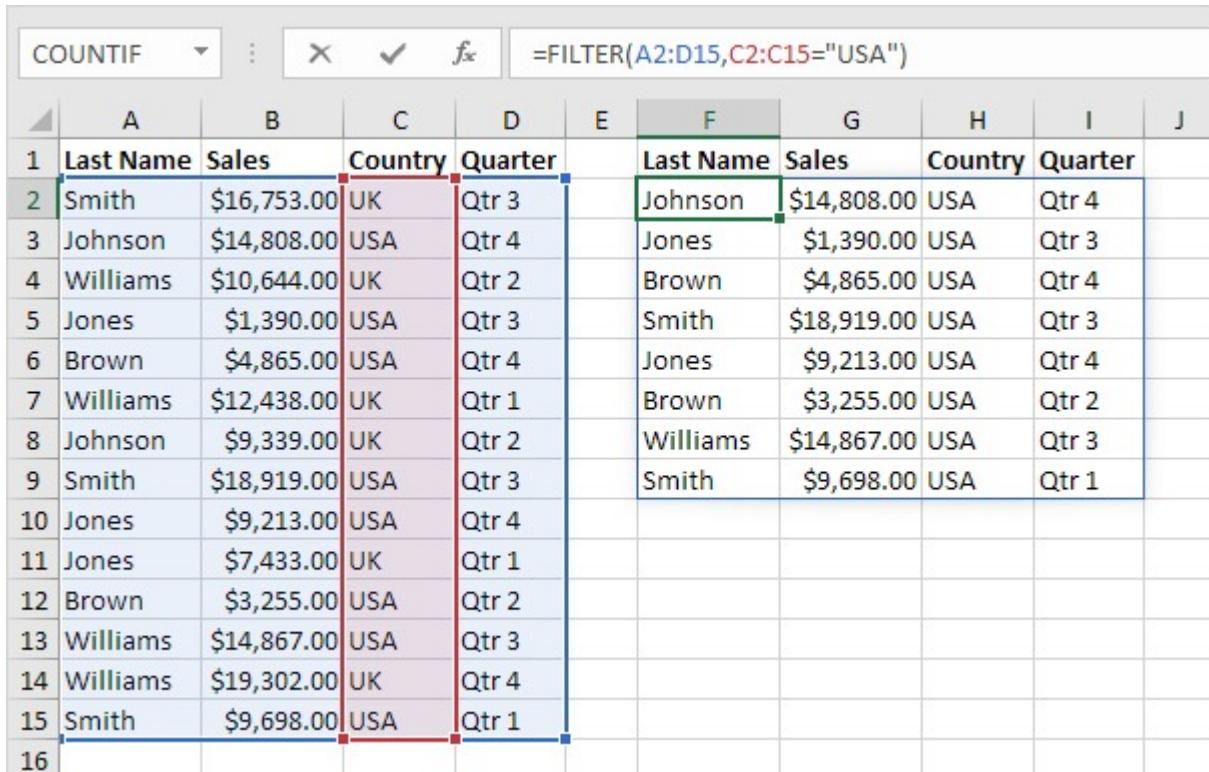


# FILTER function in Excel

Use the magic FILTER function in Excel 365/2021 to extract records that meet certain criteria. The FILTER function is quite versatile.

1. The simple FILTER function below has two arguments and extracts all USA records.



The screenshot shows a Microsoft Excel spreadsheet with two main sections. On the left, there is a table of data with columns: Last Name, Sales, Country, and Quarter. The data includes rows for Smith, Johnson, Williams, Jones, Brown, and others. On the right, a formula bar shows the formula =FILTER(A2:D15,C2:C15="USA"). Below the formula bar, the results of the filter are displayed in a new table with columns: Last Name, Sales, Country, and Quarter. This new table only contains rows where the 'Country' column value is "USA".

	A	B	C	D	E	F	G	H	I	J
1	Last Name	Sales	Country	Quarter		Last Name	Sales	Country	Quarter	
2	Smith	\$16,753.00	UK	Qtr 3		Johnson	\$14,808.00	USA	Qtr 4	
3	Johnson	\$14,808.00	USA	Qtr 4		Jones	\$1,390.00	USA	Qtr 3	
4	Williams	\$10,644.00	UK	Qtr 2		Brown	\$4,865.00	USA	Qtr 4	
5	Jones	\$1,390.00	USA	Qtr 3		Smith	\$18,919.00	USA	Qtr 3	
6	Brown	\$4,865.00	USA	Qtr 4		Jones	\$9,213.00	USA	Qtr 4	
7	Williams	\$12,438.00	UK	Qtr 1		Brown	\$3,255.00	USA	Qtr 2	
8	Johnson	\$9,339.00	UK	Qtr 2		Williams	\$14,867.00	USA	Qtr 3	
9	Smith	\$18,919.00	USA	Qtr 3		Smith	\$9,698.00	USA	Qtr 1	
10	Jones	\$9,213.00	USA	Qtr 4						
11	Jones	\$7,433.00	UK	Qtr 1						
12	Brown	\$3,255.00	USA	Qtr 2						
13	Williams	\$14,867.00	USA	Qtr 3						
14	Williams	\$19,302.00	UK	Qtr 4						
15	Smith	\$9,698.00	USA	Qtr 1						
16										

