

How can I calculate the median of filtered rows in Excel?

Authored by
stats writer

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The process of calculating the median of filtered rows in Excel involves determining the middle value in a set of data that has been filtered according to specific criteria. This can be achieved by arranging the filtered data in ascending or descending order and finding the value that falls in the middle position. In cases where there is an even number of data points, the median is the average of the two middle values. The median can be easily calculated using the MEDIAN function in Excel, which takes the filtered range as its input. This allows for a quick and accurate determination of the median for a specific subset of data in an Excel spreadsheet.

Calculate Median of Filtered Rows in Excel

You can use the following syntax to calculate the median value of a filtered range in Excel:

=AGGREGATE(12,1,B2:B13)

The value 12 is a for calculating the median of a range and the value 1 tells Excel to ignore hidden rows.

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

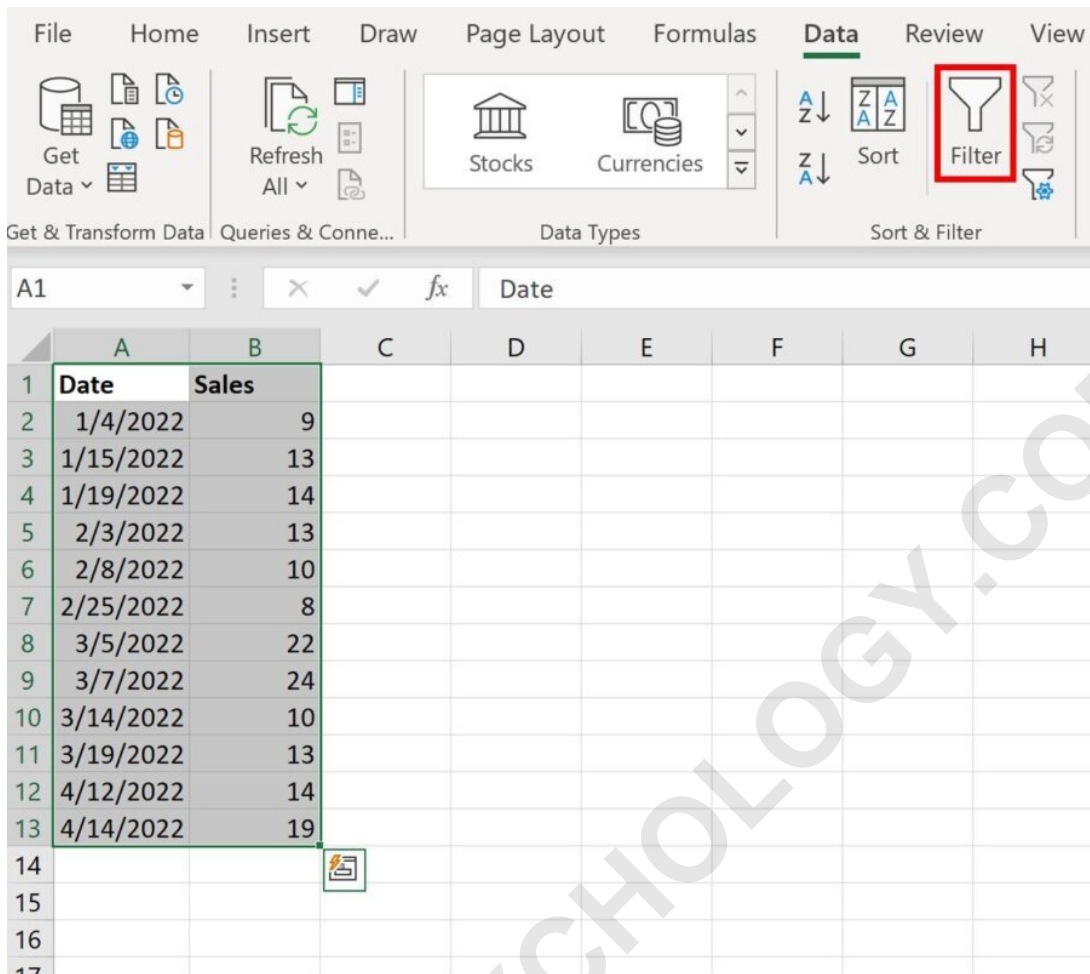
Example: Calculate Median of Filtered Rows in Excel

Suppose we have the following dataset that shows the number of sales made during various days by a company:

	A	B	C	D	E	F
1	Date	Sales				
2	1/4/2022	9				
3	1/15/2022	13				
4	1/19/2022	14				
5	2/3/2022	13				
6	2/8/2022	10				
7	2/25/2022	8				
8	3/5/2022	22				
9	3/7/2022	24				
10	3/14/2022	10				
11	3/19/2022	13				
12	4/12/2022	14				
13	4/14/2022	19				
14						
15						
16						
17						
18						
19						

Next, let's filter the data to only show the dates that are in January or April.

