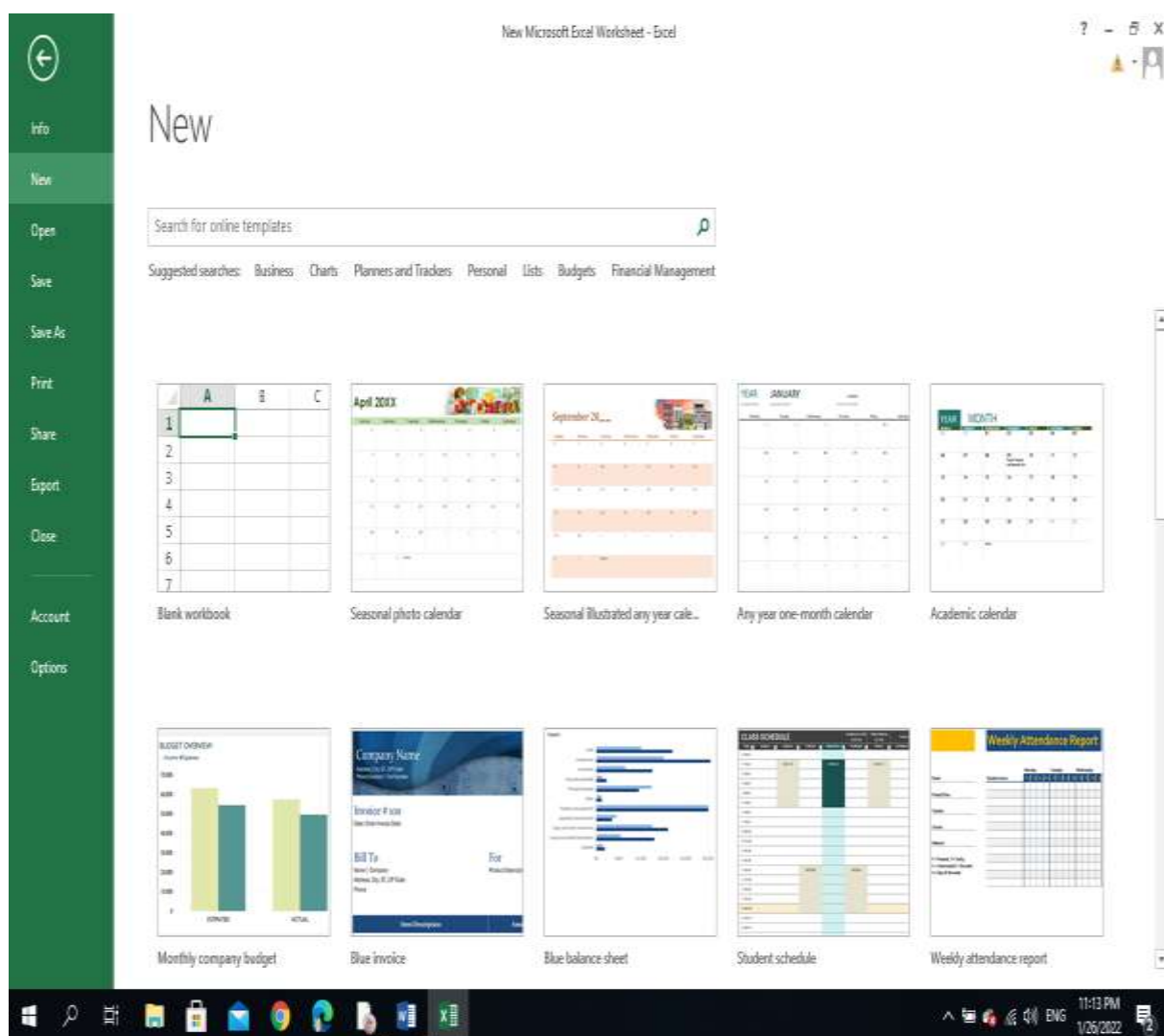# Microsoft Excel 2013

2022
INAAM ABBAS
College of Medicine

The Excel interface

When you open Excel 2013 for the first time, the **Excel Start Screen** will appear. From here, you'll be able to create a **new workbook**, choose a **template**, and access your **recently edited workbooks**.

- From the **Excel Start Screen**, locate and select **Blank workbook** to access the Excel interface.

Click the buttons in the interactive below to become familiar with the Excel 2013 interface.

1. *Exploring and Setting Up Your Excel Environment*

The Ribbon contains multiple **tabs**, each with several **groups** of commands. You can add your own tabs that contain your favorite commands.
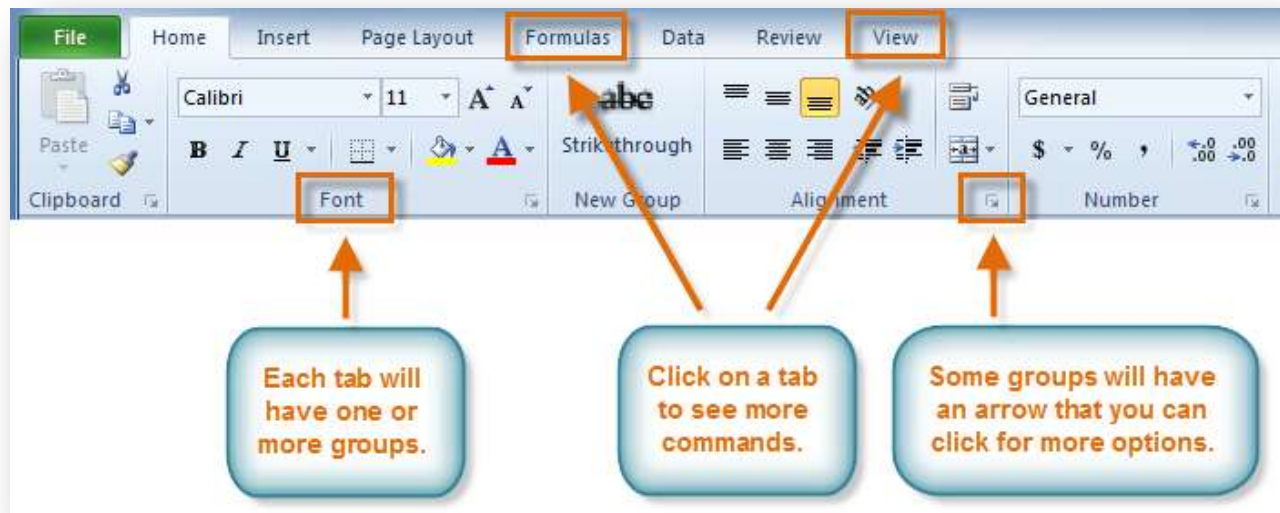

At the bottom, left area of the spreadsheet, you will find **worksheet** tabs. By default, **three** worksheet tabs appear each time you create a new workbook. On the bottom, right area of the spreadsheet you will find **page view** commands, the **zoom** tool, and the **horizontal** scrolling bar.

