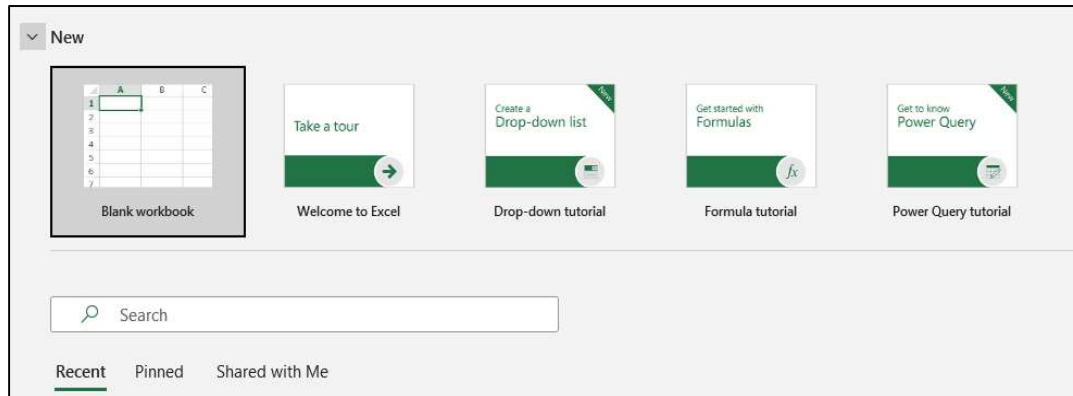# Microsoft Excel User Guide

Opening and Creating Spreadsheet

1. Opening Excel will open to the Excel Home page, where you can select to create a new workbook (either blank or with a template), or to select a file from your computer.


Navigating a Workbook

1. Navigating a Workbook
   a. Multiple spreadsheets can be included in a single workbook. These can be added by selecting the plus sign at the bottom near the sheet names.

      i. Each name can be color coded and named for organization. To do this, right click the sheet name and adjust as needed.
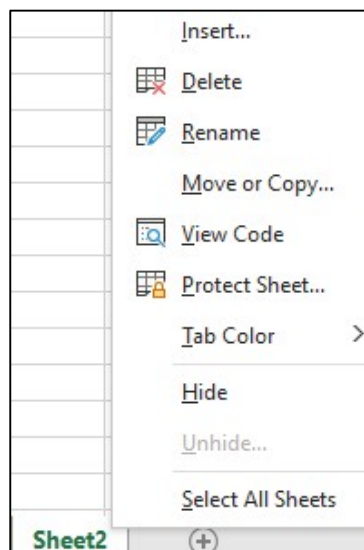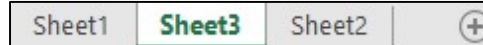
b. To select a full column or row, select the column or row's corresponding letter or number. This will highlight the enter column or row to allow for easy adjustment of font, alignment, or to move or delete the column or row.
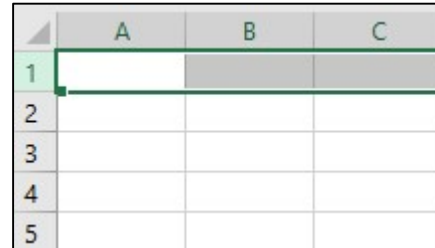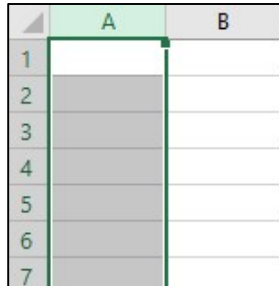
c. To automatically resize any column or row to fit the text in that column or row, double click the line after the column or row. An example is shown below.
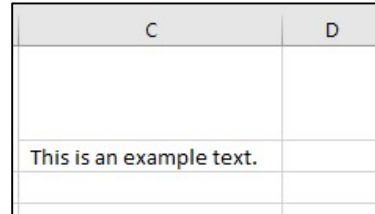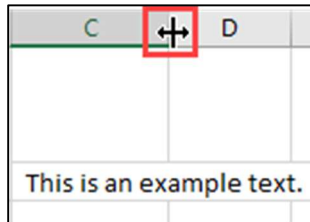
d. To manually resize any column or row, click and drag on the same area as if you were to fit to text. As you drag, it will show you the exact size of the cell.
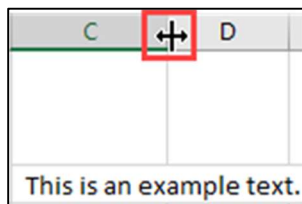
e. Cells
   i.   To edit a cell, double-click the desired cell.
    ii. To select a group of cells, click and drag to cover the desired cell.
    iii. To select a group of cells that are not next to each other, hold control while selecting each individual cell.

