Microsoft Excel 2010

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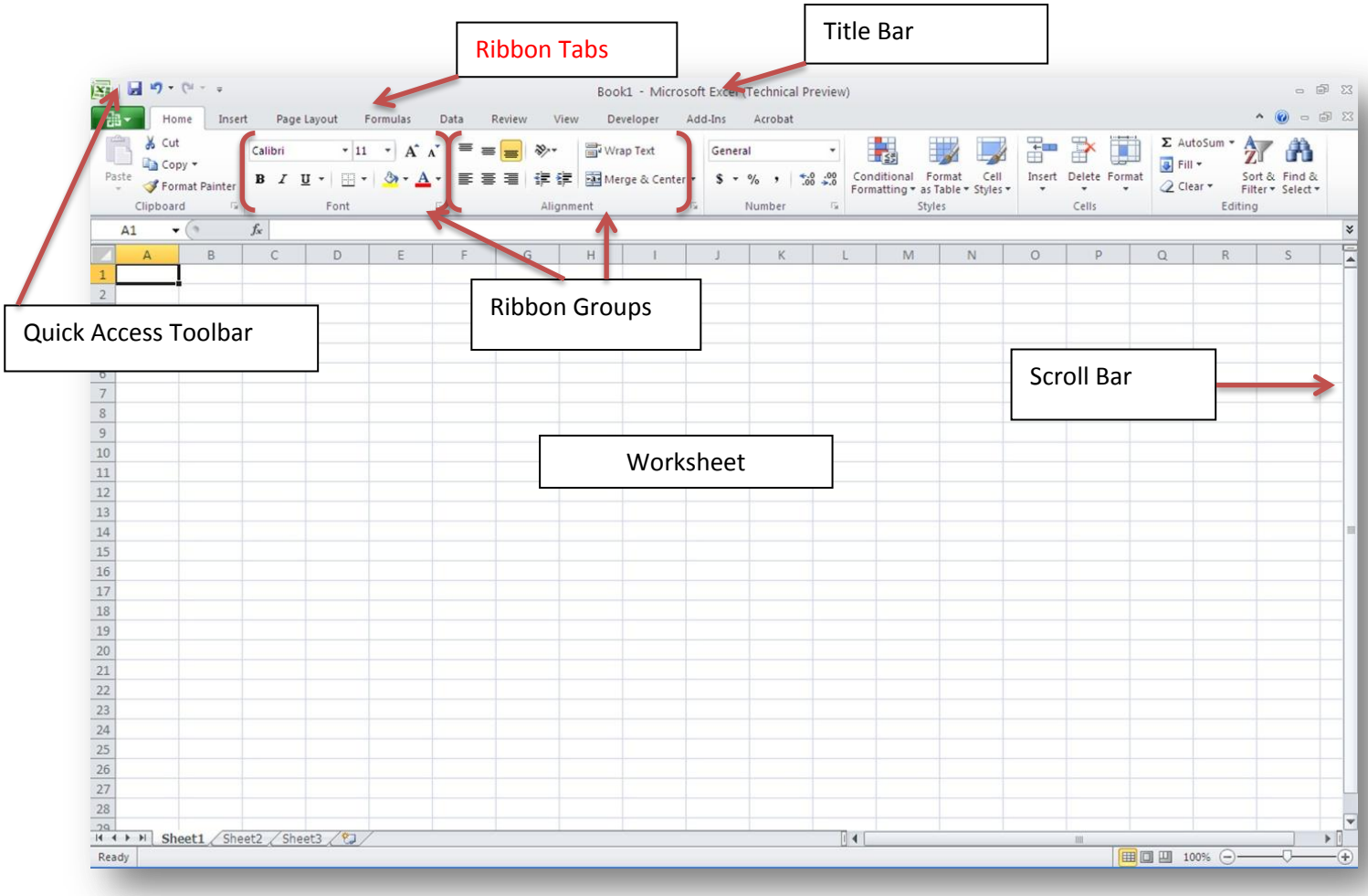
Part I: Introduction to MS Excel 2010

Microsoft Excel 2010 is a spreadsheet software in the new Microsoft 2010 Office Suite. Excel allows you to store, manipulate and analyze data in organized workbooks for home and business tasks. You can use Excel for to keep up with inventory, budgets, bookkeeping, contact lists, etc.

Getting Started

1. Click the **Start** button and choose **All Programs** > **Microsoft Office** > **Microsoft Excel 2010**. *(Note: The Start button is disabled while in the training mode.)*
2. Double click the **Microsoft Excel** icon on the desktop.
3. Whenever you start word, by default, a new blank document will appear in the application window, and the **Home** tab is active by default.