2. *Starting a Workbook*

2.1. *To create new workbook:*

a. Click the **File** tab. This takes you to**Backstage** view.
b. Select **New**.
c. Select **Blank** workbook under **Available Templates**. It will be highlighted by default.
d. Click **Create**. A new, blank workbook appears in the Excel window.
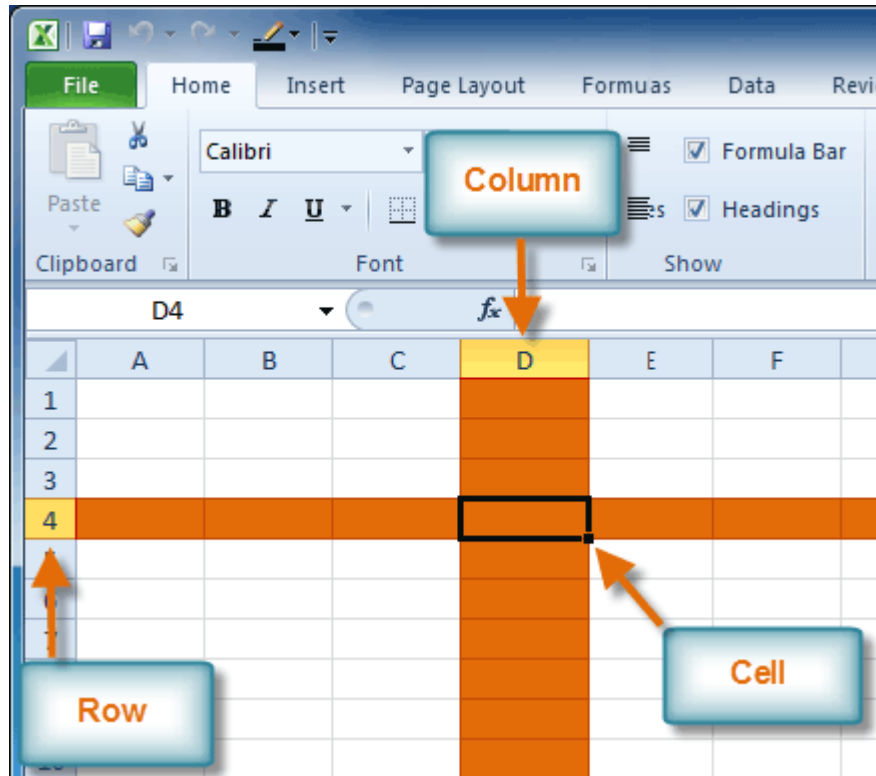
3. *The Cell*

Each rectangle in a worksheet is called a cell. A cell is the intersection of a row and a column.

Each cell can contain its own text, formatting, comments, formulas, and functions.

Each cell has a name, or a **cell address** based on which **column and row** it intersects. The **cell address** of a selected cell appears in the **Name box**. Here you can see that **C5** is selected.
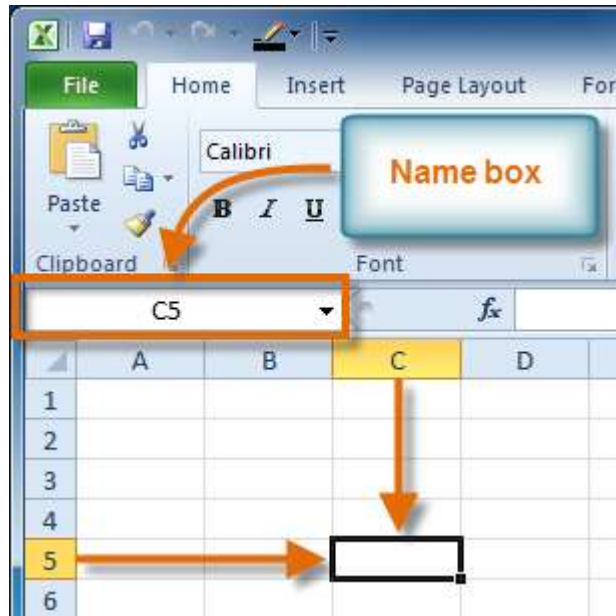
3.1. *To Select a Cell:*
  a. **Click on a cell** to select it. When a cell is selected you will notice that the
  borders of the cell appear bold [   ] and the **column heading** and **row
  heading** of the cell are highlighted.
  b. Release your mouse. The cell will stay selected until you click on another cell
 in the worksheet.

3.2. *To Select Multiple Cells*:
  a. **Click and drag your mouse** until all of the adjoining cells you want are
  highlighted.
  b. Release your mouse. The cells will stay selected until you click on another
 cell in the worksheet.

3.3. *To Insert Text:*
  a. Click on a cell to select it.
  b. Enter content into the selected cell using your keyboard. The content appears
  in the cell and in the **formula bar**. You also can enter or edit cell content
  from the formula bar.

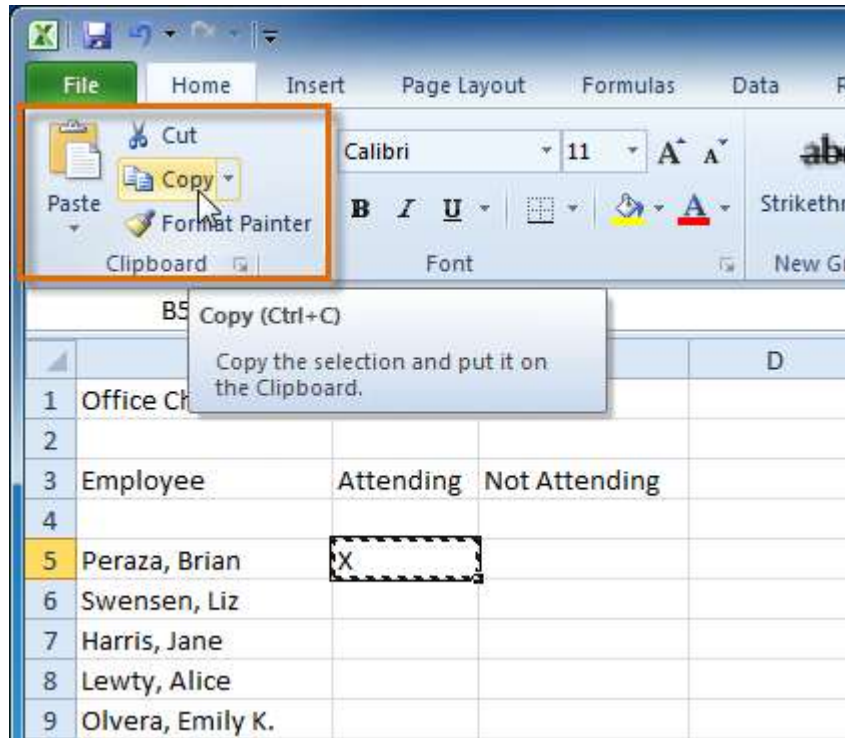When you first open Excel, the software opens to a new, blank workbook.
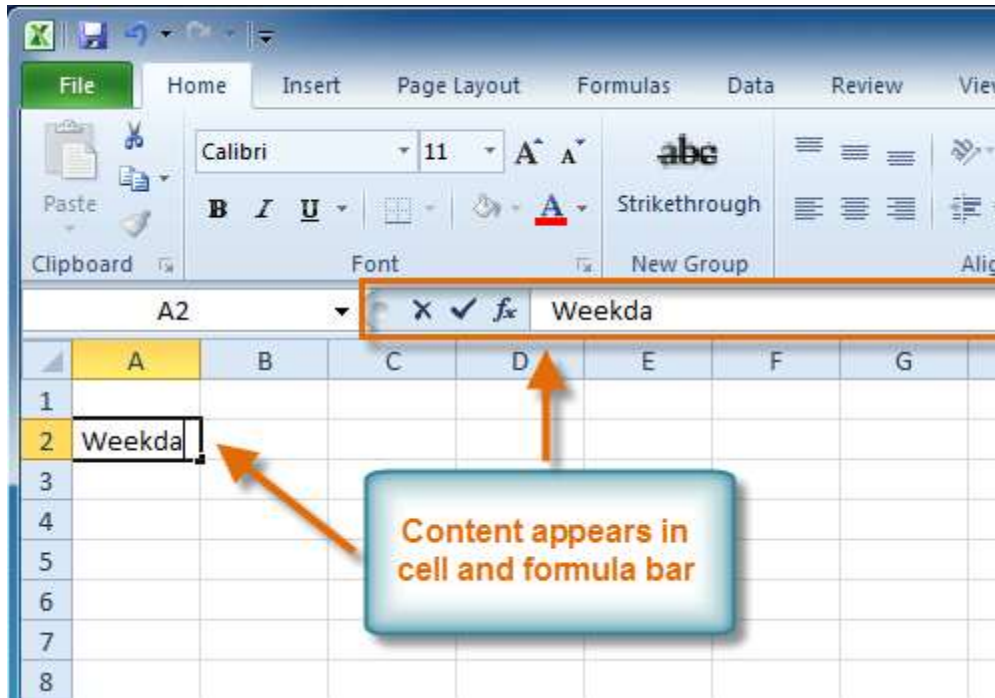
3.4. To Delete Cells:
    a. Select the cells that you want to delete.
    b. Choose the **Delete** command from the **Cell** group in **Home** tab.
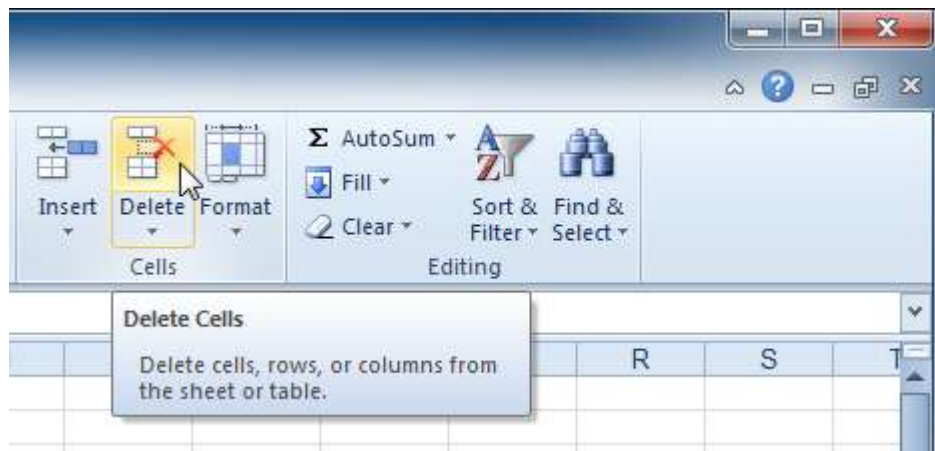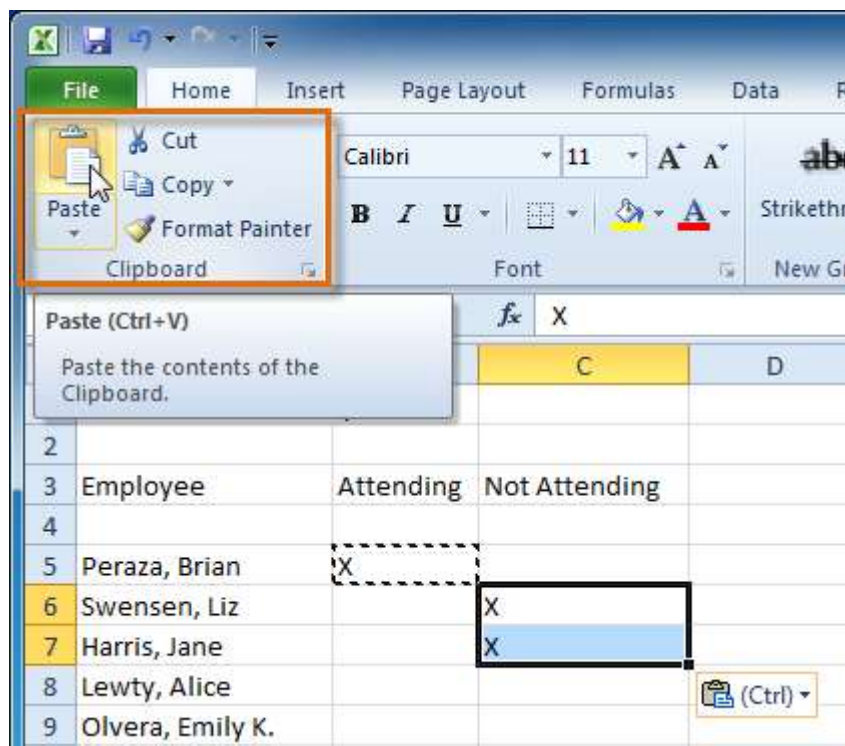

