

How can I use the IF function in Excel with multiple conditions?

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The IF function in Excel allows users to perform logical tests and specify actions to be taken based on the results of those tests. By using this function with multiple conditions, users can further refine their logical tests and create more complex and precise calculations. This can be accomplished by nesting multiple IF functions within each other, or by using logical operators such as AND, OR, and NOT to combine conditions. This enables users to create custom formulas that can handle a variety of scenarios and make data analysis more efficient and accurate.

Excel: Use IF Function with Multiple Conditions

You can use the following formulas to create an IF function with multiple conditions in Excel:

Method 1: Use IF Function to Test if Multiple Conditions are Met

=IF(AND(B2="Guard",C2>20),"Yes", "No")

For this formula, if cell B2 is equal to "Guard" *and* cell C2 is greater than 20, then the function returns "Yes." Otherwise it returns "No."

Method 2: Use IF Function to Test if One of Several Conditions are Met

=IF(OR(B2="Guard",C2>20),"Yes", "No")

For this formula, if cell B2 is equal to "Guard" *or* cell C2 is greater than 20, then the function returns "Yes."

Otherwise it returns "No."

The following examples show how to use each formula in practice with the following dataset in Excel:

	A	B	C	D	E	F
1	Player	Position	Points			
2	A	Guard	22			
3	B	Forward	30			
4	C	Guard	34			
5	D	Guard	15			
6	E	Forward	10			
7	F	Guard	19			
8	G	Forward	14			
9	H	Forward	12			
10	I	Forward	8			
11	J	Guard	30			
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						

Example 1: Use IF Function to Test if Multiple Conditions are Met

We can type the following formula into cell D2 to return "Yes" if the value in the Position column is "Guard" *and* the value in the Points column is greater than 20:

=IF(AND(B2="Guard",C2>20),"Yes", "No")

We can then click and drag this formula down to each remaining cell in column D:

D2				=IF(AND(B2="Guard",C2>20),"Yes", "No")		
	A	B	C	D	E	F
1	Player	Position	Points	Guard AND Points > 20?		
2	A	Guard	22	Yes		
3	B	Forward	30	No		
4	C	Guard	34	Yes		
5	D	Guard	15	No		
6	E	Forward	10	No		
7	F	Guard	19	No		
8	G	Forward	14	No		
9	H	Forward	12	No		
10	I	Forward	8	No		
11	J	Guard	30	Yes		
12						
13						
14						
15						
16						
17						
18						
19						
20						

The formula returns "Yes" for each row where the value in the Position column is "Guard" *and* the value in the Points column is greater than 20.

If both of these conditions aren't met in a given row, then the formula returns "No" instead.

Example 2: Use IF Function to Test if One of Several Conditions are Met

=IF(OR(B2="Guard",C2>20),"Yes", "No")

We can then click and drag this formula down to each remaining cell in column D:

	A	B	C	D	E	F
1	Player	Position	Points	Guard OR Points > 20?		
2	A	Guard	22	Yes		
3	B	Forward	30	Yes		
4	C	Guard	34	Yes		
5	D	Guard	15	Yes		
6	E	Forward	10	No		
7	F	Guard	19	Yes		
8	G	Forward	14	No		
9	H	Forward	12	No		
10	I	Forward	8	No		
11	J	Guard	30	Yes		
12						
13						
14						
15						
16						
17						
18						
19						

The formula returns "Yes" for each row where the value in the Position column is "Guard" or the value in the Points column is greater than 20.

If neither of these conditions are met in a given row, then the formula returns "No" instead.

Note that in both examples, we checked if two conditions were met.

However, you can place as many conditions as you'd like in the AND() or OR() functions depending on how many conditions you'd like to check.

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