The Home Tab

1. Clipboard tools control selected text or objects.
   a. To cut: Select the cell or object you want to cut and select cut (ctrl + x). This will delete it and add that cell or object to the clipboard to paste.
   b. To copy: Select the cell you want to copy and select copy (ctrl + c) to add it to the clipboard.
   c. To paste: Select where you would like the cell or object to be, and select paste (ctrl + v)
   d. Format painter allows you to replicate the created format of any cell onto other cells. To use the format painter, select the cell you would like to copy the format of, then select the format painter button. This will change your pointer into a paint brush when hovering over a cell. Select the cell you would like to change, and release.
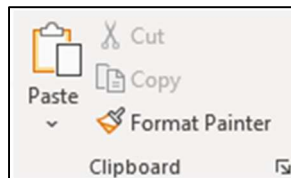
2. Font can help change the look of any workbook. Any cell that is selected when you select any font changes, will change along with your new selections. If no text is selected it will apply to text you type after changing the selection.
   a. To select a new font, select the down arrow, then the font you would like to use.
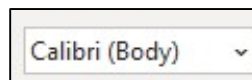
   b. To select a new font size, select the down arrow, then the size you would like to use.

   c. You can also change the capitalization, bold, italicize, or underline by making the corresponding selection.

d. To add WordArt, select the outlined A, and select the desired style.
    i. You can also change the settings of the WordArt to change the selection to better fit your document.
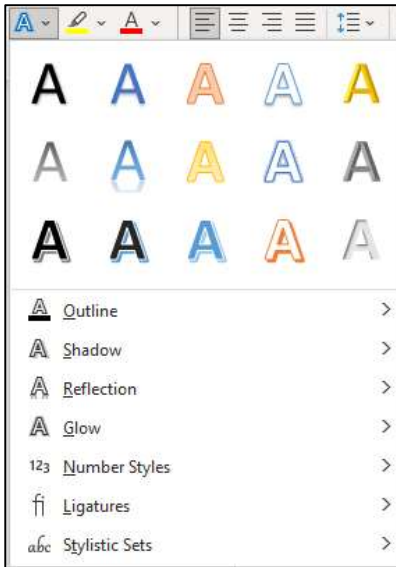
e. To highlight a cell, select the highlight button, then the desired color.

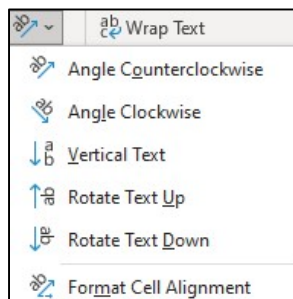f. To change font color, select the font color arrow, then the desired color.

3. Alignment
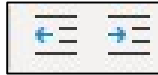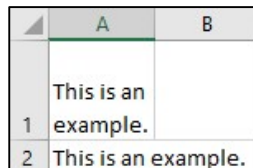   a. The first alignment tools include top, middle, bottom, left, center, or right align.

   b. To angle text, select orientation, then the desired orientation.

c. To edit an indent, select either decrease or increase indent.

d. Wrap text changes how the text fits into a cell. For example, in the following figure, 1A has wrap text selected, and 2A does not have wrap text selected.