3.5. To Copy and Paste Cell Content:
    a. Select the cells you wish to copy.
    b. Click the **Copy** command. The border of the selected cells will change appearance.

c. Select the cell or cells where you want to paste the content.
d. Click the **Paste** command. The copied content will be entered into the highlighted cells.

3.6. To Use the Fill Handle to Fill Cells:

a. Select the cell or cells containing the content you want to use. You can fill cell content either vertically or horizontally.

b. Position your mouse over the **fill handle** so that the **white cross** ⊹ becomes **a black cross +**.

◢	A	B	C
1	Office Christmas Party		
2			
3	Employee	Attending	Not Attending
4			
5	Peraza, Brian	X	
6	Swensen, Liz		X
7	Harris, Jane		X
8	Lewty, Alice	X	
9	Olvera, Emily K.		
10	Wodal, Matthew		
11	McMillan, J.E.		
12	Dees, Robert		
13	Wimblet, Grace		
14	Salter, Joe Ann		

c. **Click and drag the fill handle** until all the cells you want to fill are **highlighted.**

d. Release the mouse and your cells will be filled.

◢	A	B	C
1	Office Christmas Party		
2			
3	Employee	Attending	Not Attending
4			
5	Peraza, Brian	X	
6	Swensen, Liz		X
7	Harris, Jane		X
8	Lewty, Alice	X	
9	Olvera, Emily K.	X	
10	Wodal, Matthew	X	
11	McMillan, J.E.	X	
12	Dees, Robert		
13	Wimblet, Grace		
14	Salter, Joe Ann		

