How can I calculate the average by date in Excel?

Authored by

stats writer

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To calculate the average by date in Excel, you can use the AVERAGEIF function. This function allows you to specify a range of dates and a corresponding range of values, and it will calculate the average of the values for the specified dates. This is useful for analyzing data that is organized by date, such as sales figures or stock prices. By using the AVERAGEIF function, you can quickly and accurately calculate the average for each date in your data set, providing valuable insights and making it easier to track trends over time.

Calculate Average by Date in Excel

You can use the following formula to calculate the average value by date in an Excel spreadsheet:

=AVERAGEIF(A1:A10, C1, B1:B10)

This particular formula calculates the average value in the cell range B1:B10 only where the corresponding cells in the range A1:A10 are equal to the date in cell C1.

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

Example: Calculate Average by Date in Excel

Suppose we have the following dataset that shows the sales of some product on various dates:

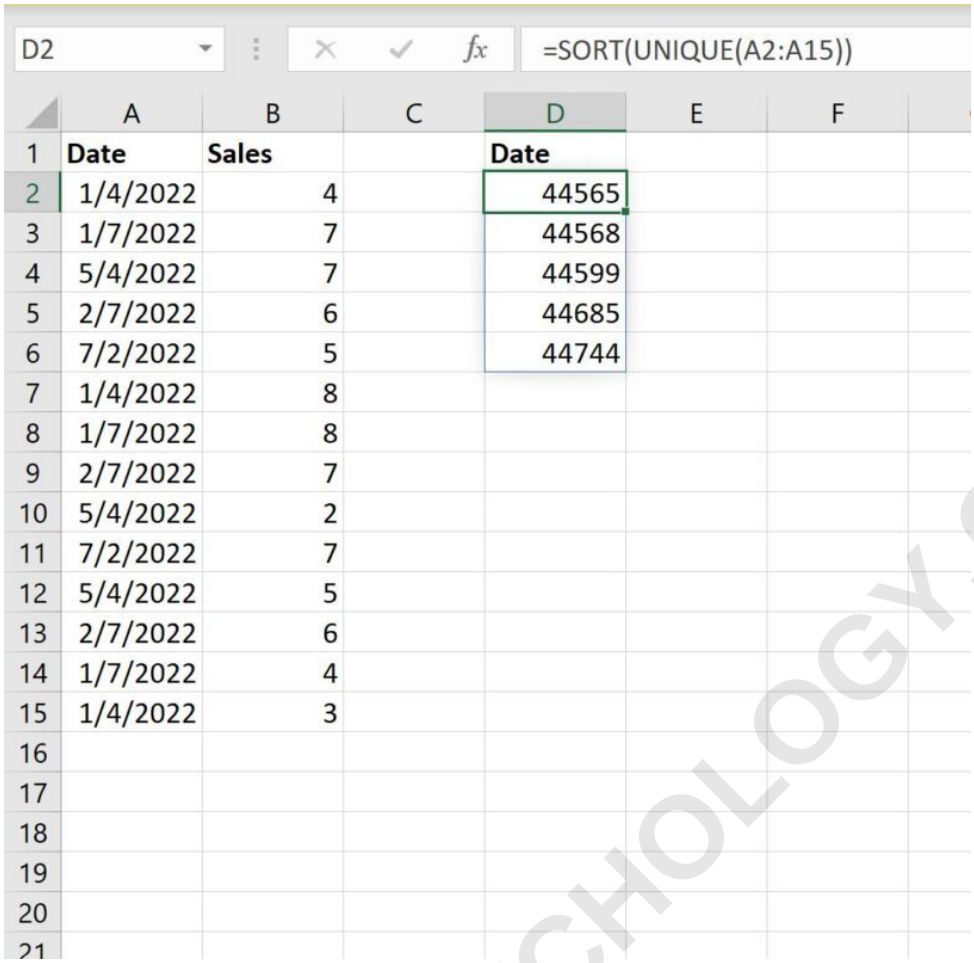
	A	B	C	D	E	F
1	**Date**	**Sales**				
2	1/4/2022	4				
3	1/7/2022	7				
4	5/4/2022	7				
5	2/7/2022	6				
6	7/2/2022	5				
7	1/4/2022	8				
8	1/7/2022	8				
9	2/7/2022	7				
10	5/4/2022	2				
11	7/2/2022	7				
12	5/4/2022	5				
13	2/7/2022	6				
14	1/7/2022	4				
15	1/4/2022	3				
16						
17						
18						
19						
20						
21						
22						
23						

Now suppose we'd like to calculate the average sales value by date.

