

Excel 2016: Large Data 1 - Sorting and Filtering



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1.5 hours

In this workshop we will work with single and multilevel sorting; learn to use data filters to automatically show only the specified data set; and do math on our filtered data sets. This workshop also contains a very brief introduction to other summary tools such as Subtotal and Pivot Tables. This intermediate workshop assumes prior experience with Microsoft Excel.

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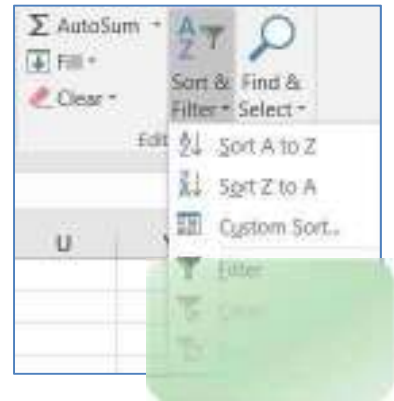
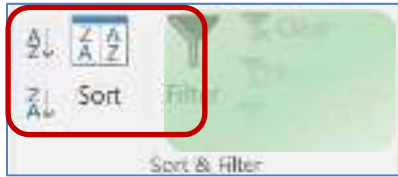
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Sorting Data

On the far right side of the **Home** tab you will find a large Sort & Filter button. The menu you see when you click on the button is reflected in the Sort & Filter group of the **Data** tab.

If you make a selection of cells, Excel will think you only want to sort or filter by that selection. But if your dataset has no blank rows and no blank columns Excel will see the whole range as one data set.



You can have blank cells, but not completely blank columns/rows; if you are not sure that your dataset is consistent, click inside one cell, and press Ctrl-A. This will select all the cells within the dataset. A second "Ctrl-A", or pressing the shortcut in an empty cell, will select the entire sheet.

When you have completed a sort, you can click the Undo button (or Ctrl-Z). Excel will undo the sort and it will select the dataset it used in the sort. This is another way to see your dataset.

Ascending Sorts

- **Text:** Sort alphabetically from A to Z
- **Numbers:** Sorts from smallest number to largest number
- **Dates:** Sorts from the newest date to the oldest date

	A	B	C
1	Apples	123	1/1/1971
2	Bananas	456	2/2/1982
3	Cherries	789	3/3/1993

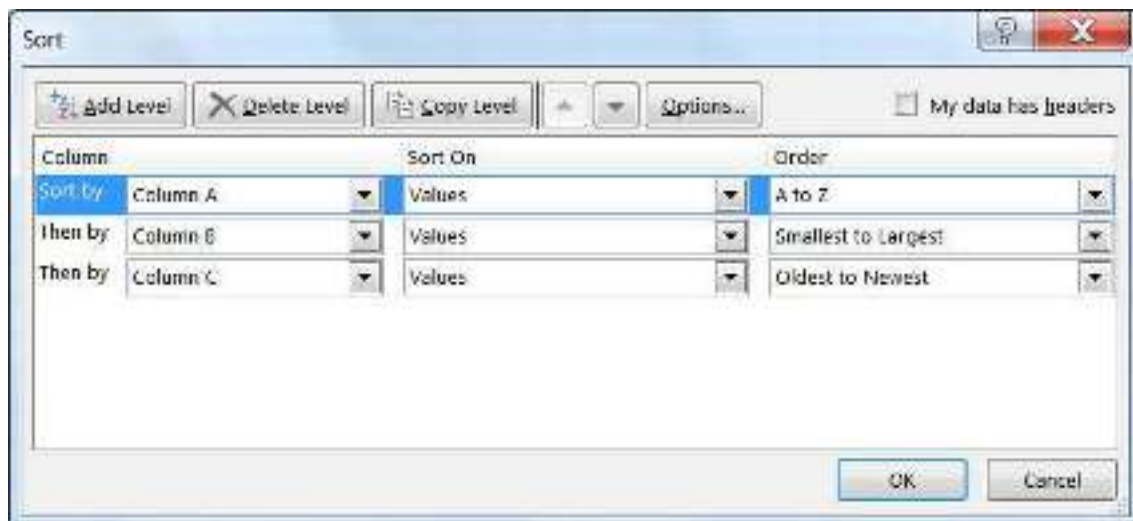
Descending Sorts

- **Text:** Sort alphabetically from Z to A
- **Numbers:** Sorts from largest number to smallest number
- **Dates:** Sorts from the oldest date to the newest date

	A	B	C
1	Cherries	789	3/3/1993
2	Bananas	456	2/2/1982
3	Apples	123	1/1/1971

Custom Sorts

When you first open this window, Excel will show the most recent sort options. If you haven't created a sort yet, this window may be blank.