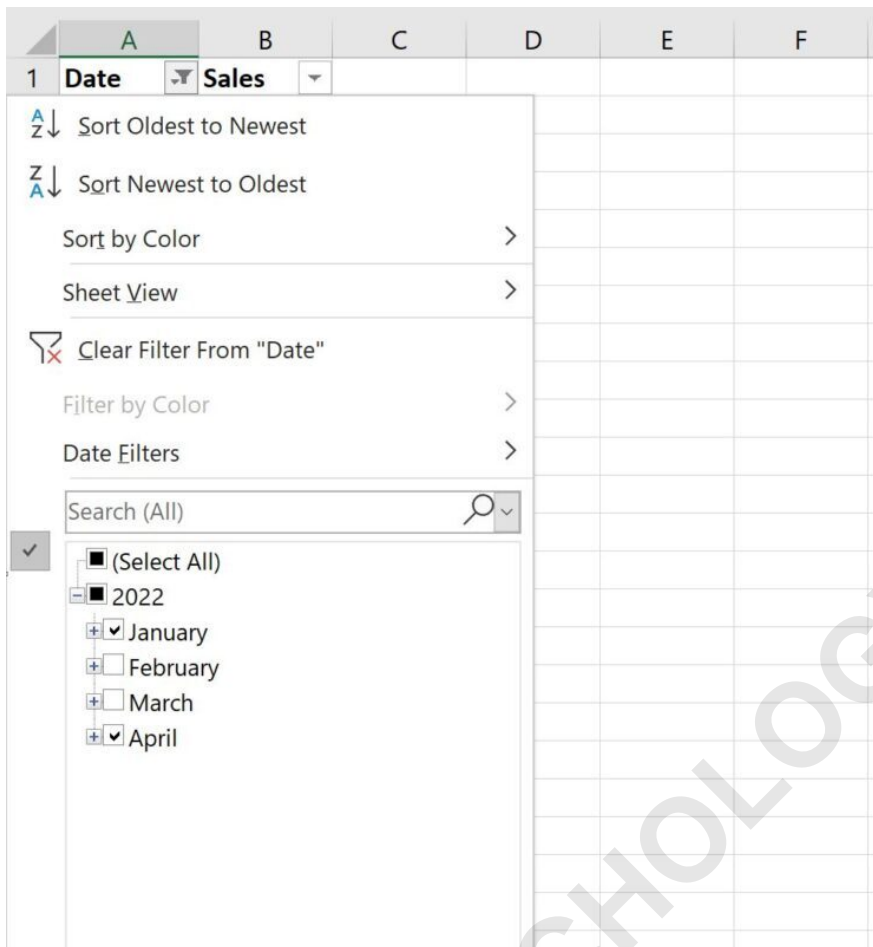
To do so, highlight the cell range A1:B13. Then click the Data tab along the top ribbon and click the Filter button.



The screenshot shows the Microsoft Excel interface with the 'Data' tab selected. The 'Filter' icon in the 'Sort & Filter' group is highlighted with a red box. Below the ribbon, the formula bar shows 'Date' and the active cell is A1. The worksheet contains a table with two columns: 'Date' and 'Sales'. The data is filtered to show only rows where the date is in January or April 2022.

	A	B	C	D	E	F	G	H
1	Date	Sales						
2	1/4/2022	9						
3	1/15/2022	13						
4	1/19/2022	14						
5	2/3/2022	13						
6	2/8/2022	10						
7	2/25/2022	8						
8	3/5/2022	22						
9	3/7/2022	24						
10	3/14/2022	10						
11	3/19/2022	13						
12	4/12/2022	14						
13	4/14/2022	19						
14								
15								
16								
17								