e. Merge & Center merges any selected cells, then automatically centers the information from the topmost and leftmost cell.
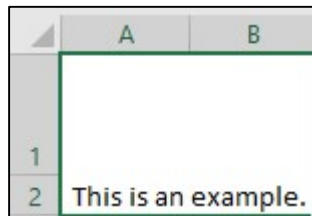

4. Styles can help organize any workbook.
   a. Conditional formatting tools are available to set up for any set of data. There are many different options for conditional formatting, some built-in, as well as options to create your own conditional formatting rules.
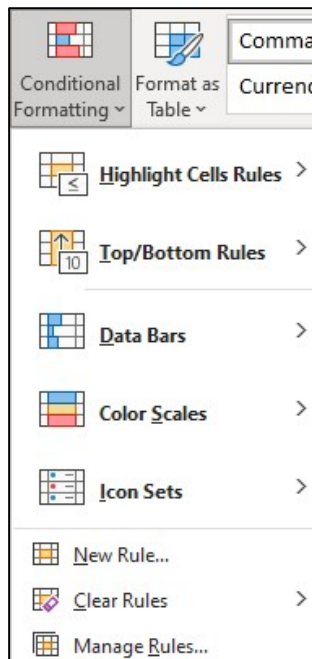
b. Formatting information as separate table can help organize data. By selecting cells then selecting format as a table, you can easily add a table into your workbook. There are built-in table styles, or you can create your own style.
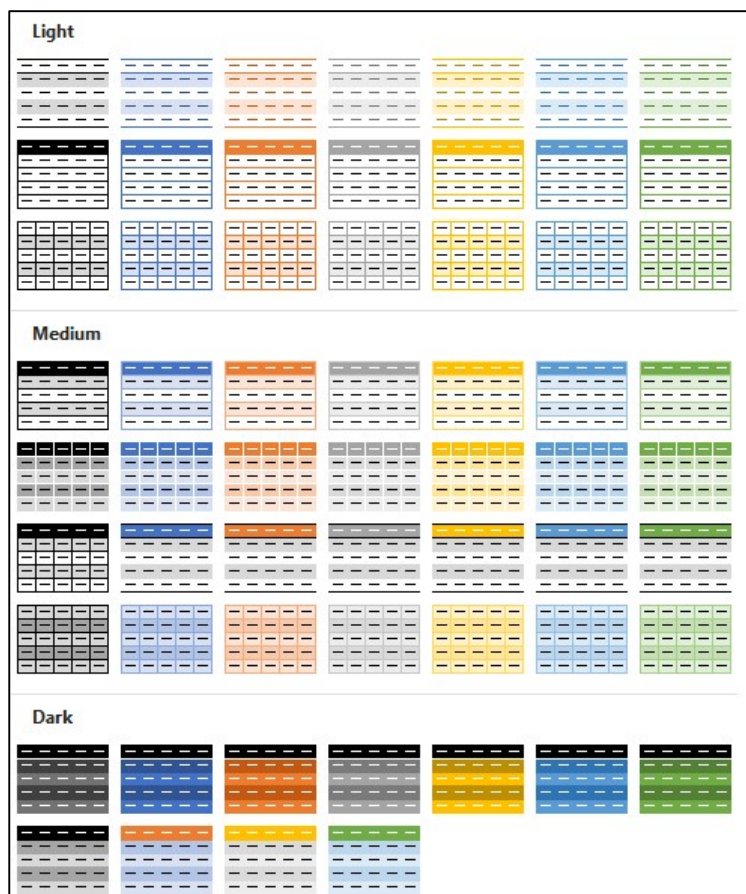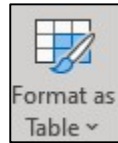
c. Individual cells can have its own style by selecting the cell, then the style you would like to apply, or by selecting "New Cell Style" and creating a style.
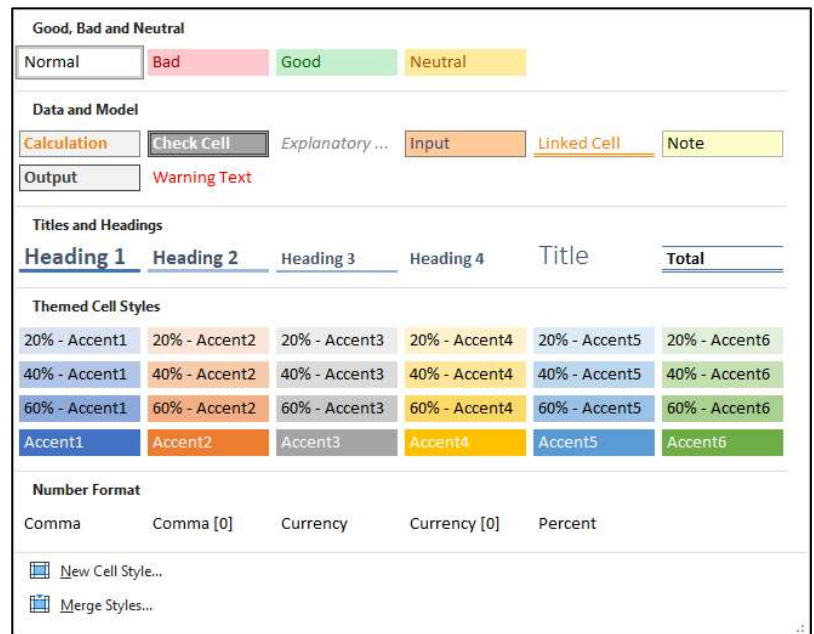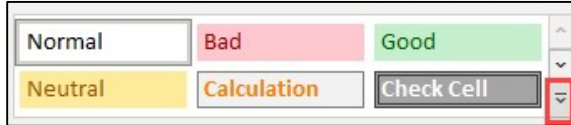
5. Cell tools are used to insert, delete, and format cells, rows, columns, or sheets.
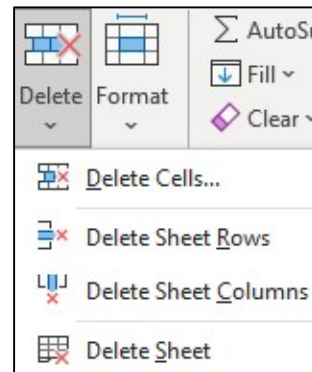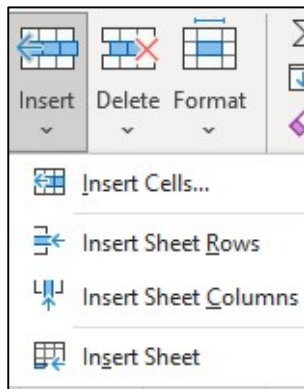
6. Editing Tools
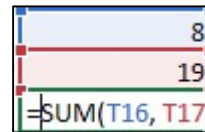   a. AutoSum is a tool that assists in adding basic functions into a workbook. Selecting any of these functions will place them into the selected cell, then ask for input. For sum, select or input the cells you would like to add together. For Average, Count Numbers, Max, and Min, select or input a range of cells for it to calculate from.
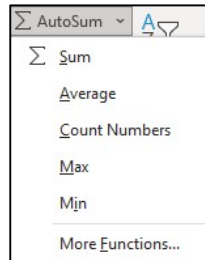
    b. The Sort and Filter tool allows you to filter data in a selected column or row.
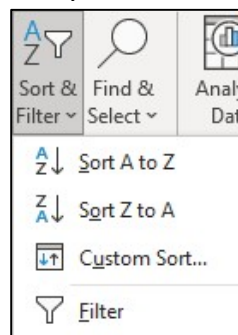
The Insert Tab