To generate a list of unique dates, we can use the following formula:

=SORT(UNIQUE(A2:A15))

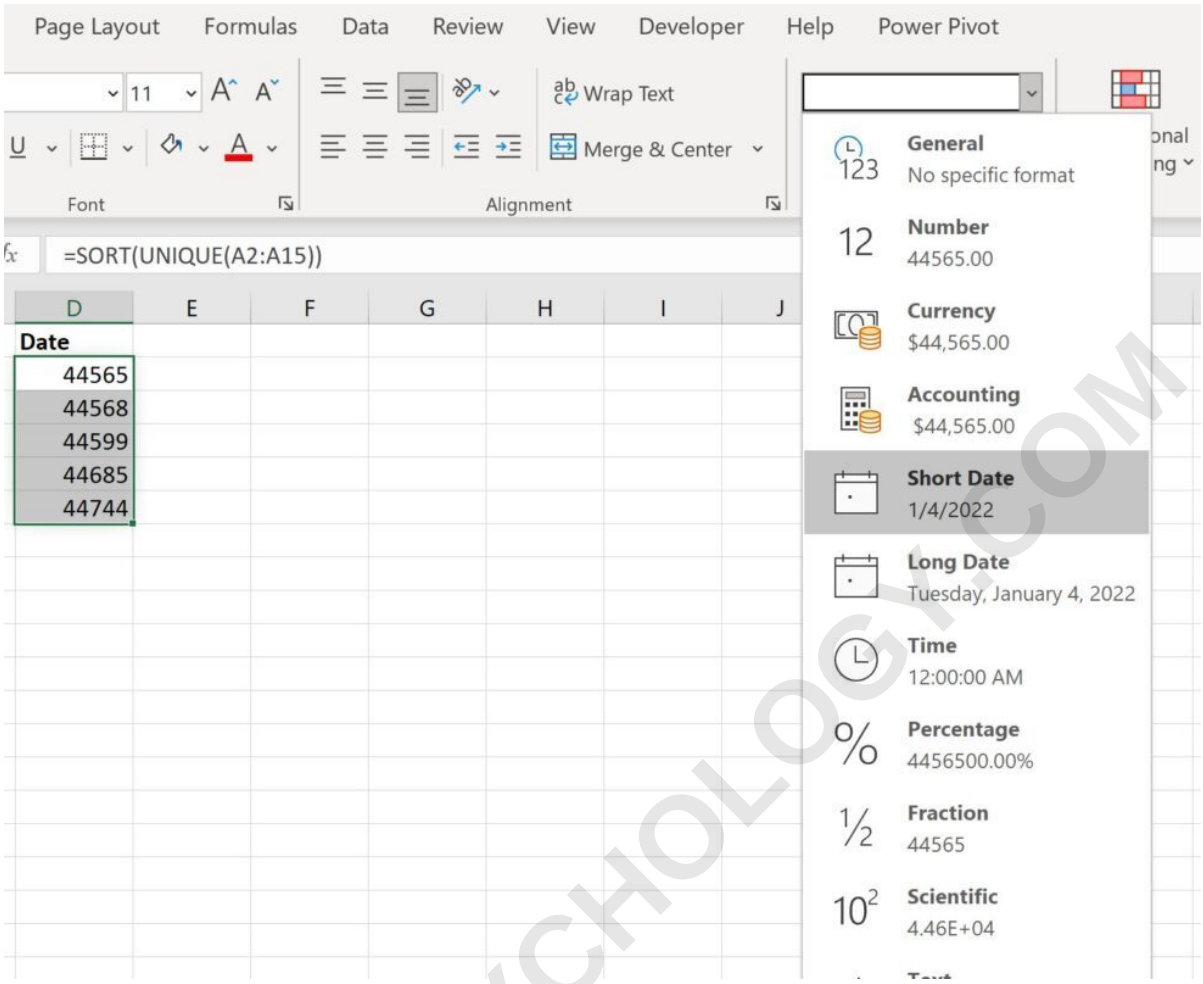
We'll type this formula into cell D2:



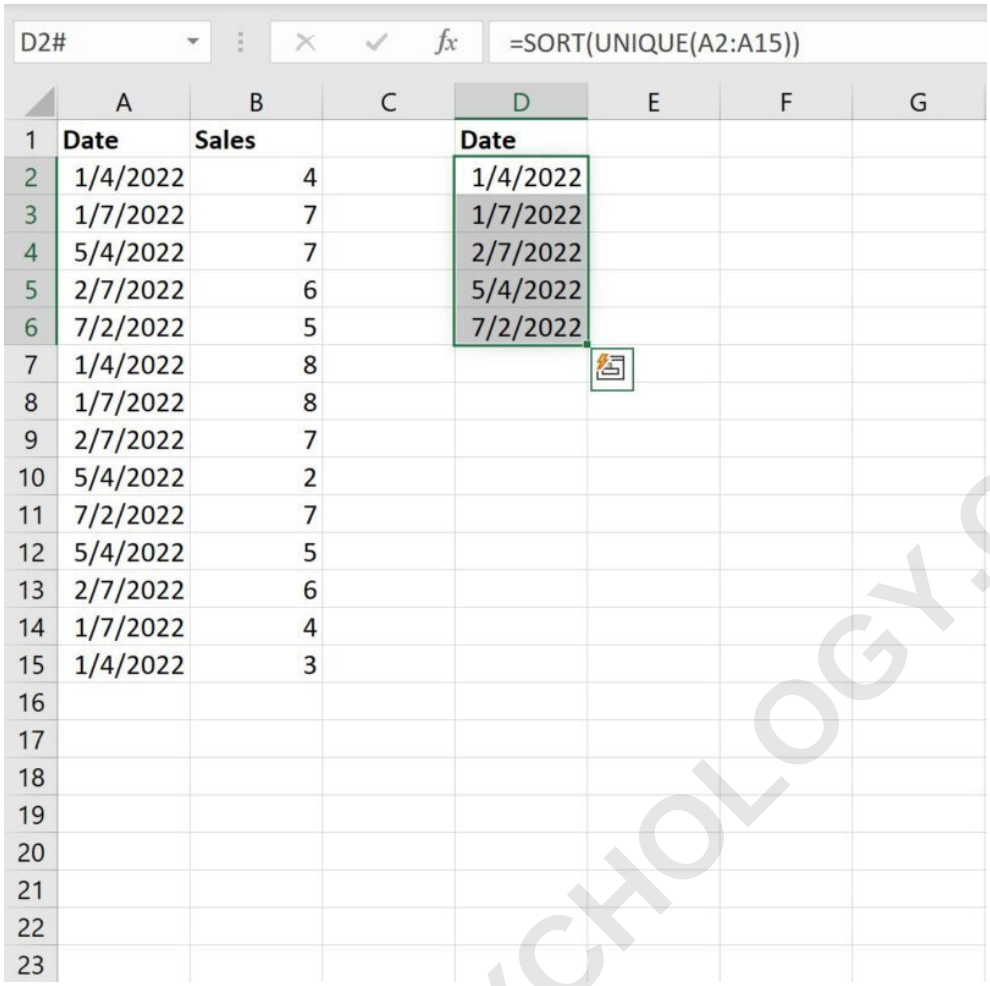
	A	B	C	D	E	F
1	Date	Sales		Date		
2	1/4/2022	4		44565		
3	1/7/2022	7		44568		
4	5/4/2022	7		44599		
5	2/7/2022	6		44685		
6	7/2/2022	5		44744		
7	1/4/2022	8				
8	1/7/2022	8				
9	2/7/2022	7				
10	5/4/2022	2				
11	7/2/2022	7				
12	5/4/2022	5				
13	2/7/2022	6				
14	1/7/2022	4				
15	1/4/2022	3				
16						
17						
18						
19						
20						
21						

By default, Excel converts the date to the number of days since 1/1/1900.

To convert these numbers to a recognizable date format, simply highlight the cell range D2:D6, then click the format dropdown arrow and click Short Date:



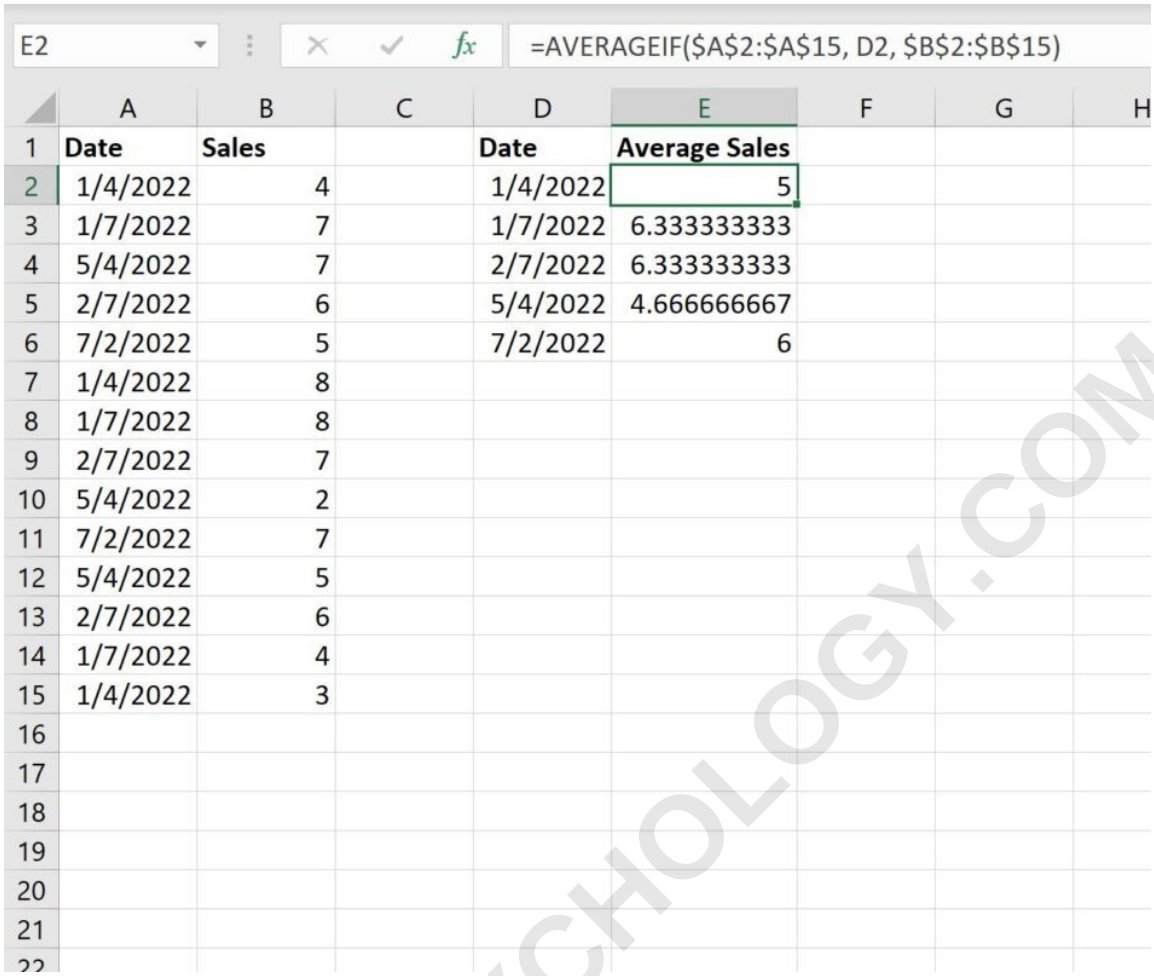
The dates will be converted to a recognizable date format:



	A	B	C	D	E	F	G
1	Date	Sales		Date			
2	1/4/2022	4		1/4/2022			
3	1/7/2022	7		1/7/2022			
4	5/4/2022	7		2/7/2022			
5	2/7/2022	6		5/4/2022			
6	7/2/2022	5		7/2/2022			
7	1/4/2022	8					
8	1/7/2022	8					
9	2/7/2022	7					
10	5/4/2022	2					
11	7/2/2022	7					
12	5/4/2022	5					
13	2/7/2022	6					
14	1/7/2022	4					
15	1/4/2022	3					
16							
17							
18							
19							
20							
21							
22							
23							

=AVERAGEIF($A$2:$A$15, D2, $B$2:$B$15)

We'll type this formula into cell E2, then copy and paste it into each remaining cell in column E:



E2 =AVERAGEIF($A$2:$A$15, D2, $B$2:$B$15)

	A	B	C	D	E	F	G	H
1	Date	Sales		Date	Average Sales			
2	1/4/2022	4		1/4/2022	5			
3	1/7/2022	7		1/7/2022	6.333333333			
4	5/4/2022	7		2/7/2022	6.333333333			
5	2/7/2022	6		5/4/2022	4.666666667			
6	7/2/2022	5		7/2/2022	6			
7	1/4/2022	8						
8	1/7/2022	8						
9	2/7/2022	7						
10	5/4/2022	2						
11	7/2/2022	7						
12	5/4/2022	5						
13	2/7/2022	6						
14	1/7/2022	4						
15	1/4/2022	3						
16								
17								
18								
19								
20								
21								

From the output we can see:

The average sales on 1/4/2022 is 5.The average sales on 1/7/2022 is 6.333.The average sales on 2/7/2022 is 6.333.

And so on.

Additional Resources

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