3.7. *To Save the Workbook:*
a. Left-click the **File** tab.
b. Select **Save** or **Save As**.
c. The **Save As** dialog box will appear. Select the location where you wish to save the workbook.
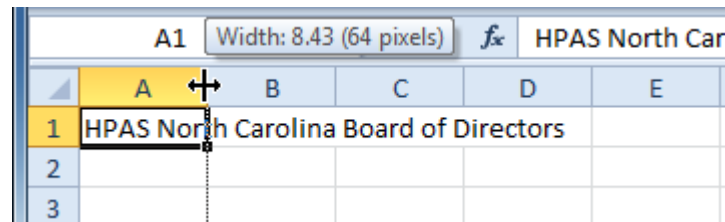d. Enter a name for the workbook and click **Save**.
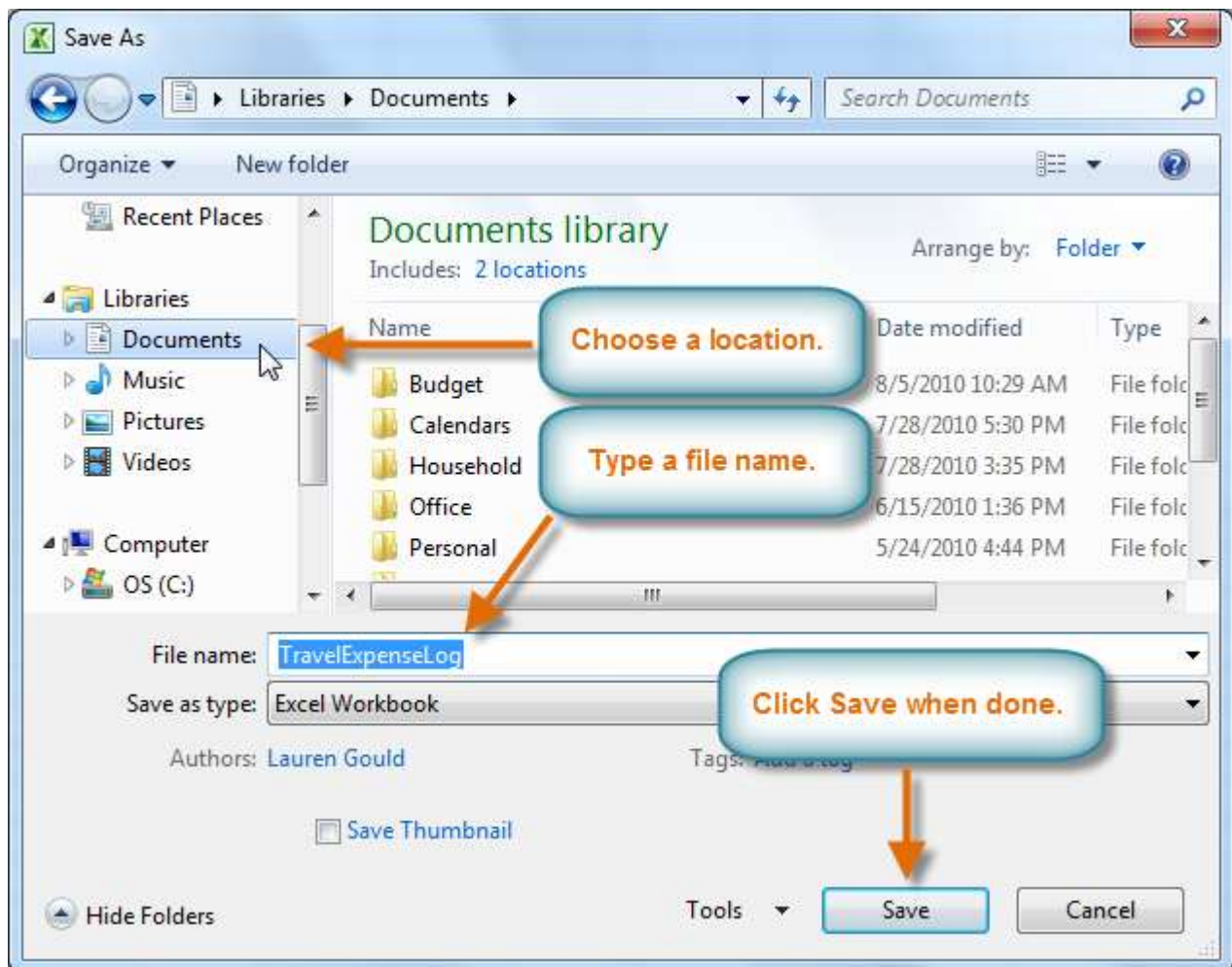
e. In the Save as type drop-down menu, select **Excel 97-2003** Workbook.
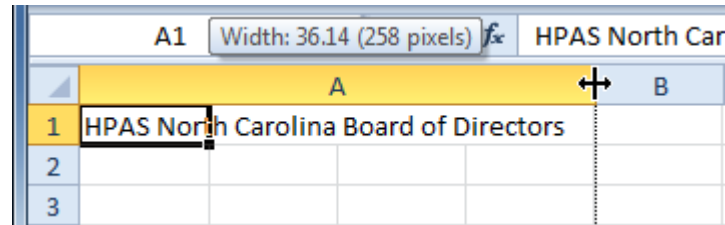f. In the Save as type drop-down menu, select **PDF**.
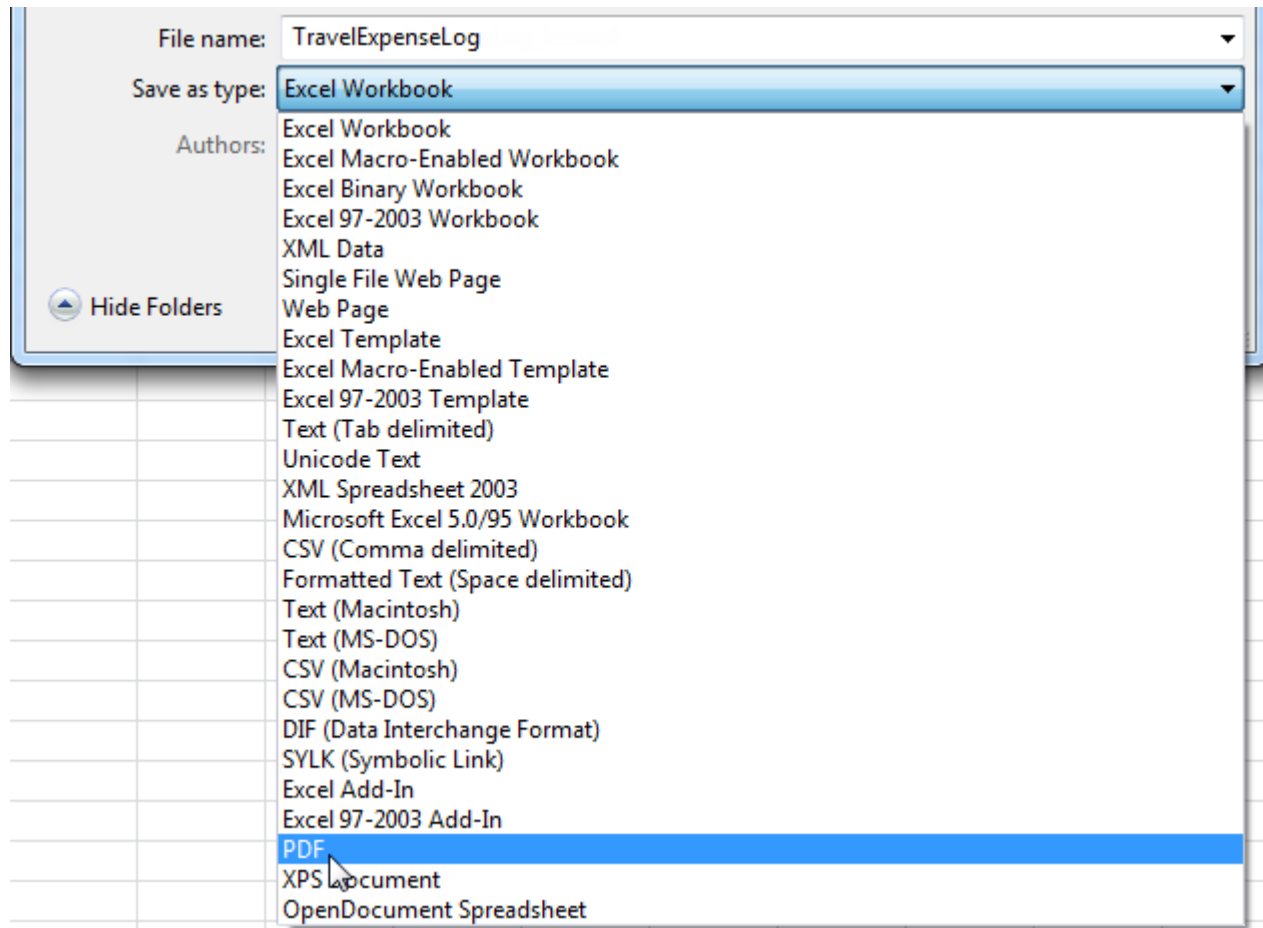
4. *Modifying Columns, Rows and Cells*

4.1. *To Modify Column Width:*

    a. Position your mouse over the **column line** in the column heading so that the **white cross** ✛ becomes **adoublearrow** ✛.
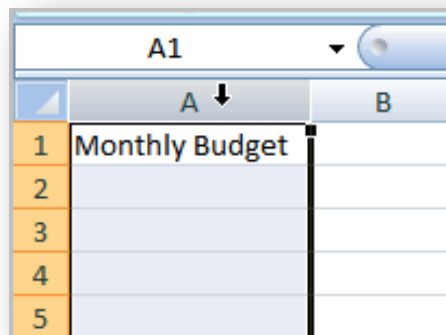

    b. **Click and drag the column** to the right to increase the column width or to the left to decrease the column width.

c. Release the mouse. The column width will be changed in your spreadsheet.

OR

a. Left-click the column heading of a column you'd like to modify. The entire column will appear highlighted.

b. Click the Format command in the **Cells** group on the **Home** tab. A menu will appear.

c. Select **AutoFit Column Width** to adjust the column so all the text will fit.