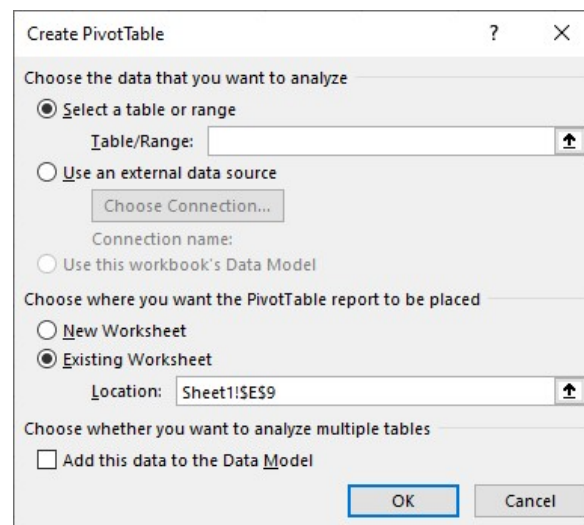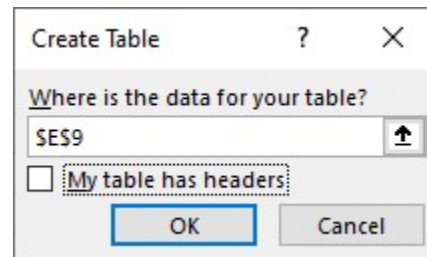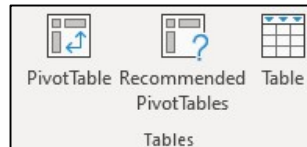1. To add tables, first select between a PivotTable or a regular table, then input the location of your data.

