

## HLOOKUP function

*Excel for Microsoft 365 Excel for Microsoft 365 for Mac Excel for the web Excel 2021 Excel 2021 for Mac Excel*

### Description

Searches for a value in the top row of a table or an array of values, and then returns a value in the same column from a row you specify in the table or array. Use HLOOKUP when your comparison values are located in a row across the top of a table of data, and you want to look down a specified number of rows. Use VLOOKUP when your comparison values are located in a column to the left of the data you want to find.

The H in HLOOKUP stands for "Horizontal."

### Syntax

HLOOKUP(lookup\_value, table\_array, row\_index\_num, [range\_lookup])

The HLOOKUP function syntax has the following arguments:

- **Lookup\_value** Required. The value to be found in the first row of the table. Lookup\_value can be a value, a reference, or a text string.
- **Table\_array** Required. A table of information in which data is looked up. Use a reference to a range or a range name.
  - The values in the first row of table\_array can be text, numbers, or logical values.
  - If range\_lookup is TRUE, the values in the first row of table\_array must be placed in ascending order: ...-2, -1, 0, 1, 2,... , A-Z, FALSE, TRUE; otherwise, HLOOKUP may not give the correct value. If range\_lookup is FALSE, table\_array does not need to be sorted.
  - Uppercase and lowercase text are equivalent.
  - Sort the values in ascending order, left to right. For more information, see [Sort data in a range or table](#).
- **Row\_index\_num** Required. The row number in table\_array from which the matching value will be returned. A row\_index\_num of 1 returns the first row value in table\_array, a row\_index\_num of 2 returns the second row value in table\_array, and so on. If row\_index\_num is less than 1, HLOOKUP returns the #VALUE! error value; if row\_index\_num is greater than the number of rows on table\_array, HLOOKUP returns the #REF! error value.
- **Range\_lookup** Optional. A logical value that specifies whether you want HLOOKUP to find an exact match or an approximate match. If TRUE or omitted, an approximate match is returned. In other words, if an exact match is not found, the next largest value that is less than lookup\_value is returned. If FALSE, HLOOKUP will find an exact match. If one is not found, the error value #N/A is returned.

### Remark

- If HLOOKUP can't find lookup\_value, and range\_lookup is TRUE, it uses the largest value that is less than lookup\_value.
- If lookup\_value is smaller than the smallest value in the first row of table\_array, HLOOKUP returns the #N/A error value.
- If range\_lookup is FALSE and lookup\_value is text, you can use the wildcard characters, question mark (?) and asterisk (\*), in lookup\_value. A question mark matches any single character; an asterisk matches any sequence of characters. If you want to find an actual question mark or asterisk, type a tilde (~) before the character.

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.

Axles	Bearings
4	4
5	7
6	8
Formula	Description
=HLOOKUP("Axles", A1:C4, 2, TRUE)	Looks up "Axles" in row 1, and returns the value from row 2 that's in the same column as 3, "c" is returned.
=HLOOKUP("Bearings", A1:C4, 3, FALSE)	Looks up "Bearings" in row 1, and returns the value from row 3 that's in the same column as 3, "c" is returned.
=HLOOKUP("B", A1:C4, 3, TRUE)	Looks up "B" in row 1, and returns the value from row 3 that's in the same column as 3, "c" is returned. If the value in row 1 that is less than "B" is used: "Axles," in column A.
=HLOOKUP("Bolts", A1:C4, 4)	Looks up "Bolts" in row 1, and returns the value from row 4 that's in the same column as 3, "c" is returned.
=HLOOKUP(3, {1,2,3;"a","b","c";"d","e","f"}, 2, TRUE)	Looks up the number 3 in the three-row array constant, and returns the value from the second column as 3, "c" is returned. The values 1, 2, and 3 are three rows of values in the array constant, each row separated by a semicolon. The values "a", "b", and "c" are three columns of values in the array constant, each column separated by a comma.