4.2. *To Modify the Row Height:*

a. Position the **cursor** over the **row line** so that the **white cross** ✛ becomes a **double arrow** ✛.
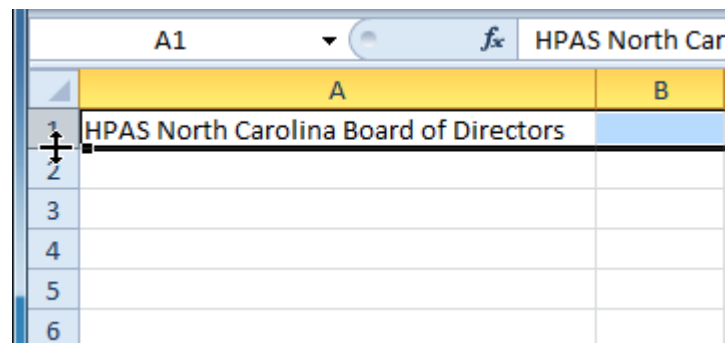
b. **Click and drag the row** downward to increase the row height or upward decrease the row height.Release the mouse button.

    c. Release the mouse. The height of each selected row will be changed in your worksheet.
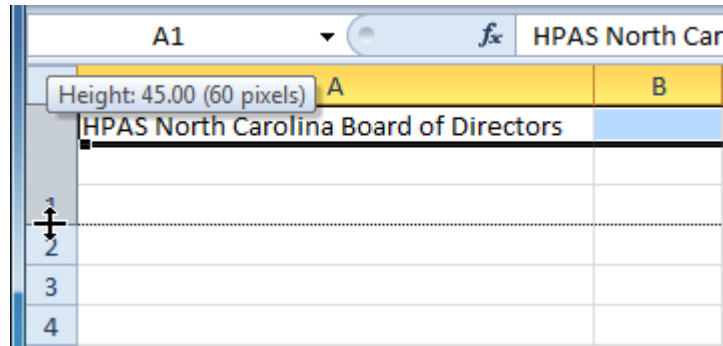
OR

    a. Click the **Format** command in the **Cells** group on the **Home** tab. A menu will appear.
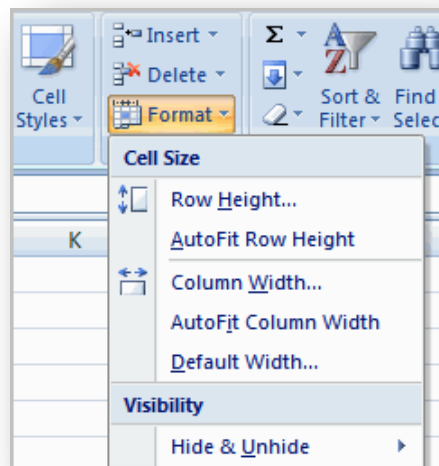
    b. Select **AutoFit Row Height** to adjust the row so all the text will fit.

4.3. *To Insert Rows:*

    a. Select the **row** below where you want the new row to appear.

    b.   Click the **Insert** command in the **Cells** group on the **Home** tab. The row will appear.
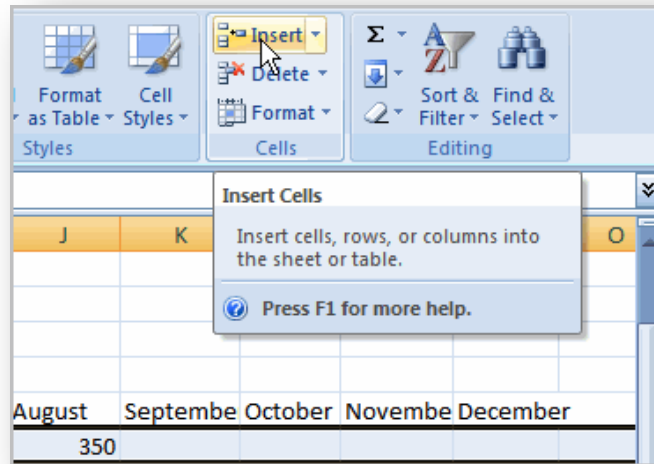
    c.   The new row always appears above the selected row.

4.4. *To Insert Columns:*

    a.   Select the **column** to the right of where you want the column to appear.

    b.   Click the **Insert** command in the **Cells** group on the **Home** tab. The column will appear.

> The new column always appears to the left of the selected columnif the page direction from left to write.

4.5. To Delete Rows and Columns:
   a. Select the row or column you'd like to delete.
   b. Click the **Delete** command in the **Cells** group on the **Home** tab.
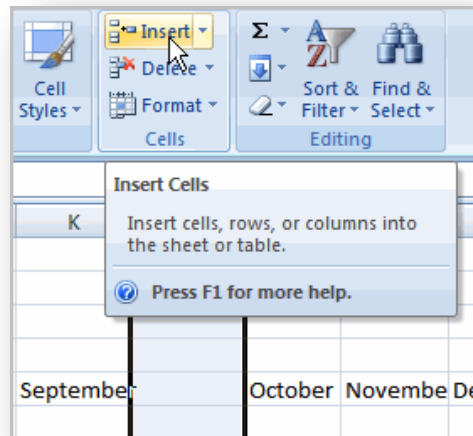
4.6. To Wrap Text:
   a. Select the cells with text you want to wrap.
   b. Select the **Wrap Text** command on the **Home** tab.
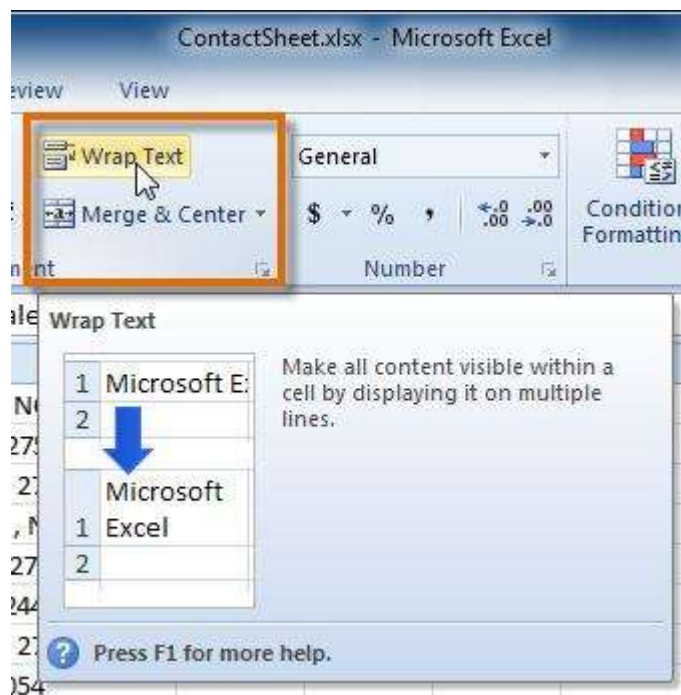
   c. The text in the selected cells will be wrapped in your worksheet.

4.7. To Merge Cells Using the Merge & Center Command:
   a. Select the cells you want to merge together.

    b. Select the **Merge & Center** command on the **Home** tab.

    c. The selected cells will be merged and the text will be centered.

A1	▾	fx	HPAS North Carolina Board of Directors

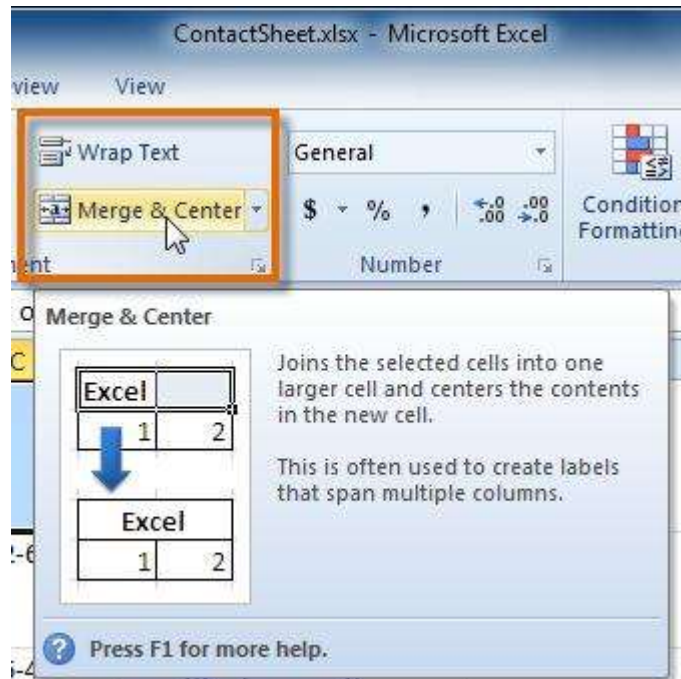|	A	B	C	D
1		HPAS North Carolina Board of Directors		
2	Ashberry, Jane	78-A Meadowview Lane Raleigh, NC 27589	919-882-6561	ashberryj@hpasnc.org
3	Davis, Garrett	29 North Luke Court Raleigh, NC 27576	919-576-4562	davisg@hpasnc.org
4	Eberhardt, Elizabeth	63-C Chapel Court Louisberg, NC 27079	252-985-3558	eberhardte@hpasnc.org