  a. You can also select recommended pivot tables, select the desired information for the table, and Excel will make a recommendation for a table using that information.

2. Many illustrations can be added into a workbook.
  a. Pictures, shapes, icons, and 3D models can be added from your files, from online, or from Excels stock photos.
  b. SmartArt can be added to aid in understanding of a list, process, cycle, hierarchy, relationship, matrix, pyramid, or a picture.

3. Charts can be added to visualize any data in your workbook. To add a chart, select the type of chart you would like, enter the location of the data, then select ok. This will insert the chart into your workbook.
  a. You can add many types of charts, including column, pie, histogram, scatter, combo, and PivotChart.

4. Links can be added into any cell by selecting the desired cell, then selecting insert link.
5. Comments can be added to any selected cell, group of cells, or object in a worksheet by selecting comment when the object is selected.
6. Text Tools
    a. iext boxes can be added by selecting text box, then clicking and dragging to select the size of the text box.
    b. A header or a footer can be added to any sheet by selecting header & footer.
        i. This can only be viewed in page layout view.
    c. A signature line can be added to a sheet if needed. By selecting signature line, you will be able to change the settings and add in a signature line.
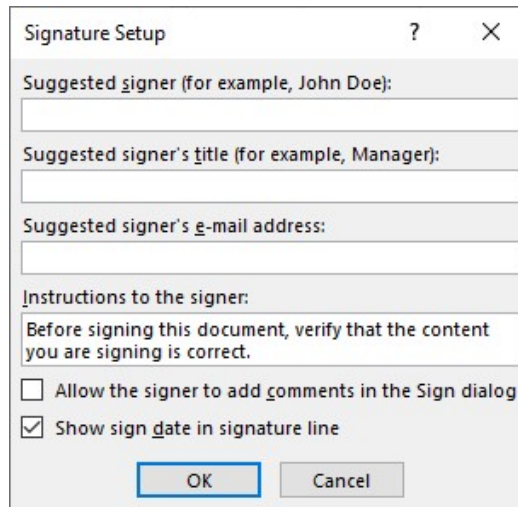

7. Symbols can be added to any selected cell by selecting symbol and selecting the desired symbol from the symbol library.

The Page Layout Tab
1. Page Setup
    a. Margins, orientation, and size can be changed to best fit your data and visuals onto a printable page.
        i. These settings will not appear to change unless you are in the page view.
    b. Print Area can be changed to select only certain cells to print. To change the print area, select the cells you would like to print, and select set print area.
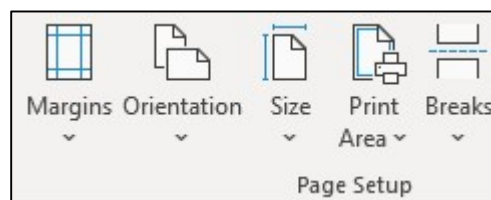
c. Breaks can be added to adjust which sections of data are on a page. To add a break, select where you would like to add the break, then select insert page break.

