

1.8. Sorting & Filtering:

If you are working with a large amount of data in your worksheet, sort and filter can make finding information faster. You can customize the order of your data alphabetically, numerically, by groups, and with multiple layers too.

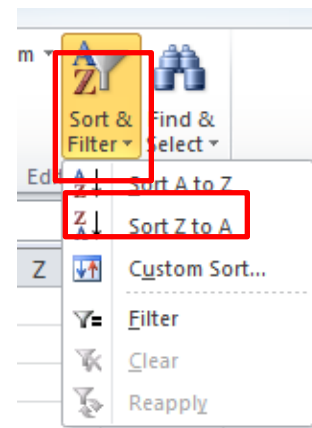


18.1. Sort:

Sort allows you to change or customize the order of your data. Do you want your attendance list to be alphabetized? Or order a column of numbers from smallest to largest? The sort command allows you to do this and not mess up the rest of your spreadsheet too. Below are some common sort commands.

1.8.1.1 Sort Alphabetically

1. Click in a cell of the column you want to sort alphabetically. You do not have to select your entire table nor the entire column.
2. Click on Sort & Filter in the Edit group of the Home tab. You could also click on the Data tab for Sort & Filter options too.
3. A dropdown menu will appear after you click on **Sort & Filter** in the Home Tab. Select either **Sort A to Z** or **Sort Z to A**, depending on if you want to sort Ascending or Descending.
4. The data in your spreadsheet will sort. Related information across rows will be kept together when the sort is applied.



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1.8.1.2. Sort Numerically

The steps to sort numerically are the same as sorting alphabetically show above. Click on a cell in the column you want to sort numerically. Click on the Sort & Filter command in the Home tab, and select either Sort A to Z, which will sort the numbers smallest to largest, or Sort Z to A which will sort numbers largest to smallest. Again, corresponding data across rows will be kept together.

1.8.1.3. Sort by Date or Time:

Sort by Date or Time

To sort a spreadsheet by date or time:

do the same steps as sorting alphabetically as shown above. Make sure you select a cell in the column you want to sort by date/time. This time when you select Sort A to Z, the data will sort oldest to newest, or Sorting Z to A will make the data sort newest to oldest.

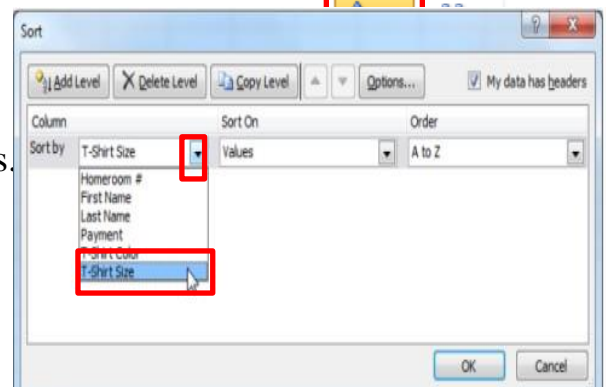
1.8.1.4. Sort in an order of your choosing

There may come a time when the alphabetical or numerical sort doesn't fit your circumstances. You can tell Excel the order by which you want the data sorted. In class we will use the example of sorting by t-shirt size smallest to largest.

1. Click a cell in the column you want to sort.
2. Click on the **Sort & Filter** command in the Home tab.
3. Click **Custom Sort...** from the dropdown menu that appears.
4. Identify the column you want to sort by clicking on the drop-down arrow in the column field.
5. Leave Values selected in the Sort on field.
6. Click the drop-down arrow for the Order field.

Click **Custom List**

7. Select new List, and enter the order you want the data sorted in the list entries box. After



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every entry press Enter on your keyboard.

