How can I find the maximum value by group in Excel?

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June 30, 2024

Finding the maximum value by group in Excel can be done by utilizing the "MAX" function. This function allows you to specify a range of cells and will return the highest value within that range. In order to find the maximum value by group, you can first sort your data by the desired grouping column. Then, use the "MAX" function to select the range of values within each group and return the maximum value. This method is helpful for analyzing large data sets and identifying the highest values within specific groups.

Excel: Find Max Value by Group

Often you may want to find the max value of some dataset in Excel based on a category or group.

For example, suppose we have the following dataset and we'd like to find the max value of "points" for each team:

	A	B	C	D	E
1	**Team**	**Points**			
2	Mavs	22			
3	Mavs	26			
4	Mavs	18			
5	Warriors	19			
6	Warriors	14			
7	Lakers	22			
8	Lakers	29			
9	Lakers	33			
10	Heat	13			
11	Heat	19			
12	Heat	19			
13	Celtics	14			
14	Celtics	18			
15	Celtics	22			
16	Celtics	29			
17					
18					
19					

The following step-by-step example shows how to do so.

Step 1: Enter the Data

First, enter the data values into Excel:

	A	B	C	D	E
1	**Team**	**Points**			
2	Mavs	22			
3	Mavs	26			
4	Mavs	18			
5	Warriors	19			
6	Warriors	14			
7	Lakers	22			
8	Lakers	29			
9	Lakers	33			
10	Heat	13			
11	Heat	19			
12	Heat	19			
13	Celtics	14			
14	Celtics	18			
15	Celtics	22			
16	Celtics	29			
17					
18					
19					

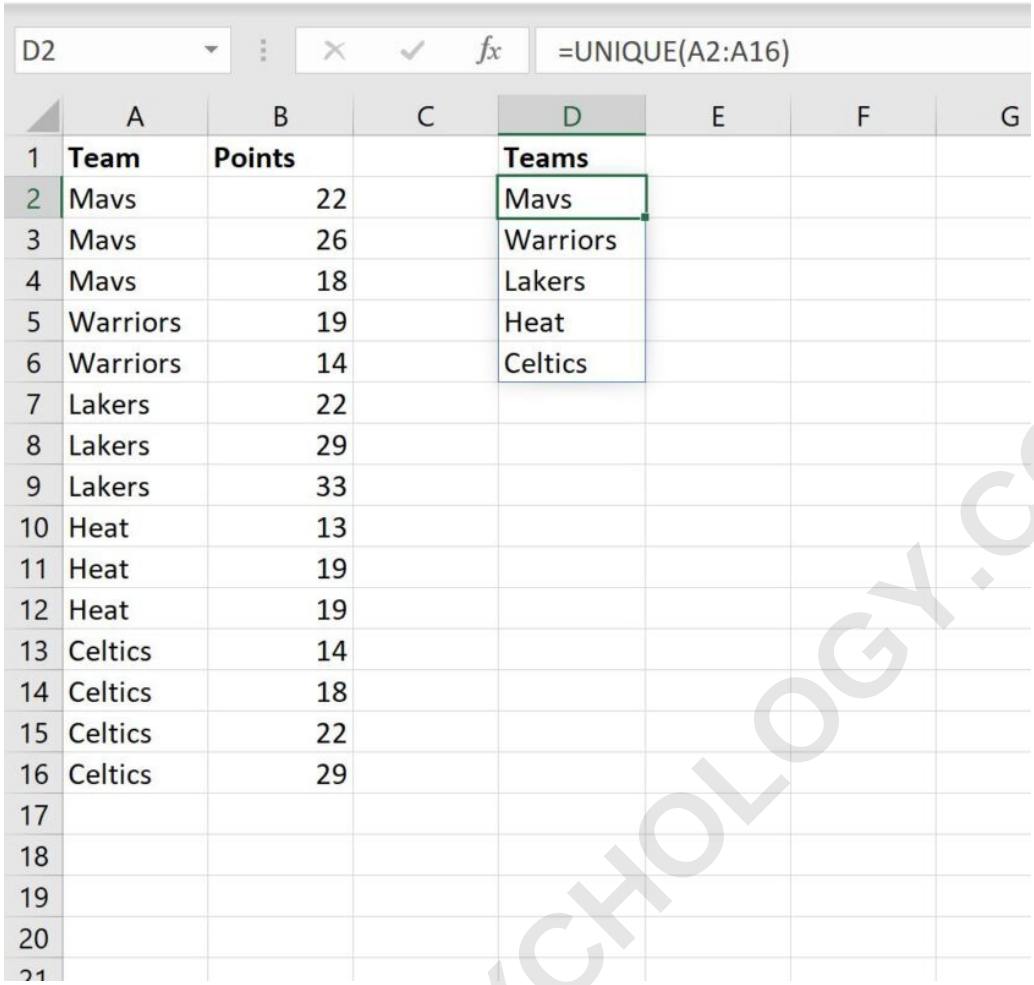
Step 2: Find the Unique Groups

Next, we need to use the =UNIQUE() function to produce a list of unique team names.

