

How can I use the MODE function in Excel?

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The MODE function in Excel is a useful tool for determining the most frequently occurring value in a set of data. It can be used to quickly and accurately identify the most common value in a given range of cells. To use the MODE function, simply select the cell where you want the result to appear and enter "=MODE(" followed by the range of cells containing the data. This will return the mode value for that set of data. The MODE function is particularly helpful when working with large datasets or when analyzing survey responses. By using this function, users can easily identify the most popular or common response, providing valuable insights and aiding decision making.

Let's say you want to find out the most common number of bird species sighted in a sample of bird counts at a critical wetland over a 30-year time period, or you want to find out the most frequently occurring number of phone calls at a telephone support center during off-peak hours. To calculate the mode of a group of numbers, use the MODE function.

MODE returns the most frequently occurring, or repetitive, value in an array or range of data.

Important: This function has been replaced with one or more new functions that may provide improved accuracy and whose names better reflect their usage. Although this function is still available for backward compatibility, you should consider using the new functions from now on, because this function may not be available in future versions of Excel.

For more information about the new functions, see [MODE.MULT function](#) and [MODE.SNGL function](#).

Syntax

MODE(number1,...)

The MODE function syntax has the following arguments:

Number1 Required. The first number argument for which you want to calculate the mode.

Number2,... Optional. Number arguments 2 to 255 for which you want to calculate the mode. You can also use a single array or a reference to an array instead of arguments separated by commas.

Remarks

Arguments can either be numbers or names, arrays, or references that contain numbers.

If an array or reference argument contains text, logical values, or empty cells, those values are ignored; however, cells with the value zero are included.

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

If the data set contains no duplicate data points, MODE returns the #N/A error value.

The MODE function measures central tendency, which is the location of the center of a group of numbers in a statistical distribution. The three most common measures of central tendency are:

Average which is the arithmetic mean, and is calculated by adding a group of numbers and then dividing by the count of those numbers. For example, the average of 2, 3, 3, 5, 7, and 10 is 30 divided by 6, which is 5.

Median which is the middle number of a group of numbers; that is, half the numbers have values that are greater than the median, and half the numbers have values that are less than the median. For example, the median of 2, 3, 3, 5, 7, and 10 is 4.

Mode which is the most frequently occurring number in a group of numbers. For example, the mode of 2, 3, 3, 5, 7, and 10 is 3.

For a symmetrical distribution of a group of numbers, these three measures of central tendency are all the same. For a skewed distribution of a group of numbers, they can be different.

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		
5.6		
4		
4		
3		
2		
4		
Formula	Description	Result
=MODE(A2:A7)	Mode, or most frequently occurring number above	4