8. Click Add to save the list. The t-shirt size list will now be in the Custom Lists field. Click **OK**.

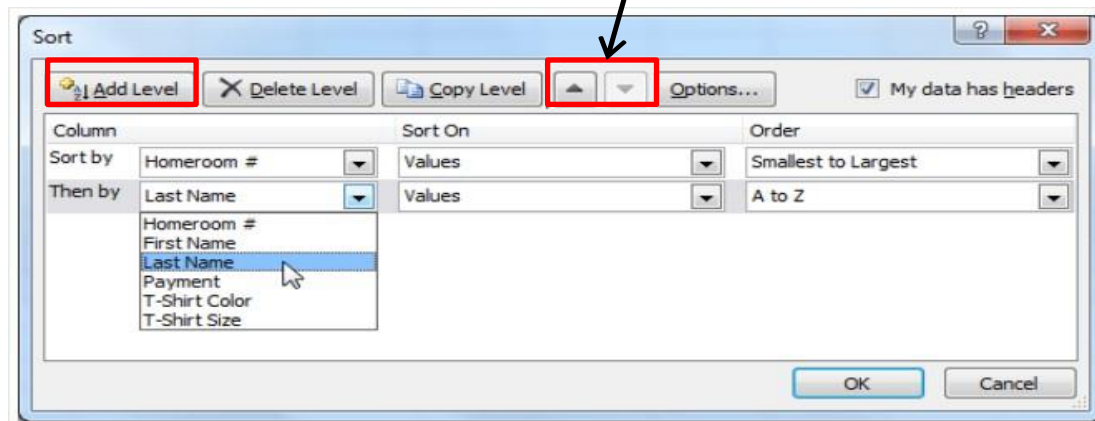
9. Click **OK** to close the Sort dialog box and sort the data.

1.8.1.5. Sort with multiple levels

You can sort by more than one column. In our example, we will sort by homeroom number then by last name.

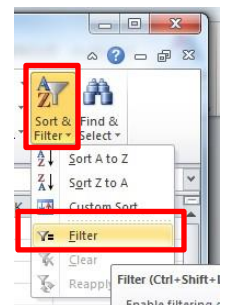
1. Click on the Sort & Filter command, and click Custom Sort.
2. Identify the first column you want to sort, in our example Homeroom #. Leave the other fields, Sort On and Order fields, the way they are.
3. Click **Add Level**
4. Identify the next column you want to sort by. If you have the Sort On and Order fields the same. Click **OK**.

change the sort level priority here. If you have the Sort On and Order fields the same. come before the other.



1.9. Filter

Filter is useful when you want to narrow down your data and hide other parts. You can filter text, dates, and numbers.



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You can also use more than one filter to further narrow your data.

To use the filter command, you must have a spreadsheet that has a header row.

1. Click the Sort & Filter command in the Home tab.
2. There is also a Filter command located under the Data tab.
3. Click on Filter.
4. Drop-down arrows will appear in every column in the header row.
5. Click the drop-down arrow in the column that you want to filter.
6. The filter menu appears.
7. Uncheck any boxes next to data that you do not want to view. Anything that remains checked will remain visible.
8. Click OK and your spreadsheet will be filtered. The data not visible is hidden temporarily. It has not been deleted.

1.10. Entering Values

Numerical pieces of information that will be used for calculations are called values. They are entered the same way as labels. It is important NOT to type values with characters such as “,” or “\$”.

To Enter Values:

- 1) Navigate to a cell
- 2) Type a value
- 3) Press Enter

1.11. Creating Formulas

Operator (Key)	Function
=	Begins all Excel functions and formulas
+	Addition
-	Subtraction
*	Multiplication
/	Division

1.12. To Create a Formula:

- 1) Click in a cell
- 2) Press the = key
- 3) Type the **formula**

4) Press **Enter**

1.13. Excel Functions:

As we have previously seen, the power of Excel lies in its ability to perform calculations. The real strength of this is shown in **Functions**. Functions are more complex formulas that are executed by using the name of a function and stating whatever parameters the function requires.

