How can I use the VARPA function in Excel?

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The VARPA function in Excel is a statistical formula that calculates the variance of a population. It can be used to analyze data sets and determine the variability or spread of the values within the population. To use the VARPA function, the user must select the data range they wish to analyze and input the function into a cell. The function will return the variance value, which can then be further used for data analysis and decision-making. This function is useful for businesses, researchers, and students who need to analyze large sets of data and understand the variability within their data. By using the VARPA function, users can make more informed decisions and gain insights into their data.

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

Description

Calculates variance based on the entire population.

Syntax

VARPA(value1, , ...)

The VARPA function syntax has the following arguments:

Value1, value2, ... Value1 is required, subsequent values are optional. 1 to 255 value arguments corresponding to a population.

Remarks

VARPA assumes that its arguments are the entire population. If your data represents a sample of the population, you must compute the variance by using VARA.

Arguments can be the following: numbers; names, arrays, or references that contain numbers; text representations of numbers; or logical values, such as TRUE and FALSE, in a reference.

Logical values and text representations of numbers that you type directly into the list of arguments are counted.

Arguments that contain TRUE evaluate as 1; arguments that contain text or FALSE evaluate as 0 (zero).

If an argument is an array or reference, only values in that array or reference are used. Empty cells and text values in the array or reference are ignored.

Arguments that are error values or text that cannot be translated into numbers cause errors.

If you do not want to include logical values and text representations of numbers in a reference as part of the calculation, use the VARP function.

The equation for VARPA is :

$$\frac{\sum(x-\bar{x})^2}{n}$$

where x is the sample mean AVERAGE(value1,value2,...) and n is the sample size.