Components of the Excel Window

The tabbed Ribbon system was introduced in Excel 2007 to replace traditional menus. It contains all of the commands you'll need in order to do common tasks. There are multiple tabs, each with several groups of commands. Some groups have an arrow in the bottom-right corner that you can click to see even more commands

- **File Tab**: Opens Backstage view, which displays a menu of commonly used file-management commands, such as Open, Save, Save As, and Print.
- **Quick Access Toolbar**: Contains buttons for frequently used commands. By default, Save, Undo, and Repeat/Redo are available. You can customize the toolbar to include additional commands.
- **Ribbon Tabs**: Contain Excel's primary tools and commands, which are organized in logical groups and divided among the tabs. The main tabs are File, Home, Insert, Page Layout, References, Mailings, Review, and View.
- **Ribbon Groups**: Further organize related tools and commands. For example, tools and menus for changing text formats are arranged together in the Font group.
- **Title Bar**: Displays the name of the current document.
- **Document area**: Displays the text graphics that you type, edit, or insert. The flashing vertical line in the document area is called the insertion point, and it indicates where text will appear as you type.
- **Status Bar**: Contains the page number, word count, View commands, and document Zoom.
- **Scrollbars**: Used to view parts of the document that doesn't currently fit in the window. You can scroll vertically and horizontally.
- **Help**: Pressing your F1 key will bring up the Help function for Window-based programs. Word 2010 offers relevant results with articles from different sources online.

The Ribbon

Understanding the Ribbon is a great way to help understand the changes between Microsoft 2003 to Microsoft 2010. The ribbon holds all of the information in previous versions of Microsoft Office in a more visual stream line manner through a series of tabs that include an immense variety of program features. The Ribbon contains multiple **tabs**, each with several **groups** of commands. You can add your own tabs that contain your favorite commands.

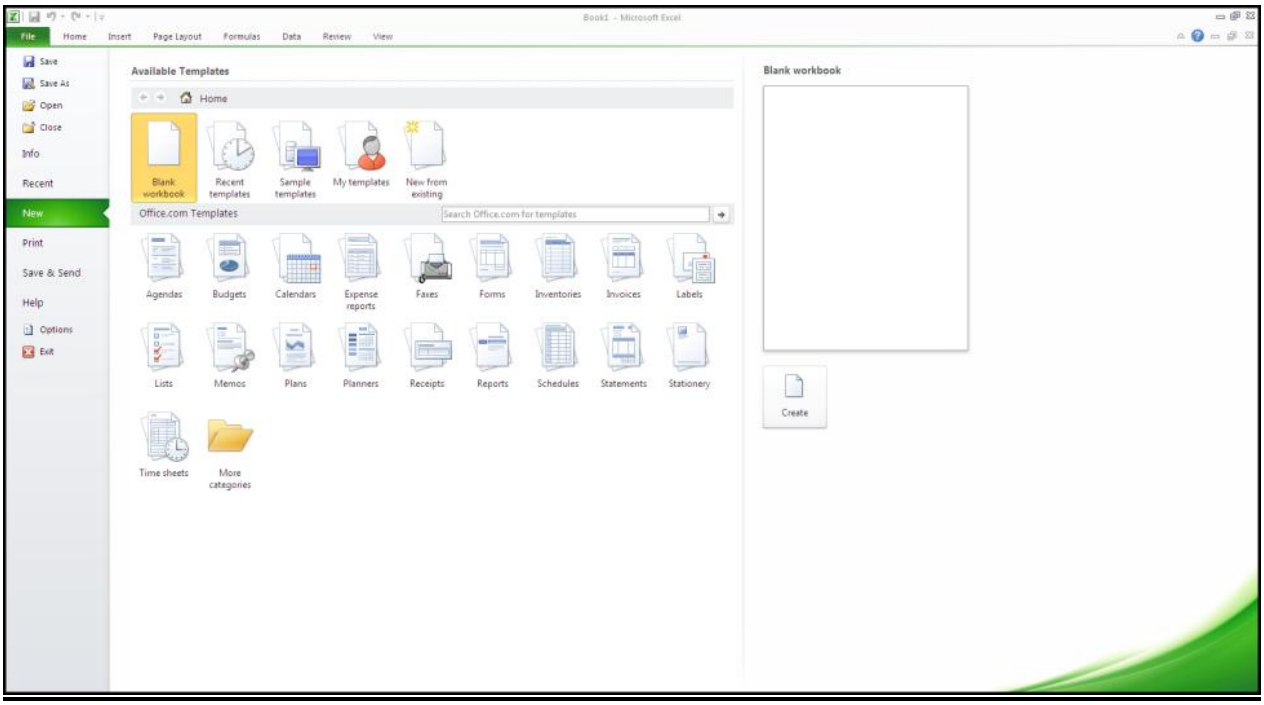
- ***Home Tab-***This is the most used tab; it incorporates all text and cell formatting features such as font and paragraph changes. The Home Tab also includes basic spreadsheet formatting elements such as text wrap, merging cells and cell style.
- ***Insert Tab-***This tab allows you to insert a variety of items into a document from pictures, clip art, and headers and footers.