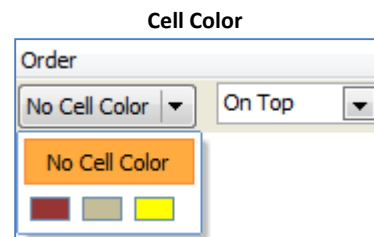
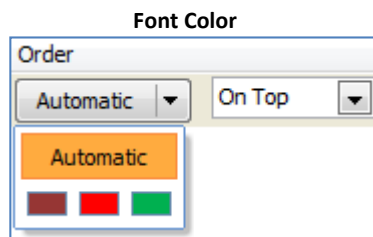
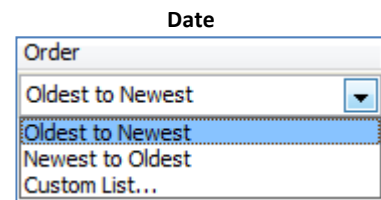
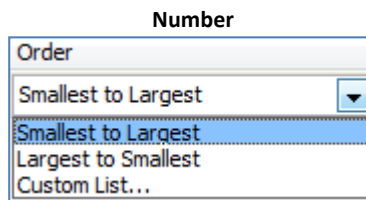
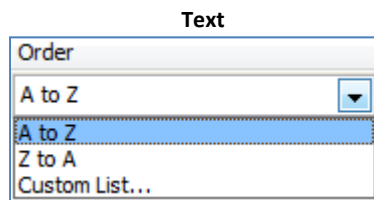
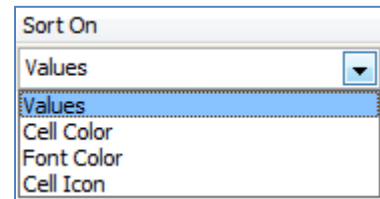


In Excel 2016, we can sort by 64 levels. From this sort window we can add levels, delete levels, copy levels, and even change the order of our sort using the up and down arrows in the toolbar.

Column: The column drop-down menu will show the names of your columns, your 'fields'. If your data doesn't have titles Excel lists the column heading letters instead. If you were expecting titles, but is only showing the column letters, you can click on the check box in the upper right hand corner of the Sort window to let Excel know your data has headers.

Sort On: You can Sort on the values of the cells, the cell colors, the font colors, or the cell icons.

Order: The order options change depending on the values in the cells.

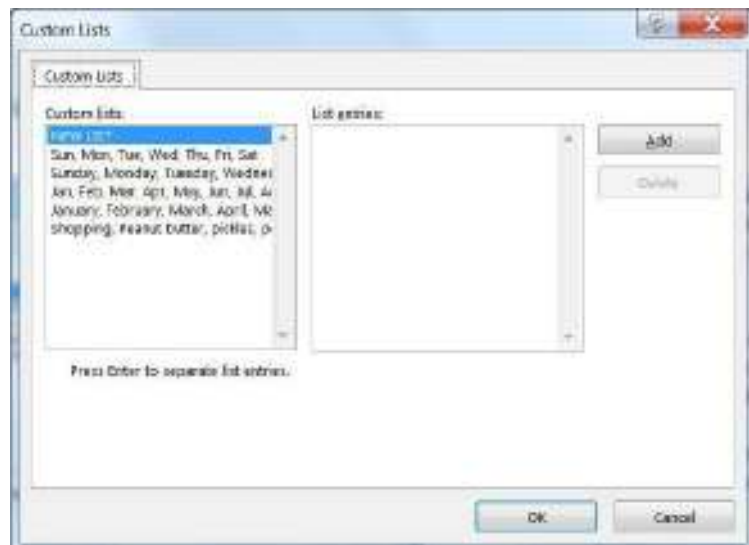


Custom Lists

Custom lists can be built through the Excel Options under the **File** menu in the **Advanced** section under **General**. Or by choosing **Custom List...** option at the bottom of each order box above.

If you choose this option, you will be able to select from one of these lists. Alphabetically, April comes before January. With the Custom List order, we can ensure January comes first.

These custom lists will work as patterns with the fill handle. Notice the "Shopping" list? Once I set this up, I can type any of the words in a cell and use the fill handle to follow this pattern.



Sort Options

- **Case sensitive:** Sort lowercase letters before uppercase letters
- **Orientation:** Sort vertically (top to bottom, sort rows) or horizontally (left to right, sort columns)

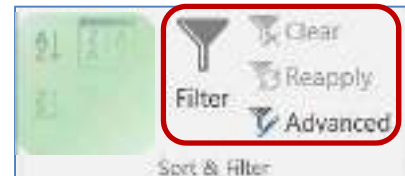
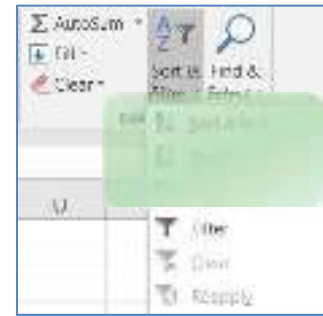