d. The background of the sheet can be changed by selecting the background button. You can then insert a background picture from a file, or from an online image search.

    i. You can also delete the background once it is added by selecting delete background

e. Print Titles allows adjustment for what you would like to print, including repeated columns or rows, gridlines, and print area.
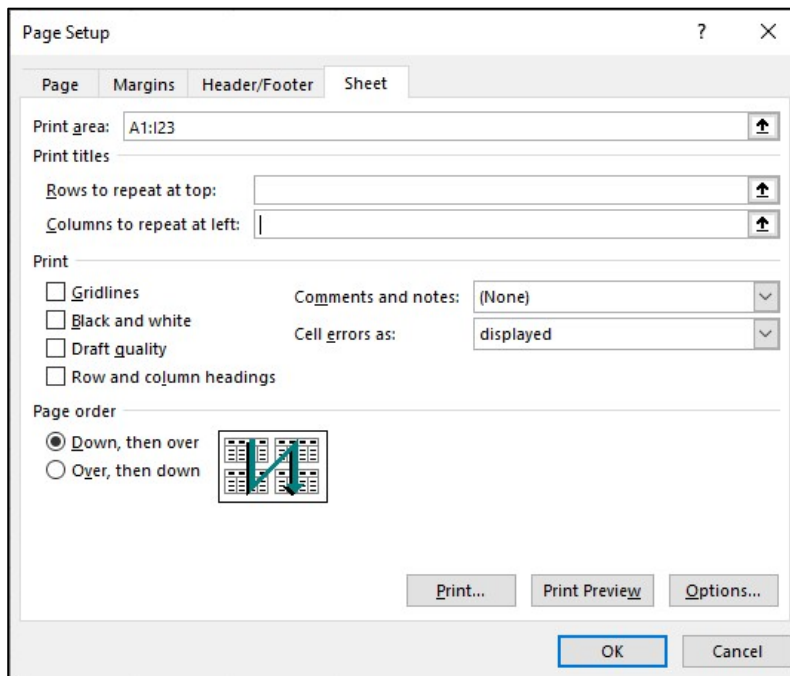
2. Scale to Fit
    a. Width & Height tools will automatically fit the available data into the width or height of the chosen number of pages.
   b. Changing the scale percentage modifies how the size of the page appears.
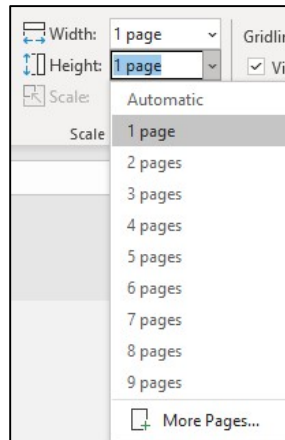