5. *Formatting Cells*

5.1. *To Format Text as Bold, Italic and Underlined:*
5.2. *To Change the Font Style*

5.3. *To Change the Font Size:*
5.4. *To Change the Text Color:*
5.5. *To Add a Border:*

    a. Select the cell or cells you want to format.

    b. Click the drop-down arrow next to the **Borders** command on the **Home** tab. A menu will appear with border options.

> As you move over the font list, the Live Preview feature previews the font for you in the spreadsheet.
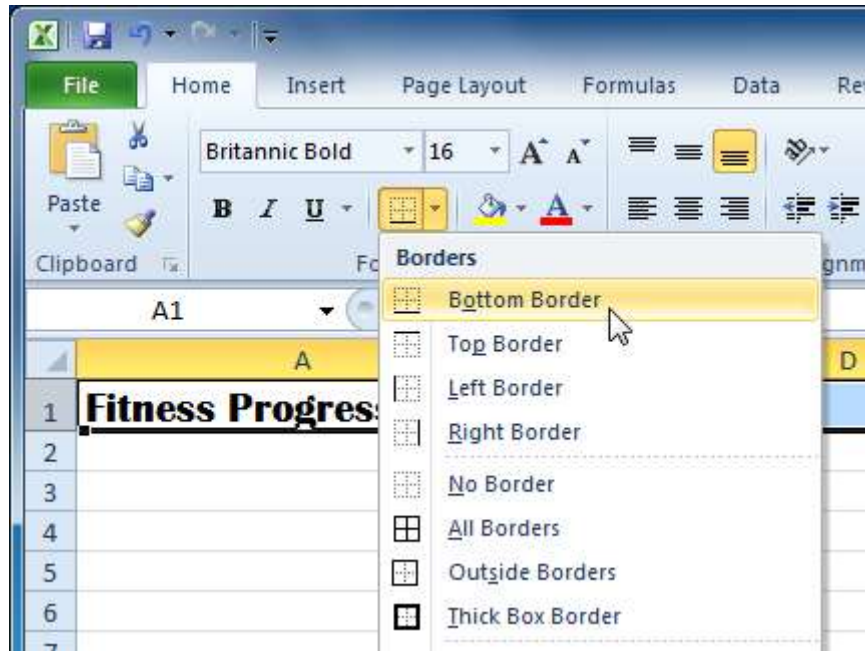
c. Left-click an option from the list to select it.

5.6. _To add a Fill Color:_

a. Select the cell or cells you want to format.

b. Click the **Fill** command. A color palette will appear.

c. Select a color.

5.7. _To Format Numbers and Dates:_

a. Select the cell or cells you want to format.
b. Left-click the drop-down arrow next to the **Number Format** box.
c. Select one of the options for formatting numbers.
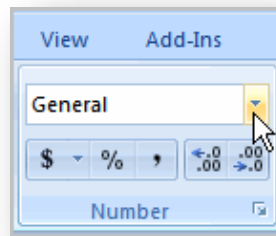
7. *Formatting Tables*

7.1. *To format a table:*

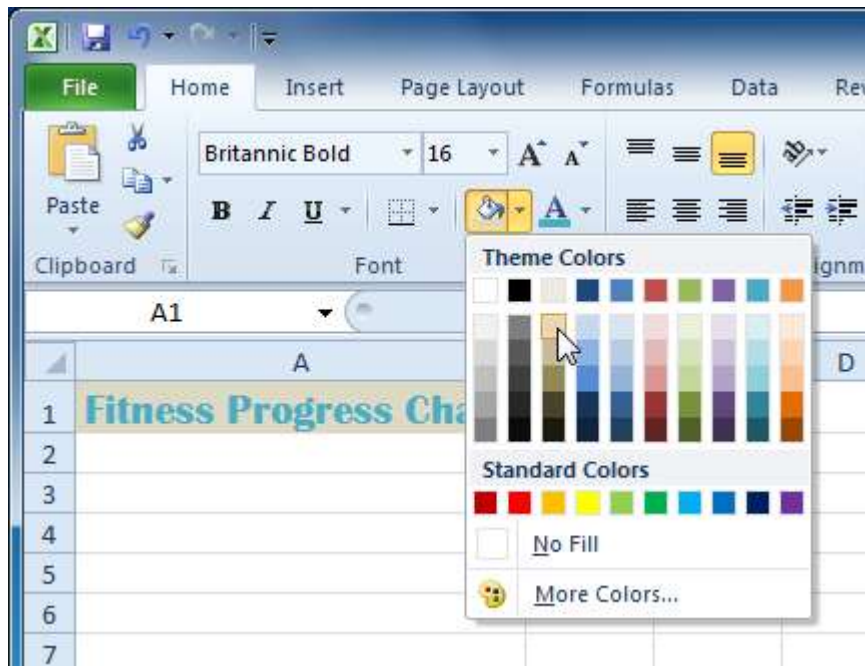**a.** Select any cell that contains information.

b. Click the **Format as Table** command in the **Styles** group on the **Home** tab. A list of predefined tables will appear.
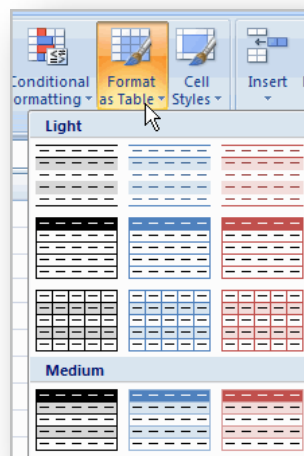
c. Left-click **a table style** to select it.

d. A dialog box will appear. Excel has automatically selected the cells for your table. The cells will appear selected in the spreadsheet and the range will appear in the dialog box.

e. Change the range listed in the field, if necessary.
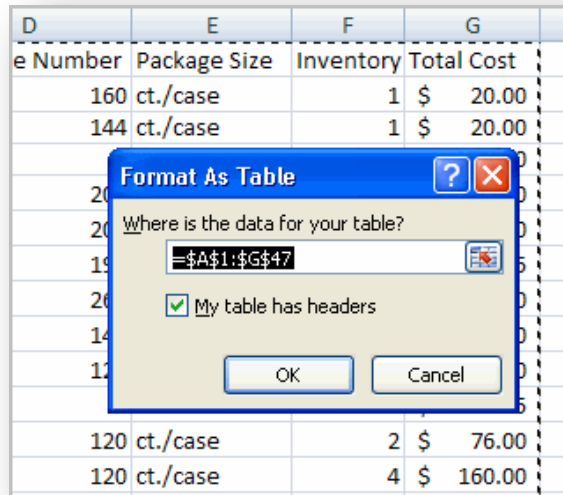
f. Verify the box is selected to indicate your table has headings, if it does.

g. Deselect this box if your table does not have column headings.

h. Click OK. The table will appear formatted in the style you chose.