Filtering Data

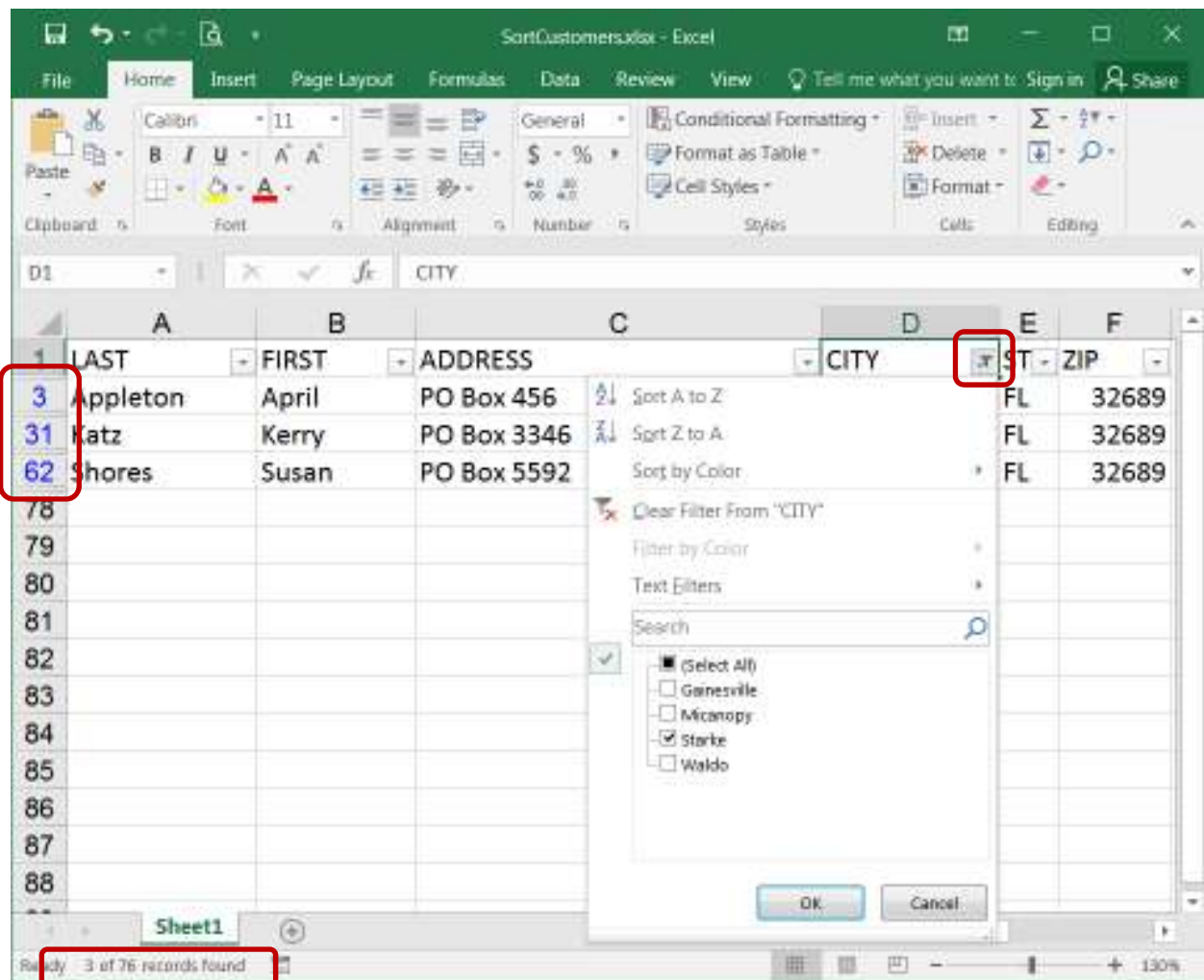
Filters hide rows (records) based on criteria you set. You can turn the filter on and off by choosing **Filter** from the **Sort & Filter** button on the Home tab, or choosing the **Filter** button on the Data tab.

Excel will place a drop-down arrow at the end of each cell in the title row (the first row of the dataset). When you click on this arrow we see several options including our sort orders:

- Sort Ascending, Descending, and by color
- Clear the Filter
- Filter by Color
- Set a custom filter (text, number, date)
- Search for a matching value in the column
- List of values in the column (field). **Select All** will toggle between everything and nothing.

