

What is the formula for finding the minimum value based on multiple criteria in Excel?

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The formula for finding the minimum value based on multiple criteria in Excel is known as the MINIFS function. It allows users to specify a range of cells to evaluate, along with multiple criteria to determine the minimum value. This formula is helpful in situations where there are multiple data points and specific requirements for finding the minimum value. By using the MINIFS function, users can efficiently analyze and identify the lowest value that meets all of the specified criteria. This feature is particularly useful in data analysis and decision-making processes.

Excel: Formula for Minimum IF Multiple Criteria

You can use the following basic in Excel to find the minimum value in a range only if multiple criteria are met:

```
=MINIFS(C2:C11, A2:A11, "Mavs", B2:B11, "<5")
```

This particular formula finds the minimum value in the cell range C2:C11 only if the value in the range A2:A11 is equal to "Mavs" and the value in the range B2:B11 is less than 5.

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

Example: Formula for MIN IF Multiple Criteria in Excel

Suppose we have the following dataset in Excel that contains information about various basketball players:

	A	B	C	D	E
1	Team	Assists	Points		
2	Mavs	4	22		
3	Mavs	7	18		
4	Mavs	8	25		
5	Mavs	3	30		
6	Spurs	10	13		
7	Spurs	12	29		
8	Spurs	8	25		
9	Spurs	4	20		
10	Rockets	3	13		
11	Rockets	6	39		
12					
13					
14					
15					
16					
17					

Suppose we would like to find the minimum value in the points column only *if* the corresponding value in the team column is "Mavs" and the corresponding value in the assists column is less than 5.

We can use the following formula to do so:

=MINIFS(C2:C11, A2:A11, "Mavs", B2:B11, "<5")

We'll type this formula into cell E2 and then press Enter:

	A	B	C	D	E
1	Team	Assists	Points		Min Points if Team="Mavs" and Assists<5
2	Mavs	4	22		22
3	Mavs	7	18		
4	Mavs	8	25		
5	Mavs	3	30		
6	Spurs	10	13		
7	Spurs	12	29		
8	Spurs	8	25		
9	Spurs	4	20		
10	Rockets	3	13		
11	Rockets	6	39		
12					
13					
14					
15					
16					
17					
18					

The formula returns a value of 22.

This is the minimum points value among rows where the team is equal to "Mavs" and the assists is less than 5.

We can confirm this by manually checking which rows meet both of these requirements:

	A	B	C	D	E
E2					=MINIFS(C2:C11, A2:A11, "Mavs", B2:B11, "<5")
1	Team	Assists	Points		Min Points if Team="Mavs" and Assists<5
2	Mavs	4	22		22
3	Mavs	7	18		
4	Mavs	8	25		
5	Mavs	3	30		
6	Spurs	10	13		
7	Spurs	12	29		
8	Spurs	8	25		
9	Spurs	4	20		
10	Rockets	3	13		
11	Rockets	6	39		
12					
13					
14					
15					
16					
17					

The two rows highlighted in green are the only two rows where the team is equal to "Mavs" *and* the assists value is less than 5.

Note that in this example we used the MINIFS function with two criteria, but you can use as many criteria as you'd like.

You can find the complete documentation for the MINIFS function in Excel .

The following tutorials explain how to perform other

common tasks in Excel:

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