In our example, we'll type the following formula in cell D2:

=UNIQUE(A2:A16)

This will produce a list of unique teams:



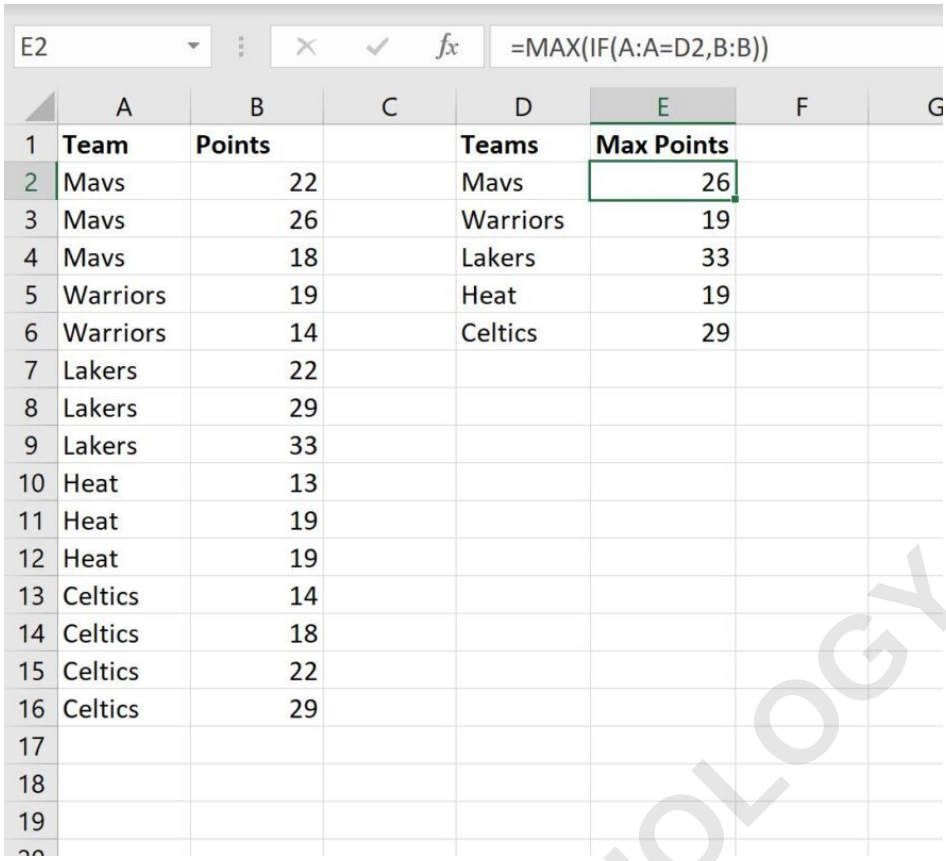
	A	B	C	D	E	F	G
1	**Team**	**Points**		**Teams**			
2	Mavs	22		Mavs			
3	Mavs	26		Warriors			
4	Mavs	18		Lakers			
5	Warriors	19		Heat			
6	Warriors	14		Celtics			
7	Lakers	22					
8	Lakers	29					
9	Lakers	33					
10	Heat	13					
11	Heat	19					
12	Heat	19					
13	Celtics	14					
14	Celtics	18					
15	Celtics	22					
16	Celtics	29					
17							
18							
19							
20							

Step 3: Find the Max Value by Group

Next, we will use the following formula to find the max points scored by each team:

=MAX(IF(A:A=D2,B:B))

We will type this formula into cell E2 and then copy and paste it down to the remaining cells in column E:



	A	B	C	D	E	F	G
1	**Team**	**Points**		**Teams**	**Max Points**		
2	Mavs	22		Mavs	26		
3	Mavs	26		Warriors	19		
4	Mavs	18		Lakers	33		
5	Warriors	19		Heat	19		
6	Warriors	14		Celtics	29		
7	Lakers	22					
8	Lakers	29					
9	Lakers	33					
10	Heat	13					
11	Heat	19					
12	Heat	19					
13	Celtics	14					
14	Celtics	18					
15	Celtics	22					
16	Celtics	29					
17							
18							
19							

This tells us:

The max points scored by players on the Mavs is 26.The max points scored by players on the Warriors is 19.The max points scored by players on the Lakers is 33.The max points scored by players on the Heat is 19.The max points scored by players on the Celtics is 29.

Note: To calculate the minimum points scored by each team, simply replace the MAX in the formula with MIN.

Additional Resources

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