- ***Page Layout Tab-***This tab has commands to adjust page such as margins, orientation and themes
- ***Formulas Tab-***This tab has commands to use when creating Formulas. This tab holds an immense function library which can assist when creating any formula or function in your spreadsheet.
- ***Data Tab-***This tab allows you to modifying worksheets with large amounts of data by sorting and filtering as well as analyzing and grouping data.
- ***Review Tab-***This tab allows you to correct spelling and grammar issues as well as set up security protections. It also provides the track changes and notes feature providing the ability to make notes and change someone's document.
- ***View Tab-***This tab allows you to change the view of your document including freezing or splitting panes, viewing gridlines and hide cells.

Creating a New Workbook

1. Click **File** > **New**. Excel will display available templates. You can create a blank workbook or a blank template, or choose from a number of built-in templates. For a blank workbook click the **Blank Workbook** template, and click **Create**.

2. You can also press **CTRL + N**. New workbooks open in a separate window. When more than one workbook is open, you can switch between windows by clicking the **View** tab > **Switch Windows**, and selecting which window you want to view.



Opening an Existing Workbook

When you open a workbook, you're viewing its contents in Excel but the original document will remain in the folder where it was saved.

- Click the **File** tab > **Open**. Another option is to press **Ctrl + O**. The open file dialog box will appear, and you can choose which file you wish to open.
- You can also view recently opened or viewed documents by choosing the **Recent** option under the **File** tab.
- **Pinned documents:** Additionally, you can also "pin" any of the documents in the Recent Documents list so that they'll always be displayed in this list. You can do so by clicking the **pin icon** to the right of the document name. Otherwise, as you open new documents, items on this list will move down and eventually moved off the list. To remove a recent document off the list, **right-click** and choose "Remove from list." To remove *all* documents from the list, right-click any document and choose "clear unpinned items."
- **Protected View:** Word identifies documents from potentially unsafe locations and opens them in "protected view." A document that was sent via email or from the Internet cannot be edited until you choose "Enable Editing" on the Message Bar (located at the top of the workbook). If you want to turn off this feature, go to **Options** under the **File** tab. In the **Trust Center** section of the dialog box, click Trust Center **settings**. Clear the desired options and click **OK**.

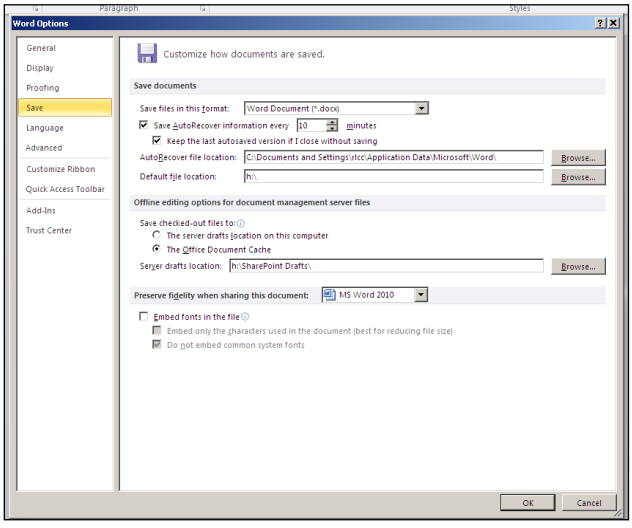
Saving a Workbook

Whenever you create a workbook, you will want to save your work. It is a good habit to save your work as often as you can while in the process of creating it. Unsaved work is often not recoverable, and all the work you will have put in will be lost. You can save your workbook by using the **Save** and **Save As** commands.

Using AutoRecover

When you're working, you might forget to save regularly. If Excel closes unexpectedly, you may lose all your work since the last time you saved your document. Excel provides an automatic save feature that saves your document regularly. To customize or make sure this option is enabled:

1. On the **File** tab, click **Options** to open the Excel Options dialog box.
2. In the left pane, click **Save** to display the save options (as shown).



3. Check “Save AutoRecover information every…”
4. Enter your desired time of how often you want Excel to save your file.
5. Choose other options you desire. When you are done, click **OK**.

