

Anticipate what stakeholders need to know

Prepare metrics and insights to share

Video: Prepare data in spreadsheets: sorting and filtering
5 min

Reading: Data analysis in spreadsheets: sort, filter, and compare
20 min

Practice Quiz: Activity: Sort and filter spreadsheet data
5 questions

Video: Prepare data in spreadsheets: pivot tables
3 min

Reading: Data analysis in spreadsheets: pivot tables
20 min

Practice Quiz: Activity: Analyze data using pivot tables
1 question

Reading: Activity: Exemplar: Analyze data using pivot tables
10 min

Practice Quiz: Test your knowledge: Spreadsheet features
5 questions

Present insights to stakeholders

Review: Share metrics and insights with stakeholders

Course review: Assess for success: marketing analytics and measurement

Data analysis in spreadsheets: sort, filter, and compare

A video in this course covered the steps to sort and filter data in spreadsheets. This reading illustrates how sorting and filtering can help you pinpoint campaign or business-related insights that you can share with stakeholders.

Description of spreadsheet

Suppose you have a spreadsheet that contains online sales data, like the one shown in the image below. Recall from the video that a cell in a spreadsheet holds data. Columns are vertical and are labeled alphabetically. Rows are horizontal and are labeled numerically. People refer to cell positions by combining the column and row designation, like cell **A2**. In the sample online sales data below, cell **A2** contains the data, Alexander City.

	A	B	C	D	E	F
1	City	State	Customer	Auto Parts	Quantity	Code
2	Alexander City	Alabama	Hallam Gardner	Tires	4	EZ3043
3	Athens	Alabama	Lenny Reyes	Sunroof Glass	1	39343E
4	Jasper	Alabama	AJ McNally	Roof rack	1	
5	Opelika	Alabama	Musa Marquez	Quarter panel	1	
6	Phenix City	Alabama	Ibraheem Betts	Sunroof Glass	1	
7	Scottsboro	Alabama	Emilee Guthrie	Radiator	1	
8	Troy	Alabama	Dwayne Barnett	Tires	2	EZ3043
9	Tuscumbia	Alabama	Nenna Thornton	Spoller	1	
10	Tuskegee	Alabama	Eddison Mercer	Rims	2	
11	Cardova	Alaska	Anayah Robles	Roof rack	1	
12	Fairbanks	Alaska	Haidia Kape	Window motor	1	
13	Nome	Alaska	Nicole Delarosa	Sunroof	1	
14	Palmer	Alaska	Jethro Stein	Grille	1	CGRWAT
15	Seward	Alaska	Senas Bassett	Tires	12	
16	Sitka	Alaska	Eisa Garcia	Quarter panel	1	
17	Skagway	Alaska	Taha Robinson	Rims	1	
18	Valdez	Alaska	Caro Dunlap	Grille	1	
19	App	Arizona	Nathaniel Hegam	Roof rack	1	
20	Avondale	Arizona	Saffa Stokes	Quarter panel	1	
21	Bisbee	Arizona	Rio Proctor	Tires	4	
22	Casa Grande	Arizona	Dawnade Mohammed	Inner door handle	1	

Also recall from the video that sorting can put data in a certain order, and filtering can display data you want while excluding other data. Sorting and filtering in this spreadsheet enables you to gather insights like these:

- Number and percentage of purchases made from each campaign (by campaign codes)
- Campaign-related purchases (overall and by state)

Example 1: Purchases made from each campaign

1. To determine the number and percentage of purchases made from each campaign, sort the data in the sheet by Column F, which contains a discount code used in each campaign. Sorting in descending order (Z to A) places campaign-related purchases at the top of the sheet followed by blank cells.

2. Next, after sorting, create a filter for Column F to display the purchases for each campaign separately by deselecting the other two campaigns. For example, unchecking 39343E and CGRWAT displays only the purchases made from campaign EZ3043.

3. And finally, count the number of instances of each code each time you filter. Divide the number of instances of each code by the total number of purchases to get the percentage of purchases made from each campaign. For example, 15 purchases made with the code EZ3043 out of a total of 363 purchases is 2.66% of purchases.

Pro tip: For large datasets, instead of manually counting instances, you can use the COUNTA function in Google Sheets or Microsoft Excel. COUNTA returns the number of non-blank cells in a range. For example, if the data range is F2:F500, enter the following in a blank cell: **=COUNT(F2:F500)**. The number of cells in the range that contain data (such as a campaign code) is returned in that cell.

Insight you could share with stakeholders: 2.66% of all purchases resulted from Campaign EZ3043.

Example 2: Campaign-related purchases (overall and by state)

If you add the number of campaign-related purchases and divide that value by the total number of purchases, you get a percentage of campaign-related purchases. For example, if 59 purchases were related to the three campaigns, the overall percentage would be 59 divided by 363, and then multiplied by 100, or 16.48%.

Insight you could share with stakeholders: 10.48% of all purchases were campaign-related.

You could then filter the data by state (Column B) to get the breakdown by state. For example, if filtering for Alabama in Column B displays nine results, two of which are campaign-related, you can conclude that 22% of purchases from Alabama were campaign-related. You would have to repeat the filtering process for each state to complete a state-by-state comparison.

Insights you could share with stakeholders:

- 22% of purchases in Alabama were campaign-related
- 0% of purchases in Alaska were campaign-related
- 38% of purchases in Arizona were campaign-related
- (and so on for each subsequent state in the U.S.)

Resources for more information

You can refer to the links listed below for more information about sorting and filtering data in spreadsheets.

Google Sheets

- Sort and filter your data** [↗](#): This resource can help you organize data in Sheets. Use this guide to sort part or all of a spreadsheet. You can sort by text, number, and color. Then, learn how to create filters to show only certain data while hiding the rest. Finally, the article includes information on creating, saving, and removing a filter view.
- COUNTA** [↗](#): This Google Help Center article provides syntax and usage examples for the COUNTA function in Google Sheets.

Microsoft Excel

- Sort data in a range or table** [↗](#): This page guides you through all the steps you will need to sort data by number, text, and color. You'll also have the option to sort by custom list so that you can customize exactly what you want to sort.
- Filter data in a range or table** [↗](#): This article has step-by-step instructions on how to filter an Excel spreadsheet to show only the data you want to see. You can also use built-in comparison operators, such as "greater than" and "top 10" to reveal only the most relevant data.
- COUNTA function** [↗](#): This article describes the formula syntax and usage of the COUNTA function in Microsoft Excel.

Mark as completed