## Discover more

[Microsoft Excel](#) >

[Excel](#) >

[Free Excel](#) >

Note: this dynamic array function, entered into cell F2, fills multiple cells. Wow! This behavior in Excel 365/2021 is called [spilling](#).

2. The dynamic FILTER function below extracts all UK records.

COUNTIF ▾ : X ✓ f<sub>x</sub> =FILTER(A2:D15,C2:C15=B17)

	A	B	C	D	E	F	G	H	I	J
1	Last Name	Sales	Country	Quarter		Last Name	Sales	Country	Quarter	
2	Smith	\$16,753.00	UK	Qtr 3		Smith	\$16,753.00	UK	Qtr 3	
3	Johnson	\$14,808.00	USA	Qtr 4		Williams	\$10,644.00	UK	Qtr 2	
4	Williams	\$10,644.00	UK	Qtr 2		Williams	\$12,438.00	UK	Qtr 1	
5	Jones	\$1,390.00	USA	Qtr 3		Johnson	\$9,339.00	UK	Qtr 2	
6	Brown	\$4,865.00	USA	Qtr 4		Jones	\$7,433.00	UK	Qtr 1	
7	Williams	\$12,438.00	UK	Qtr 1		Williams	\$19,302.00	UK	Qtr 4	
8	Johnson	\$9,339.00	UK	Qtr 2						
9	Smith	\$18,919.00	USA	Qtr 3						
10	Jones	\$9,213.00	USA	Qtr 4						
11	Jones	\$7,433.00	UK	Qtr 1						
12	Brown	\$3,255.00	USA	Qtr 2						
13	Williams	\$14,867.00	USA	Qtr 3						
14	Williams	\$19,302.00	UK	Qtr 4						
15	Smith	\$9,698.00	USA	Qtr 1						
16										
17	Country	UK								
18										

3. The FILTER function has an optional third argument. Use this argument to display a friendly message (instead of the #CALC! error) if no records are found.

COUNTIF ▾ : X ✓ f<sub>x</sub> =FILTER(A2:D15,C2:C15=B17,"No Items")

	A	B	C	D	E	F	G	H	I	J
1	Last Name	Sales	Country	Quarter		Last Name	Sales	Country	Quarter	
2	Smith	\$16,753.00	UK	Qtr 3		No Items				
3	Johnson	\$14,808.00	USA	Qtr 4						
4	Williams	\$10,644.00	UK	Qtr 2						
5	Jones	\$1,390.00	USA	Qtr 3						
6	Brown	\$4,865.00	USA	Qtr 4						
7	Williams	\$12,438.00	UK	Qtr 1						
8	Johnson	\$9,339.00	UK	Qtr 2						
9	Smith	\$18,919.00	USA	Qtr 3						
10	Jones	\$9,213.00	USA	Qtr 4						
11	Jones	\$7,433.00	UK	Qtr 1						
12	Brown	\$3,255.00	USA	Qtr 2						
13	Williams	\$14,867.00	USA	Qtr 3						
14	Williams	\$19,302.00	UK	Qtr 4						
15	Smith	\$9,698.00	USA	Qtr 1						
16										
17	Country	Canada								
18										

4. Let's kick it up a notch! The FILTER function below uses the multiplication operator (\*) to extract all records where Sales is greater than \$10,000 and Country equals "USA".

COUNTIF : =FILTER(A2:D15,(B2:B15>10000)\*(C2:C15="USA"))

	A	B	C	D	E	F	G	H	I	J
1	Last Name	Sales	Country	Quarter		Last Name	Sales	Country	Quarter	
2	Smith	\$16,753.00	UK	Qtr 3		Johnson	\$14,808.00	USA	Qtr 4	
3	Johnson	\$14,808.00	USA	Qtr 4		Smith	\$18,919.00	USA	Qtr 3	
4	Williams	\$10,644.00	UK	Qtr 2		Williams	\$14,867.00	USA	Qtr 3	
5	Jones	\$1,390.00	USA	Qtr 3						
6	Brown	\$4,865.00	USA	Qtr 4						
7	Williams	\$12,438.00	UK	Qtr 1						
8	Johnson	\$9,339.00	UK	Qtr 2						
9	Smith	\$18,919.00	USA	Qtr 3						
10	Jones	\$9,213.00	USA	Qtr 4						
11	Jones	\$7,433.00	UK	Qtr 1						
12	Brown	\$3,255.00	USA	Qtr 2						
13	Williams	\$14,867.00	USA	Qtr 3						
14	Williams	\$19,302.00	UK	Qtr 4						
15	Smith	\$9,698.00	USA	Qtr 1						
16										

5. The FILTER function below uses the addition operator (+) to extract all records where Last Name equals "Smith" or Last Name equals "Brown".