The Formulas Tab

1. The function library is an important tool in most workbooks.
    a. The available groups of AutoSum, Recently Used, Financial, Logical, Text, Date & Time, Lookup & Reference, Math & Trig, and more functions make it easier to find the functions you need easier.
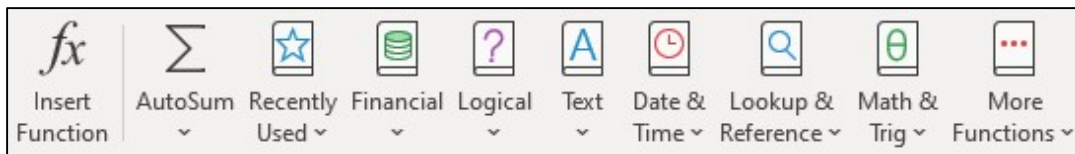
b. Or you can select insert function to look through all available functions.
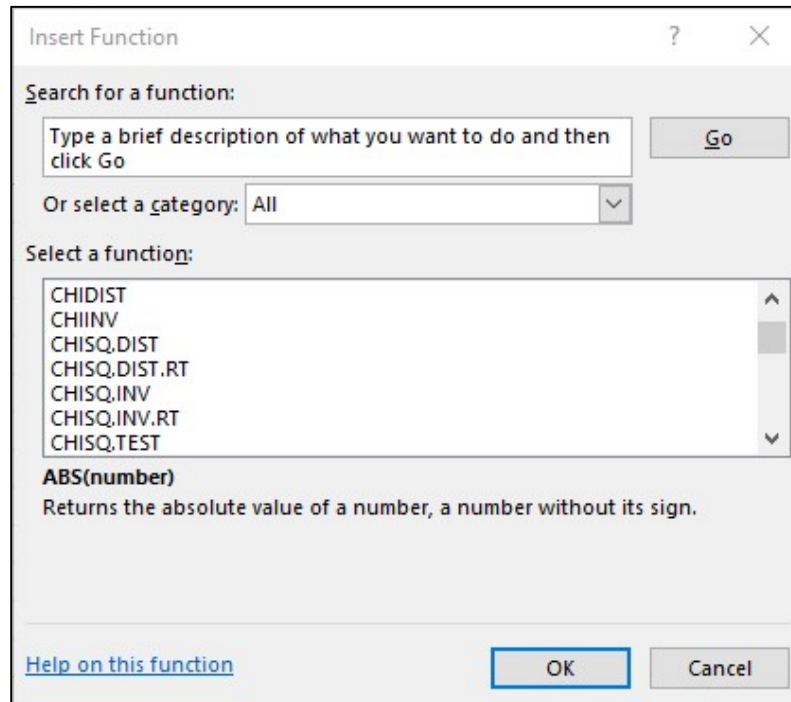
c. When inserting a function it will either:
     i. Ask for input of the cell locations that you would like used in the function.
          1. These can be typed or selected by clicking and dragging.
          2. To type an area of cells, place a colon between.
          3. To type separate cells, place a comma between.
     ii. Or create a pop-up to insert the required information to correctly run that function.
2. Calculation settings can be changed to stop automatic calculations.
     a. When set as manual, functions will only be calculated until calculate now is selected.
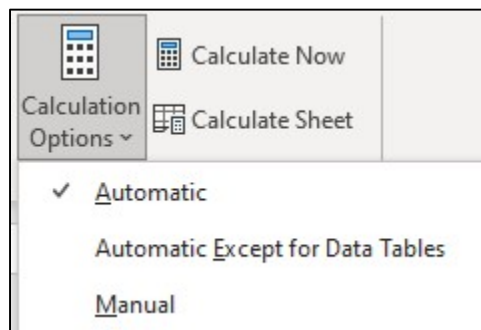
The Data Tab

