto a common scale, making it easier to compare and analyze. This process is particularly useful in statistical analysis, as it allows for a more accurate understanding of the data. To use the STANDARDIZE function, simply input the required arguments and the function will automatically convert the data into a standard normal distribution, providing a more standardized and meaningful representation of the data.

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

Description

Returns a normalized value from a distribution characterized by mean and standard_dev.

Syntax

STANDARDIZE(x, mean, standard_dev)

The STANDARDIZE function syntax has the following arguments:

X Required. The value you want to normalize.

Mean Required. The arithmetic mean of the distribution.

Standard_dev Required. The standard deviation of the distribution.

Remarks

If standard_dev ≤ 0, STANDARDIZE returns the #NUM! error value.

The equation for the normalized value is:

$$Z = \frac{X - \mu}{\sigma}$$