

How can I calculate a cumulative sum by date in Excel?

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To calculate a cumulative sum by date in Excel, you can use the SUMIF or SUMIFS function, along with the DATE function. First, organize your data in columns with the dates in one column and the values in another. Then, use the SUMIF or SUMIFS function to sum the values based on the date criteria. Finally, use the DATE function to create a series of dates and use the cumulative sum formula to calculate the cumulative sum for each date. This will give you a running total of the values by date in your Excel spreadsheet.

Calculate a Cumulative Sum by Date in Excel

This tutorial explains how to calculate a cumulative sum grouped by date in Excel.

Step 1: Create the Data

First, let's create a dataset that shows the total sales of some store by date:

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

Step 2: Calculate Overall Cumulative Sum

Next, we can create a column that displays the overall cumulative sum of sales.

First, type `=B2` in cell C2.

Then, type the following formula in cell C3:

`=SUM(B2:B3)`

Then drag this formula down to every remaining cell in

column C:

	A	B	C	D	E	F	G
1	Date	Sales	Overall Cum Sum				
2	1/1/2022	5	5				
3	1/1/2022	3	8				
4	1/1/2022	7	15				
5	1/1/2022	12	27				
6	1/2/2022	7	34				
7	1/2/2022	5	39				
8	1/2/2022	10	49				
9	1/3/2022	15	64				
10	1/4/2022	3	67				
11	1/4/2022	7	74				
12	1/4/2022	9	83				
13	1/4/2022	10	93				
14							
15							
16							
17							
18							
19							
20							
21							

Step 3: Calculate Cumulative Sum by Date

Next, we can create a column that displays the cumulative sum of sales by date.

First, type `=B2` in cell D2.

Then, type the following formula in cell D3:

=IF(A3=A2, B3+D2, B3)

Then drag this formula down to every remaining cell in column D:

	A	B	C	D	E	F	G
1	Date	Sales	Overall Cum Sum	Daily Cum Sum			
2	1/1/2022	5	5	5			
3	1/1/2022	3	8	8			
4	1/1/2022	7	15	15			
5	1/1/2022	12	27	27			
6	1/2/2022	7	34	7			
7	1/2/2022	5	39	12			
8	1/2/2022	10	49	22			
9	1/3/2022	15	64	15			
10	1/4/2022	3	67	3			
11	1/4/2022	7	74	10			
12	1/4/2022	9	83	19			
13	1/4/2022	10	93	29			
14							
15							
16							
17							
18							
19							
20							
21							
22							

The result is a column that displays the cumulative sales grouped by each date.

For example:

The cumulative sales for 1/1/2022 is: 5, 8, 15, 27
The cumulative sales for 1/2/2022 is: 7, 12, 2
The cumulative sales for 1/3/2022 is: 15
The cumulative sales for 1/4/2022 is: 3, 10, 19, 29

Notice that the values in the cumulative sum column restart for each new date.

Additional Resources

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