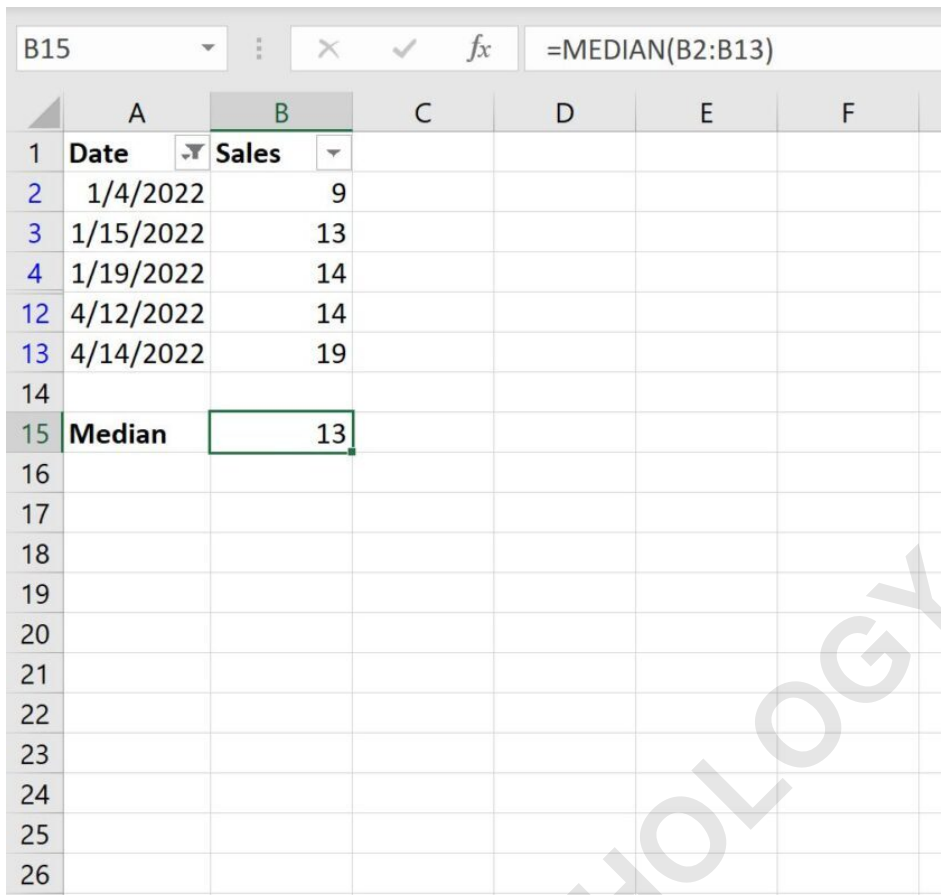
Then click the dropdown arrow next to Date and make sure that only the boxes next to January and April are checked, then click OK:



The data will automatically be filtered to only show the rows where the dates are in January or April:

	A	B	C	D	E	F
1	Date	Sales				
2	1/4/2022	9				
3	1/15/2022	13				
4	1/19/2022	14				
12	4/12/2022	14				
13	4/14/2022	19				
14						
15						
16						
17						
18						
19						
20						
21						
22						
23						
24						
25						

If we attempt to use the MEDIAN() function to find the average value in the Sales column, it will actually return the median of all of the original values:



The screenshot shows an Excel spreadsheet with a filtered table. The formula bar at the top displays the formula `=MEDIAN(B2:B13)`. The table has two columns: 'Date' and 'Sales'. The 'Sales' column contains the values 9, 13, 14, 14, and 19. The median of these values is 13, which is displayed in cell B15. The formula bar also shows a checkmark and the `fx` icon, indicating that the formula is active.

	A	B	C	D	E	F
1	Date	Sales				
2	1/4/2022	9				
3	1/15/2022	13				
4	1/19/2022	14				
12	4/12/2022	14				
13	4/14/2022	19				
14						
15	Median	13				
16						
17						
18						
19						
20						
21						
22						
23						
24						
25						
26						

Instead, we can use the AGGREGATE() function:

	A	B	C	D	E	F
1	Date	Sales				
2	1/4/2022	9				
3	1/15/2022	13				
4	1/19/2022	14				
12	4/12/2022	14				
13	4/14/2022	19				
14						
15	Median	14				
16						
17						
18						
19						
20						
21						
22						
23						
24						
25						

This function calculates the median of only the visible rows.

We can manually verify this by calculating the median of the visible rows:

Median of Sales in visible rows:

When the values are arranged in ascending order, the value located in the middle is indeed 14.

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

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