7.2. *To Modify a Table:*

Select any cell in the table. The **Table Tools Design** tab will become active. From here you can modify the table in many ways.
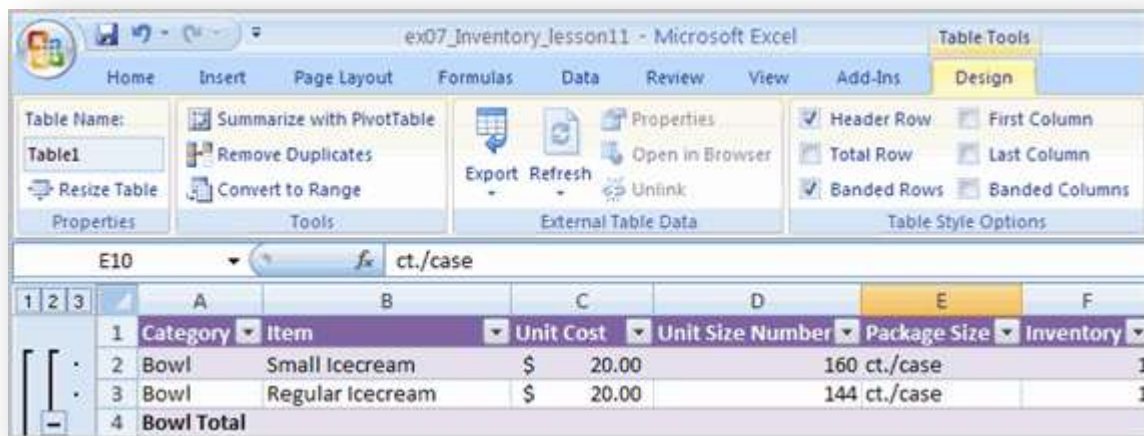
You can:

a. Select a different table in the **Table Styles Options** group. Click the **More** drop-down arrow to see more table styles.

b. Delete or add a **Header Row** in the **Table Styles Options** group.

c. Insert a **Total Row** in the **Table Styles Options** group.

d. Remove or add banded rows or columns.

e. Make the first and last columns bold.

f. Name your table in the **Properties** group.

g. Change the cells that make up the table by clicking **Resize Table**.

8. <u>*Sorting and Filtering Cells*</u>

Sorting lists is a common spreadsheet task that allows you to easily reorder your data. The most common type of sorting is alphabetical ordering, which you can do in ascending or descending order.

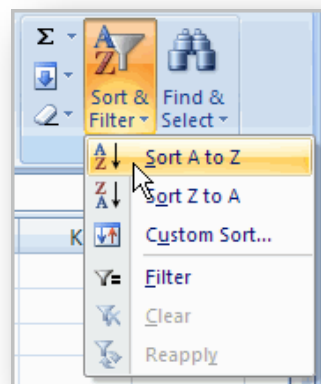### 8.1. <u>*To Sort in Alphabetical Order:*</u>

a. Select a cell in the column you want to sort (In this example, we choose a cell in column A).

b. Click the **Sort & Filter** command in the **Editing** group on the **Home** tab.

c. Select **Sort A to Z**. Now the information in the **Category** column is organized in alphabetical order.

8.2. <u>*To Sort from Smallest to Largest:*</u>

a. Select a cell in the column you want to sort (a column with numbers).

b. Click the **Sort & Filter** command in the **Editing** group on the **Home** tab.

c. Select **From Smallest to Largest**. Now the information is organized from the smallest to largest amount.

<u>*Filtering Cells*</u>

Filtering or temporarily hiding data in a spreadsheet very easy. This allows youto focus on specific spreadsheet entries.

8.3. *To Filter Data:*
Click the **Filter** command on the **Data** tab. **Drop-down** arrows will appear beside each column heading.

8.4. *To Clear One Filter:*
a. Select one of the drop-down arrows next to a filtered column.

b. Choose **Clear** Filter From...

	A	B	C	D
1	Equipment Log — Ragnar Technologies Inc.			
2	ID #	Type	Equipment Detail	Checked Out
3	1011	Laptop	10" Seris Netbook Pro	04-Oct-10
4	1012	Laptop	Netbook Pro	29-Sep-10
5	1021	Laptop	15" EDI SmartPad L200-3	15-Sep-10
6	1022	Laptop	15" EDI SmartPad L200-3	14-Aug-10
7	1023	Laptop	15" EDI SmartPad L200-3	08-Aug-10

	A	B	C	D
1	Equipment Log — Ragnar Technologies Inc.			
2	ID #	Type	Equipment Detail	Checked Out
	Sort A to Z		ro	04-Oct-10
	Sort Z to A		ro	29-Sep-10
	Sort by Color	▶	00-3	15-Sep-10
			00-3	14-Aug-10
	Clear Filter From "Type"		00-3	08-Aug-10
	Filter by Color	▶	00-4X	26-Sep-10
	Text Filters	▶	)	04-Oct-10
	Search	🔍	)	19-Sep-10
	■ (Select All)		)	24-Sep-10
	✔ Laptop		)	25-Aug-10
	☐ Other		)-1	05-Oct-10
	✔ Projector		)-1	01-Oct-10
	☐ TV		Camera	12-May-10
			tal Camera	27-Jul-10
			Camcorder	06-Oct-10
			Printer II	04-Aug-10
			ker	13-Jun-10
			Travel Bag	27-Jul-10
	OK	Cancel	top Case	04-Oct-10
22	4905	Other	7N Heavy Rolling Laptop Case	04-Oct-10
23	5020	TV	32" Paragon 440 Plasma TV	11-Aug-10

Type:
(Showing All)

c. To remove all filters, click the **Filter** command.

|	A	B	C	D
1	Equipment Log — Ragnar Technologies Inc.			
2	ID #	Type	Equipment Detail	Checked Out
3	1011	Laptop	10" Saris Netbook Pro	04-Oct-10
4	1012	Laptop	10" Saris Netbook Pro	29-Sep-10
5	1021	Laptop	15" EDI SmartPad L200-3	15-Sep-10
6	1022	Laptop	15" EDI SmartPad L200-3	14-Aug-10
7	1023	Laptop	15" EDI SmartPad L200-3	08-Aug-10
8	1025	Laptop	15" EDI SmartPad L200-4X	26-Sep-10
9	1031	Laptop	17" Saris X-10 Laptop	04-Oct-10
10	1032	Laptop	17" Saris X-10 Laptop	19-Sep-10
11	1033	Laptop	17" Saris X-10 Laptop	24-Sep-10
12	1034	Laptop	17" Saris X-10 Laptop	25-Aug-10
26	6100	Projector	Omega VisX 1.0	28-Sep-10
27	6101	Projector	Omega VisX 1.0	26-Sep-10
28	6102	Projector	Omega VisX 1.0	22-Aug-10

9. *Basic Functions*

The Parts of a Function:

Each function has a specific order, called syntax, which must be strictly followed for the function to work correctly.

9.1. *Syntax Order:*

a. All functions begin with the = sign.

b. After the = sign define the function name (e.g., Sum).

c. Then there will be an argument. An argument is the cell range or cell references that are enclosed by parentheses. If there is more than one argument, separate each by a comma.

An example of a function with one argument that adds a range of cells, A3 through A9:
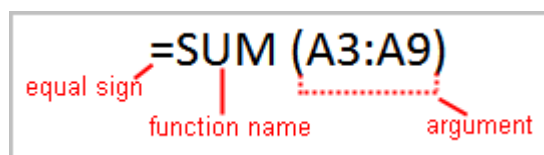
An example of a function with more than one argument that calculates the sum of two cell ranges:
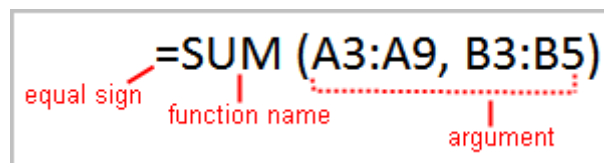
> Excel literally has hundreds of different functions to assist with your calculations. Building formulas can be difficult and time-consuming. Excel's functions can save you a lot of time and headaches.

9.2. *Excel's Different Functions:*

There are many different functions in Excel 2007. Some of the more common functions include:

a. Statistical Functions:
(1) **SUM** - summation adds a range of cells together.
(2) **AVERAGE** - average calculates the average of a range of cells.
(3) **COUNT** - counts the number of chosen data in a range of cells.
(4) **MAX** - identifies the largest number in a range of cells.
(5) **MIN** - identifies the smallest number in a range of cells.
b. Date and Time functions.