COUNTIF : =FILTER(A2:D15,(A2:A15="Smith")+(A2:A15="Brown"))

	A	B	C	D	E	F	G	H	I	J
1	Last Name	Sales	Country	Quarter		Last Name	Sales	Country	Quarter	
2	Smith	\$16,753.00	UK	Qtr 3		Smith	\$16,753.00	UK	Qtr 3	
3	Johnson	\$14,808.00	USA	Qtr 4		Brown	\$4,865.00	USA	Qtr 4	
4	Williams	\$10,644.00	UK	Qtr 2		Smith	\$18,919.00	USA	Qtr 3	
5	Jones	\$1,390.00	USA	Qtr 3		Brown	\$3,255.00	USA	Qtr 2	
6	Brown	\$4,865.00	USA	Qtr 4		Smith	\$9,698.00	USA	Qtr 1	
7	Williams	\$12,438.00	UK	Qtr 1						
8	Johnson	\$9,339.00	UK	Qtr 2						
9	Smith	\$18,919.00	USA	Qtr 3						
10	Jones	\$9,213.00	USA	Qtr 4						
11	Jones	\$7,433.00	UK	Qtr 1						
12	Brown	\$3,255.00	USA	Qtr 2						
13	Williams	\$14,867.00	USA	Qtr 3						
14	Williams	\$19,302.00	UK	Qtr 4						
15	Smith	\$9,698.00	USA	Qtr 1						
16										

6. Add the SORT function to sort the records by the first column.

COUNTIF : =SORT(FILTER(A2:D15,(A2:A15="Smith")+(A2:A15="Brown")))

	A	B	C	D	E	F	G	H	I	J
1	Last Name	Sales	Country	Quarter		Last Name	Sales	Country	Quarter	
2	Smith	\$16,753.00	UK	Qtr 3		Brown	\$4,865.00	USA	Qtr 4	
3	Johnson	\$14,808.00	USA	Qtr 4		Brown	\$3,255.00	USA	Qtr 2	
4	Williams	\$10,644.00	UK	Qtr 2		Smith	\$16,753.00	UK	Qtr 3	

5	Jones	\$1,390.00	USA	Qtr 3		Smith	\$18,919.00	USA	Qtr 3
6	Brown	\$4,865.00	USA	Qtr 4		Smith	\$9,698.00	USA	Qtr 1
7	Williams	\$12,438.00	UK	Qtr 1					
8	Johnson	\$9,339.00	UK	Qtr 2					
9	Smith	\$18,919.00	USA	Qtr 3					
10	Jones	\$9,213.00	USA	Qtr 4					
11	Jones	\$7,433.00	UK	Qtr 1					
12	Brown	\$3,255.00	USA	Qtr 2					
13	Williams	\$14,867.00	USA	Qtr 3					
14	Williams	\$19,302.00	UK	Qtr 4					
15	Smith	\$9,698.00	USA	Qtr 1					
16									

Note: by default, the [SORT function](#) in Excel 365/2021 sorts by the first column, in ascending order.

## Discover more

[Data visualization software](#) >

[Business planning templates](#) >

[Excel courses online](#) >



## Chapter

- [Filter](#)

## Learn more, it's easy

- [Number and Text Filters](#)
- [Date Filters](#)
- [Advanced Filter](#)
- [Data Form](#)
- [Remove Duplicates](#)

- Outlining Data
- 

- Subtotal
- 

- Unique Values
- 

- [FILTER function](#)
- 

## ⤵ Download Excel File

- [filter-function.xlsx](#)
- 

## Next Chapter

- [Conditional Formatting](#)
- 

## Follow Excel Easy



## Become an Excel Pro

- [1. Introduction](#)
- 

- [2. Basics](#)
- 

- [3. Functions](#)
- 

- [4. Data Analysis](#)
- 

- [5. VBA](#)
- 

FILTER function • © 2010-2026

Start with Excel in 2026: Range • Formulas and Functions • Ribbon • Cell References • Sort • Filter