

# How do I use the PERCENTRANK function in Excel?

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## RECOMMENDED CITATION

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The PERCENTRANK function in Excel is a tool that allows users to find the relative position of a given value within a range of data. This function calculates the percentage of data points that are below the specified value. To use the PERCENTRANK function, simply select the cell where you want the result to appear, enter "=PERCENTRANK" followed by the range of data and the target value. This function can be useful in analyzing data sets and identifying the distribution of values. By understanding how to use the PERCENTRANK function, users can gain valuable insights into their data and make more informed decisions.

Returns the rank of a value in a data set as a percentage of the data set. This function can be used to evaluate the relative standing of a value within a data set. For example, you can use PERCENTRANK to evaluate the standing of an aptitude test score among all scores for the test.

**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 [PERCENTRANK.EXC function](#) and [PERCENTRANK.INC function](#).

## Syntax

PERCENTRANK(array,x,)

The PERCENTRANK function syntax has the following arguments:

**Array** Required. The array or range of data with numeric values that defines relative standing.

**X** Required. The value for which you want to know the rank.

**Significance** Optional. A value that identifies the number of significant digits for the returned percentage value. If omitted, PERCENTRANK uses three digits (0.xxx).

## Remarks

If array is empty, PERCENTRANK returns the #NUM! error value.

If significance < 1, PERCENTRANK returns the #NUM! error value.

If x does not match one of the values in array, PERCENTRANK interpolates to return the correct percentage rank.

## 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.

<b>Data</b>		
13		
12		
11		
8		
4		
3		
2		
1		
1		
1		
<b>Formula</b>	<b>Description (Result)</b>	<b>Result</b>
=PERCENTRANK(A2:A11,2)	Percent rank of 2 in the range A2:A11. Result is 0.333 because three values in the set are less than 2, and six are greater than 2. Because 2 is found in the range (cell A8), the number of values less than 2 is divided by the sum of the number of values less than 2 and the number of values greater than 2. That is, $3/(3+6)=0.333$ .	0.333
=PERCENTRANK(A2:A11,4)	Percent rank of 4 in the range A2:A11. Five values are less than 4, and four are greater. Following the example above, $5/(4+5)=0.555$ .	0.555
=PERCENTRANK(A2:A11,8)	Percent rank of 8 in the range A2:A11. Six values are less than 8, and 3 are greater. Following the example above, $6/(6+3)=0.666$ .	0.666
=PERCENTRANK(A2:A11,5)	Percent rank of 5 in the range A2:A11. Unlike the examples above, 5 is not found in the range. The PERCENTRANK of 5 is calculated by finding the one-quarter mark between the PERCENTRANK of 4 and the PERCENTRANK of 8. This is $(0.555)+(0.25*(0.666-0.555))$ , or 0.583.	0.583