

How can I use an array formula with VLOOKUP in Excel?

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An array formula is a special type of formula in Excel that allows you to perform multiple calculations at once. It can be used in conjunction with the VLOOKUP function to search for and retrieve data from a table. To use an array formula with VLOOKUP, you need to enter the formula in a specific way, using curly braces to surround the formula. This will enable the formula to calculate the results for each cell in the specified range, instead of just one cell. By using an array formula with VLOOKUP, you can efficiently and accurately retrieve data from a large table without having to manually enter the formula for each cell.

Use an Array Formula with VLOOKUP in Excel

You can use the following basic syntax to perform a VLOOKUP with an array formula in Excel:

=VLOOKUP(E2:E8,A2:C8,3,FALSE)

This particular formula will return the values in the third column of the range A2:C8 where the values in the range E2:E8 match the values in the range A2:A8.

The following example shows how to use this formula in practice.

Example: Use Array Formula with VLOOKUP in Excel

Suppose we have a dataset in the range A2:C8 that contains information about various basketball teams and suppose we would like to look up the value in the "Rebounds" column for each team in the range E2:E8:

	A	B	C	D	E	F	G
1	Team	Points	Rebounds		Team	Conference	Rebounds
2	Mavs	92	22		Kings	West	
3	Rockets	99	24		Pistons	East	
4	Warriors	104	20		Pistons	East	
5	Pistons	100	22		Warriors	West	
6	Hornets	97	25		Warriors	West	
7	Lakers	104	30		Lakers	West	
8	Kings	114	31		Lakers	West	
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If we use VLOOKUP with one cell, we can look up the "Rebounds" value for the Kings:

=VLOOKUP(E2,A2:C8,3,FALSE)

G2 : ✕ ✓ *fx* =VLOOKUP(E2,A2:C8,3,FALSE)

	A	B	C	D	E	F	G	H
1	Team	Points	Rebounds		Team	Conference	Rebounds	
2	Mavs	92	22		Kings	West	31	
3	Rockets	99	24		Pistons	East		
4	Warriors	104	20		Pistons	East		
5	Pistons	100	22		Warriors	West		
6	Hornets	97	25		Warriors	West		
7	Lakers	104	30		Lakers	West		
8	Kings	114	31		Lakers	West		
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However, we would have to type this formula multiple times to look up the "Rebounds" value for each team in column E.

Instead of providing one cell value to the VLOOKUP function, we could instead provide the entire range of cells in column E to look up the "Rebounds" value for each team all at once.

To do so, we can type the following formula into cell

G2:

=VLOOKUP(E2:E8,A2:C8,3,FALSE)

Once we press Enter, the "Rebounds" value for each team will be returned at the same time:

	A	B	C	D	E	F	G	H
1	Team	Points	Rebounds		Team	Conference	Rebounds	
2	Mavs	92	22		Kings	West	31	
3	Rockets	99	24		Pistons	East	22	
4	Warriors	104	20		Pistons	East	22	
5	Pistons	100	22		Warriors	West	20	
6	Hornets	97	25		Warriors	West	20	
7	Lakers	104	30		Lakers	West	30	
8	Kings	114	31		Lakers	West	30	
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The benefit of using this approach is that we don't have to type out the VLOOKUP formula multiple times or click and drag the formula to multiple cells in order to return multiple values.

The following tutorials explain how to perform other common tasks in Excel:

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