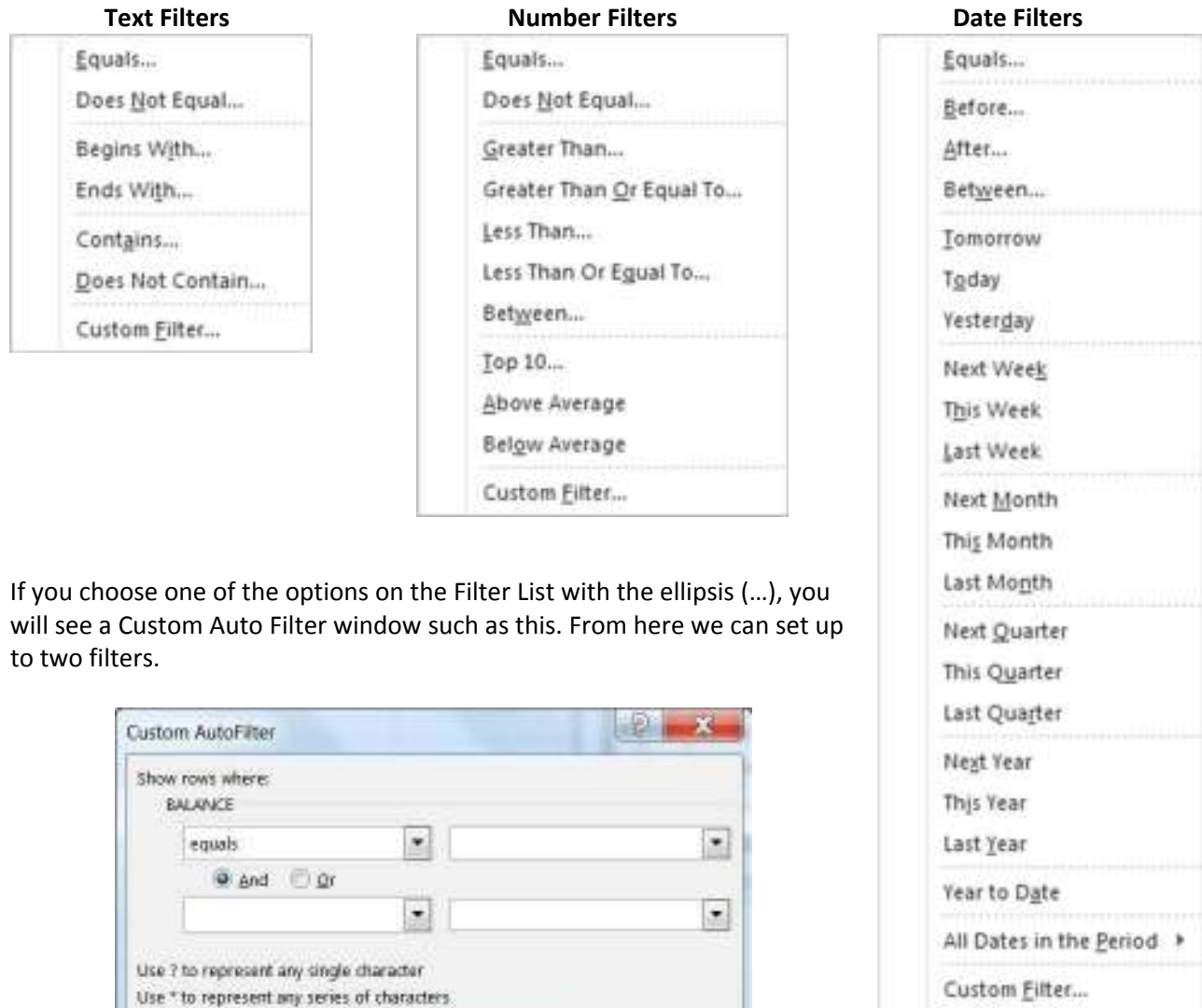


Once a filter has been set Excel will hide all the rows that don't match the criteria. The status bar will show how many records (rows) were found that matched. The row numbers of the original data will remain the same, but will appear blue. The dropdown arrows of the columns that are being filtered will show the filter icon (funnel). The double line between the row numbers indicate hidden rows.



Custom Filters

Depending on the data in the column you will have the option to set a custom filter based on text, numbers, and dates.



If you choose one of the options on the Filter List with the ellipsis (...), you will see a Custom Auto Filter window such as this. From here we can set up to two filters.



Be careful with the AND/OR relationships. If you ask Excel to show the rows where the City equals Jacksonville **AND** the City equals Gainesville, you will get no results, because one cell cannot equal both values. But if you ask for the same using the OR, Excel will show all the records for both cities. Or's tend to work for exact matches (Equals This **OR** Equals That), whereas AND's tend to work for ranges (Greater than This **AND** Less than That).

You can use the "Wildcards" ? and * to help you with your filter. ? is used for one character, * for multiple.

Equals Jacks* -> Jacksonville, Jacksonville Beach, Jackson Heights

Some of the filter choices may work just as well. I could say Contains 'Jacks' or Begins with 'Jacks'.

This is a sample, click download link to get the full Tutorial

CLICK BELOW