Function	Defined
=SUM(range of cells)	returns the sum of the selected cells
=AVERAGE (range of cells)	returns the average of the selected cells
=MAX(range of cells)	returns the highest value of the selected cells
=MIN(range of cells)	returns the lowest value of the selected cells
=COUNT(range of cells)	returns the number of values of the selected cells

1.13.1. To Enter the SUM Function:

- 1) Click in a cell
- 2) Click on the **AutoSum** button in the **Editing** group
- 3) Highlight the range of cells that are to be added (The colon means “through”)
- 4) Press **ENTER**

1.13.2. To Insert the Average Function into the Worksheet:

- 1) Click in a cell
- 2) Click on the drop-down arrow next to the **AutoSum** button
- 3) Click on **Average**
- 4) Highlight the range of cells be calculated
- 5) Press **ENTER**

1.13.3. To Insert the MAX Function into the Worksheet:

- 1) Click in a cell
- 2) Click on the drop-down arrow next to the **AutoSum** button
- 3) Click on **Max**
- 4) Highlight the range of cells be calculated
- 5) Press **ENTER**

1.13.4 To Insert the MIN Function into the Worksheet:

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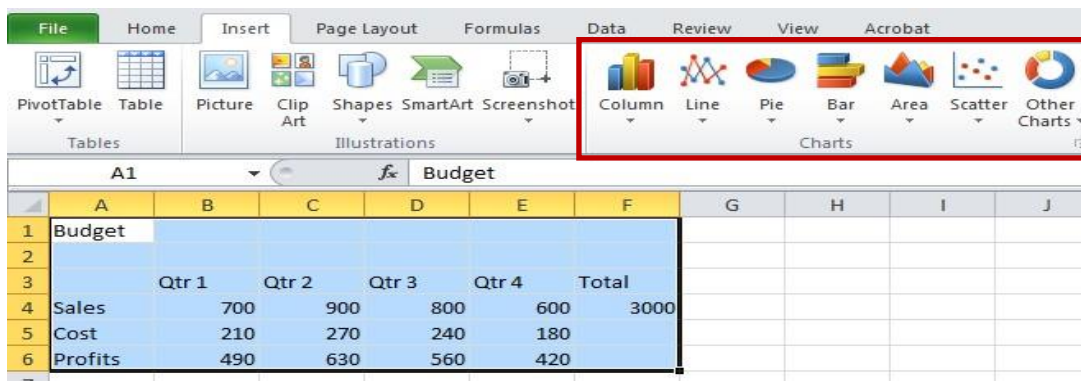
- 1) Click in a cell
- 2) Click on the drop-down arrow next to the **AutoSum** button
- 3) Click on **Min**
- 4) Highlight the range of cells be calculated
- 5) Press **ENTER**

1.13.5. To Insert the COUNT NUMBERS Function into the Worksheet:

- 1) Click in a cell
- 2) Click on the drop-down arrow next to the **AutoSum** button
- 3) Click on **Count Numbers**
- 4) Highlight the range of cells be calculated
- 5) Press **ENTER**

1.14. Creating a Basic Chart:

- 1) Highlight the data to be charted
- 2) Click on the **Insert** tab
- 3) Click on a **Chart Type** in the **Charts** group.



- 4) Click on a **Chart Style**.

1.14.1 To Move your Chart:

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Click and drag the chart to a new location on the worksheet.

When the chart is selected you will notice a new tab “**Chart Tools**” on the Ribbon. If you do not see the **Chart Tools**, click on the chart to select it. Under Chart Tools you will find 3 tabs:

- Design.
- Layout.
- Format.



1.15. Creating a New Workbook:

It is easy to create a new workbook! Simply,

- click on **File – New**
- clicking the 'New' button then click 'Create'.