9.3. *To Calculate the Sum of Two Arguments:*
a. Select the **cell** where you want the **function to appear**. In this example, G44.
b. Click the **Insert Function** command on the Formulas tab. A dialog box appears.
c. **SUM** is selected by default.
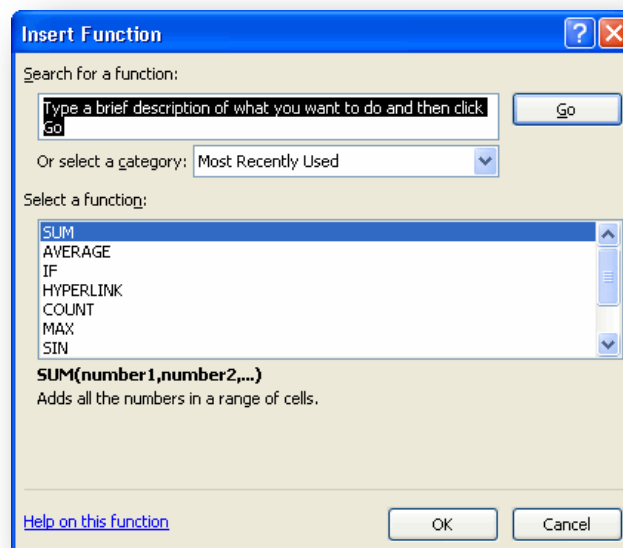
d. Click **OK** and the **Function Arguments** dialog box appears so that you can enter the range of cells for the function.

e. Insert the cursor in the **Number 1** field.

f. In the spreadsheet, select the **first range of cells**. In this example, G21 through G26. The argument appears in the Number 1 field.

g. To select the cells, **left-click cell G21** and **drag the cursor** to G26, and then release the mouse button.

h. Insert the cursor in the **Number 2** field.

**i.** Click **OK** in the dialog box and the **sum of the two ranges** is calculated
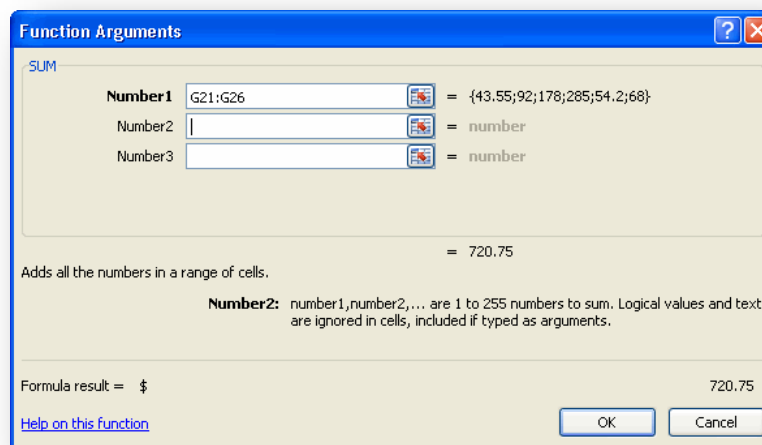
10. *Preparing to Print and Printing*

10.1. *To Print Active Sheets:*

a. Select the worksheets you want to print. To print multiple worksheets, click on the first worksheet, hold down the **Ctrl key**, then click on the other worksheets you want to select.
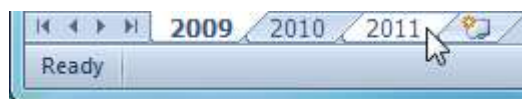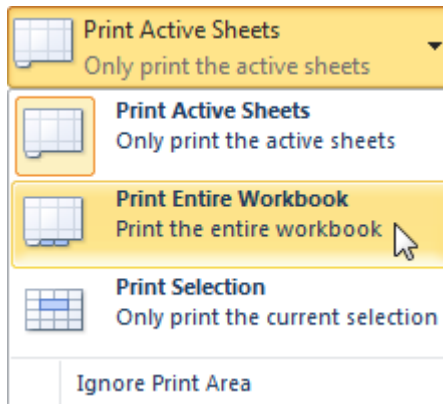

b. Click the **File tab.**

c. Select **Print** to access the **Print pane**

d. Select **Print Active Sheets** from the **print range** drop-down menu.
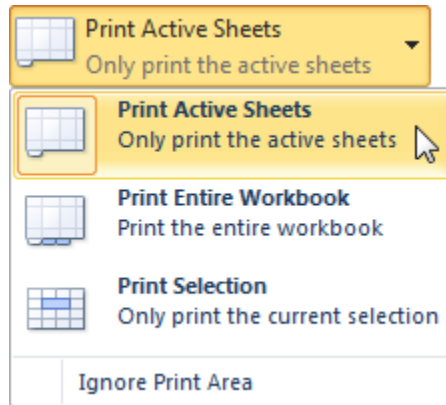
    e. Click the **Print** button.

10.2. *To Print the Entire Workbook:*
    a. Click the **File** tab.
    b. Select **Print** to access the **Print pane**.
   **c.** Select **Print Entire Workbook** from the **print range** drop-down menu.

    d. Click the **Print** button**.**

10.3. *To Print a Selection, or Set the Print Area:*
    a. Select the cells that you want to print.

	A	B	C
1	Employee Name	January	February
2	Allenson, Carol	$ 5,897.00	$ 2,356.00
3	Altman, Zoey	$ 666.00	$ 6,210.00
4	Aurelio, Fies	$ 5,889.00	$ 9,385.00
5	Aurelio, Vig	$ 8,765.00	$ 9,258.00
6	Bergman, Jeffery	$ 1,928.00	$ 6,595.00
7	Bittiman, William	$ 4,108.00	$ 7,172.00
8	Carlson, David	$ 6,302.00	$ 358.00
9	Carlton, Potter	$ 3,647.00	$ 2,858.00

b. Click the File tab.

c. Select Print to access the Print pane.

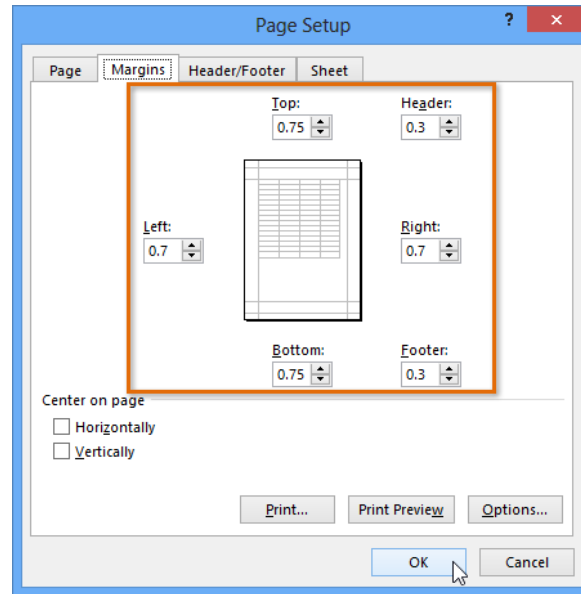**d.** Select **Print Selection from the print range drop-down menu.**
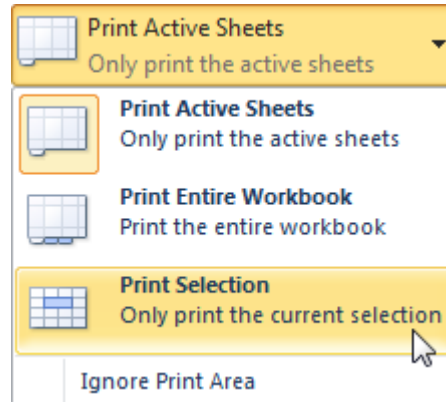
e. You can see what your selection will look like on the page in **Print Preview**.

f. The Page Setup dialog box will appear.

h.Adjust the values for each margin, then click OK

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k.The margins of the workbook will be changed.