1. Get & Transform Data
   a. Data can be imported from multiple different locations into a workbook as shown to the right.
   b. Select where you would like to import data from, and from there fill out any needed information in the pop-ups provided.
2. Sort & Filter
   a. Sorting tools can make viewing/searching for information easier.
      i. You can easily sort A→Z or Z→A by selecting the desired cells, then selecting either [A→Z] or [Z→A].
      ii. Select sort to have multiple levels of organization. This will create a pop-up allowing editing of any organizational levels already applied, and any new ones to be added.
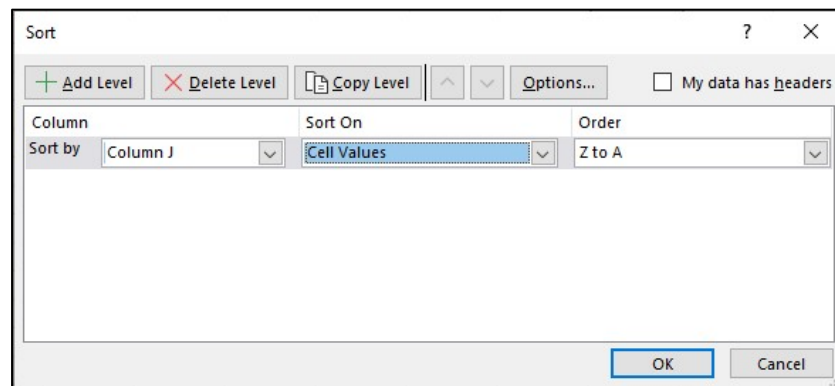
b. Filter tools can be used to filter out unneeded information. When the filter button has been selected, any column will have a drop-down arrow in the top cell.
   - i. You can filter text by unchecking information you do not need to view at this time. This will then remove any rows that included that specific information in the column.
   - ii. You can sort here as well.
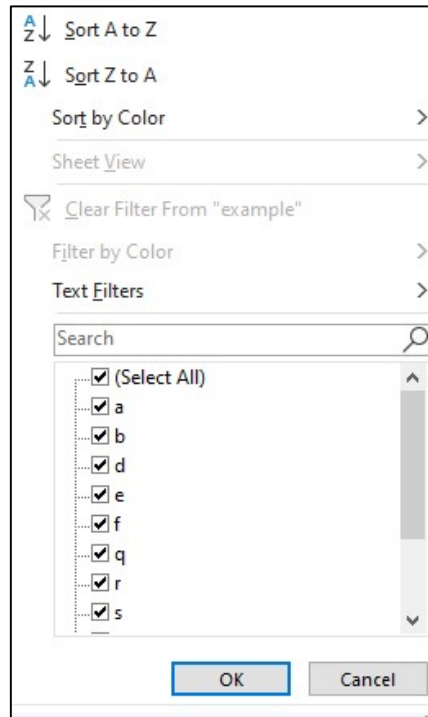
3. Data Tools
   a. Data tools can help you keep track of the information in your sheet.
   b. Flash Fill can track patterns in data and fill in gaps.
   c. Remove Duplicates can check and remove any duplicated data to help keep your data organized.
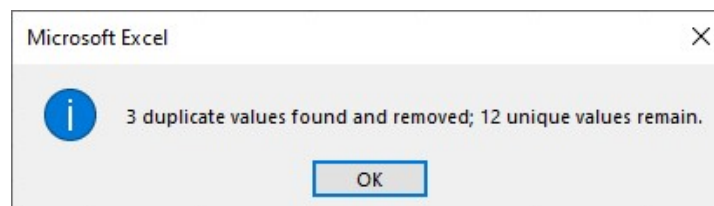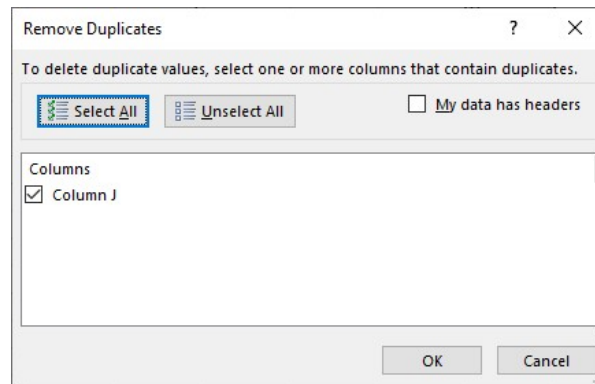
The View Tab
1. There are three main workbook views:
   a. Normal-The default view of the entire sheet.
   b. Page Break-Show's page breaks that have been inserted into the sheet.
   c. Page Layout-Shows how the sheet would look printed off, shows headings, margins, page size, etc.
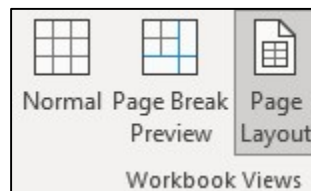
2. Zoom features allow you to change your view of your sheet. You can select zoom to pick a specific percentage, select 100% to see the default size, or select zoom to selection, which zooms into the cell you currently have selected.
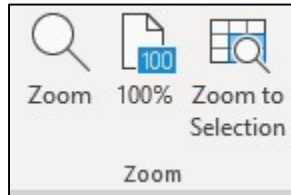
3. Freeze Panes allow you to view specific sections of your sheet even if you scroll away from those panes.
   a. You can freeze the selected rows and columns or just the first row or column.