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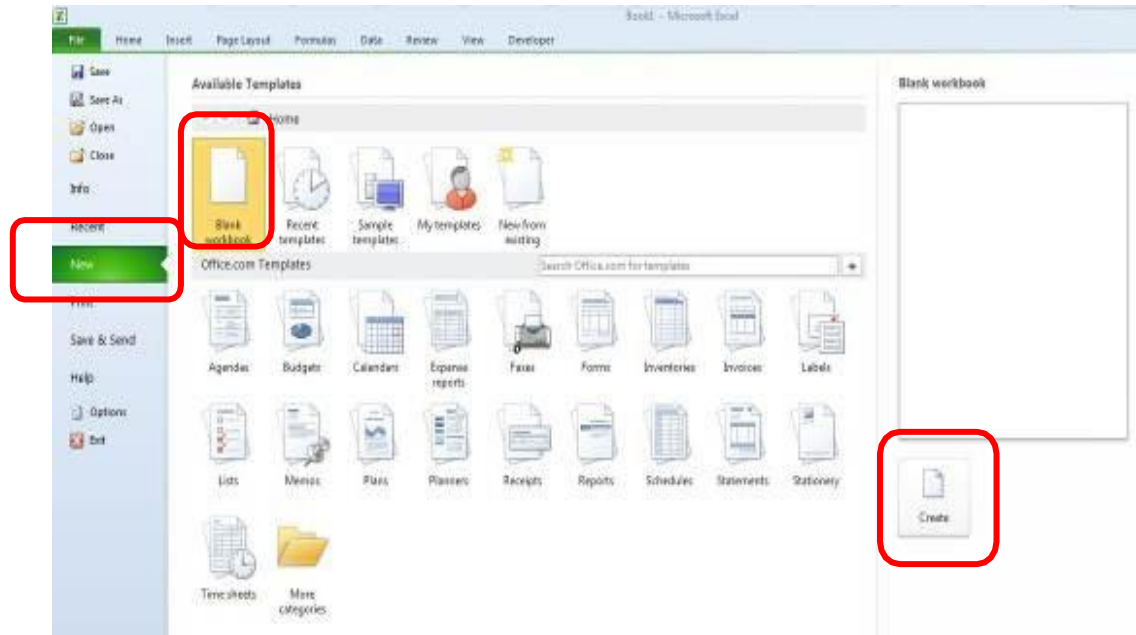
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1. To change the location of a newly added worksheet, click once on the tab and hold down the left mouse button and drag the worksheet to its new location.
2. It is also possible to change the name of each worksheet. Right-click on the *Sheet 1* tab and left-click on **Rename**. Once you click on **Rename**, the name of the sheet becomes highlighted and you can simply type in a new name. Double-clicking on the tab will also enable you to type in a new name.

1.15.1 . Saving a Worksheet

When working in Excel it is necessary to save your files. It is also very important that while working, your file is saved frequently. When naming a file, you are restricted to 255 characters. Avoid most punctuation; spaces are acceptable.

To Save the File:

- 1) Click on the **File** tab
- 2) Click **Save**
- 3) Type a file name
- 4) Click **Save**

1.15.2. Opening a Workbook

To open a workbook, display the File > Backstage menu and either:

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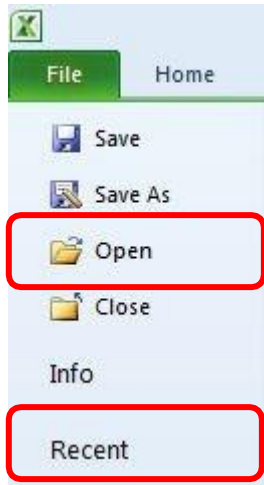
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- Choose Open or
- Choose a workbook from the Recent Documents list.

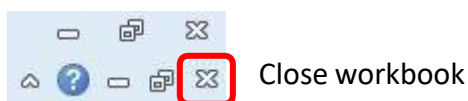


You can also use the shortcut keys Ctrl + O.

1.15.3. Closing a Workbook

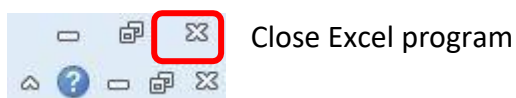
Closing a workbook is different from saving a workbook. If you have not made any changes to the workbook, just left click the lower X in the upper right corner of the workbook.

1.15.4. Close workbook



1.16. Closing Excel

To close Excel and all open Excel files, click the top X in the upper right corner of the Excel screen.



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1.17. . Printing a Worksheet**To Print, Preview and Modify Page Setup**

- 1) Click on the **File** tab
- 2) Click on **Print**

The spreadsheet shows as it will be printed. You can proceed to print the document from here, or you can change things to make the printed output look different.

