How can I use the VARPA function in Google Sheets?

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The VARPA function in Google Sheets is a statistical tool that allows users to calculate the variance of a population. It takes into account all the values in a given dataset, rather than just a sample, making it a more accurate measure of variability. To use the VARPA function, simply select the cells containing the data you want to analyze and enter the function "=VARPA()" followed by the cell range. This will return the variance of the population in decimal form. The VARPA function is useful for analyzing large datasets and can be used in various fields such as finance, economics, and research.

VARPA

Calculates the variance based on an entire population, setting text to the value `0`.

Sample Usage

`VARPA(1,2,3,4,5,6,7,8,9,10)`

`VARPA(A2:A100)`

Syntax

`VARPA(value1, )`

`value1` - The first value or range of the population.

`value2, ...` - Additional values or ranges to include in the population.

Notes

Although `VARPA` is specified as taking a maximum of 30 arguments, Google Sheets supports an arbitrary number of arguments for this function.

If the total number of values supplied as `value` arguments is not at least two, `VARPA` will return the `#NUM!` error.

`VARPA` sets each text value encountered to `0` for the purpose of calculation. To return an error upon encountering text, use `VARP`.

`VARPA` calculates variance for an entire population. To calculate variance across a sample, use `VARA`.

`VARPA` takes the sum of the squares of each value's deviation from the mean and divides by the number of such values. This differs from the calculation of variance across a sample in that the

latter divides by the size of the dataset minus one.

See Also

`VARP`: Calculates the variance based on an entire population.

`VARA`: Calculates the variance based on a sample, setting text to the value `0`.

`VAR`: Calculates the variance based on a sample.

`STDEVPA`: Calculates the standard deviation based on an entire population, setting text to the value `0`.

`STDEVP`: Calculates the standard deviation based on an entire population.

`STDEVA`: Calculates the standard deviation based on a sample, setting text to the value `0`.

`STDEV`: The STDEV function calculates the standard deviation based on a sample.

`SKEW`: Calculates the skewness of a dataset, which describes the symmetry of that dataset about the mean.

`KURT`: Calculates the kurtosis of a dataset, which describes the shape, and in particular the "peakedness" of that dataset.

`DVARP`: Returns the variance of an entire population selected from a database table-like array or range using a SQL-like query.

`DVAR`: Returns the variance of a population sample selected from a database table-like array or range using a SQL-like query.

`DSTDEVP`: Returns the standard deviation of an entire population selected from a database table-like array or range using a SQL-like query.

`DSTDEV`: Returns the standard deviation of a population sample selected from a database table-like array or range using a SQL-like query.

`DEVSQ`: Calculates the sum of squares of deviations based on a sample.

`AVEDEV`: Calculates the average of the magnitudes of deviations of data from a dataset's mean.

Examples