**Note: Choosing the “Keep the last Auto Recovered file if I close without saving” saves documents and drafts that you haven’t already saved.*

To recover a newly created file or unsaved document:

1. Click the **File** tab, and then **Recent**.
2. At the bottom of the window, click **Recover Unsaved Documents**.
3. Select the File and click **Open**. (You can save the document at this point.)
4. There may also be a **Versions** option, allowing you to choose which recovered version you wish to open.

Printing a Workbook

Excel allows you to preview your workbook before printing. You can also specify settings such as orientation and page size. Click the **File** tab, then **Print**. If you are satisfied with your preview and do not wish to make changes, you can click on the **Print button**.

Closing a Workbook

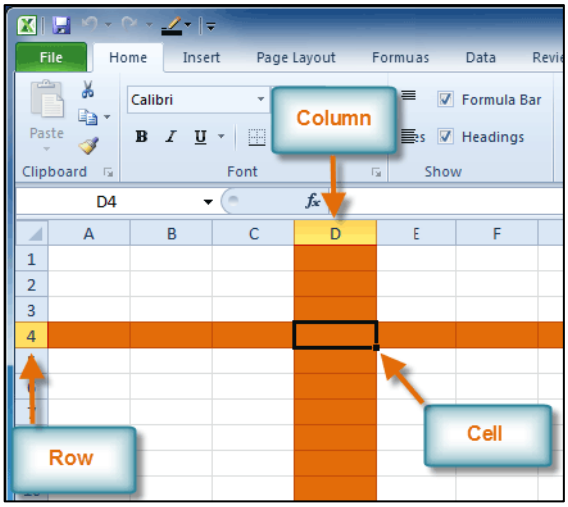
When you are finished working on a workbook and need to close it, Excel will prompt you to save it before it closes your workbook if you haven’t saved it that that point. On the **File** tab, click **Close**. You may also press Ctrl + W to close the workbook.
To exit Excel, choose **Exit** or click on the Exit icon  .

Working with Cells

Spreadsheets

The spreadsheet is represented by grids, with each cell bearing a specific reference:

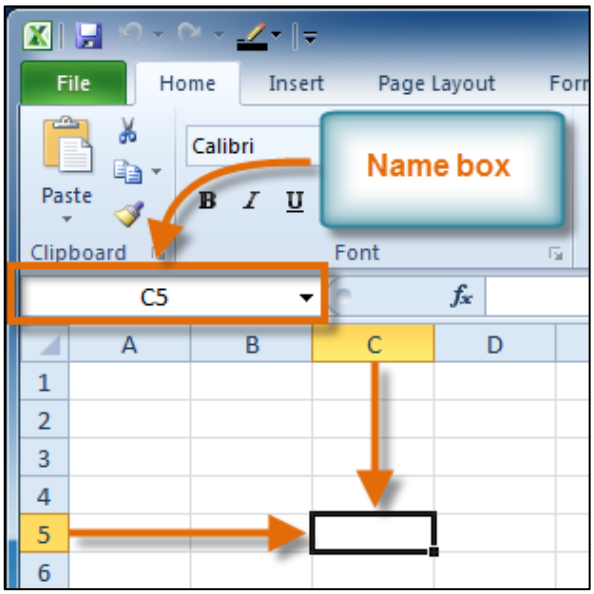
- **Column** – vertical reference (usually indicated by letters)
- **Row** – horizontal reference (usually indicated by numbers)



Note: You may also notice that Excel spreadsheets are opened with three worksheets by default (Sheet 1, Sheet 2, Sheet 3). The amount of worksheets you may have is dependent on your computer memory. There is not set maximum amount. You may also delete any unused sheets if desired.

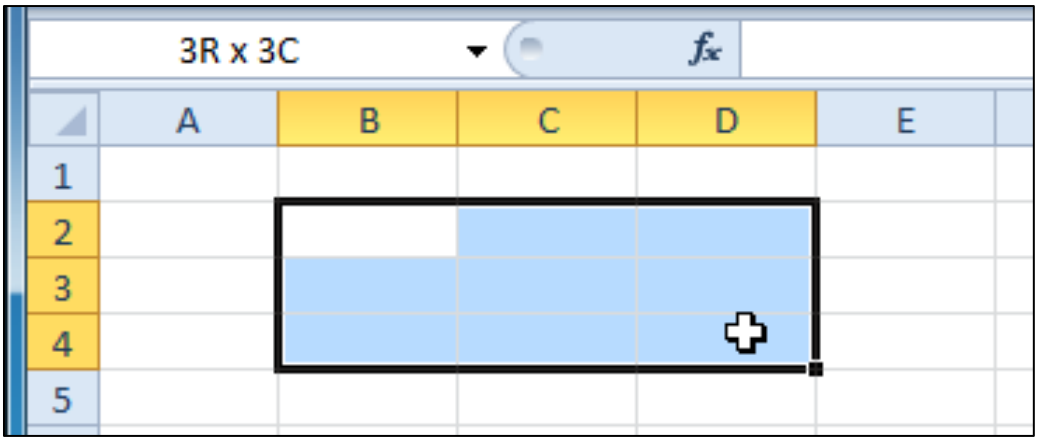
The Cell

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



To Select a Cell:

1. **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.
2. Release your mouse. The cell will stay selected until you click on another cell in the worksheet.
3. You can also navigate through your worksheet and select a cell by using the **arrow keys** on your keyboard.



- **To Select Multiple Cells** – Click and drag your mouse until all of the adjoining cells you want are highlighted. Release your mouse. The cells will stay selected until you click on another cell in the worksheet.
- **To select a single entire column** – Click a column heading — that is, the letter or letters that indicate the column.

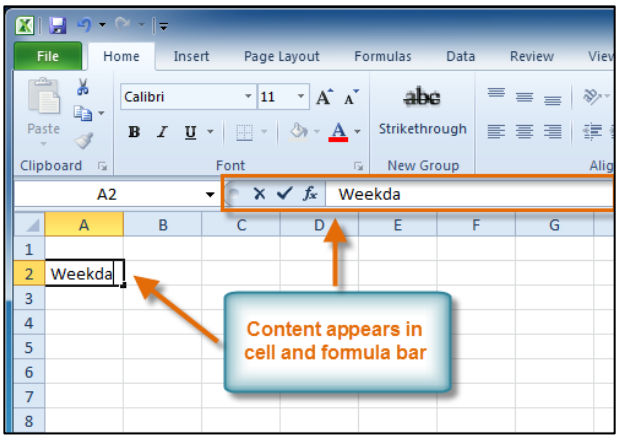
- **To select multiple columns** – Drag your mouse across multiple column headings.
- **To select a single entire row** – Click the row number.
- **To select multiple rows** – Drag across multiple row numbers.
- **To select sequential cells** – Click the first cell, hold down the **Shift** key, and click the last cell you want.
- **To select non-sequential cells** – Click the first cell, hold down the **Ctrl** key, and click each additional cell (or row or column) you want to select.
- **To select the entire worksheet** – Click the small box located to the left of column A and above row 1. Optionally, you can select all cells in a worksheet by pressing **Ctrl+A.**

Working with Cells

Cells are the basic building blocks of a worksheet. Cells can contain a variety of content such as text, formatting attributes, formulas, and functions (i.e., letters, numbers, dates, formulas, and functions.)

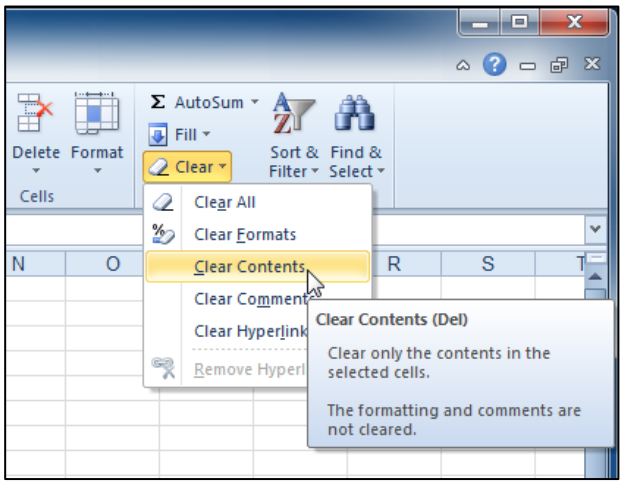
To Insert Content:

1. Click on a cell to select it.
2. 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.

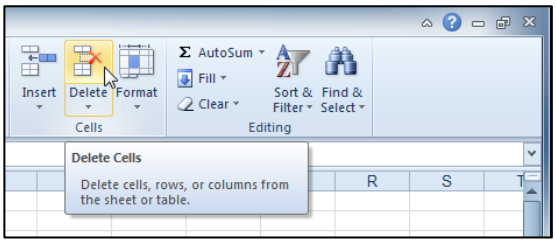


To Delete Content Within Cells:

1. Select the cells which contain content you want to delete.
2. Click the **Clear** command on the ribbon. A **dialog box** will appear.
3. Select **Clear Contents**.
4. You can also use your keyboard's **Backspace** key to delete content from a **single cell** or **Delete** key to delete content from **multiple cells**.

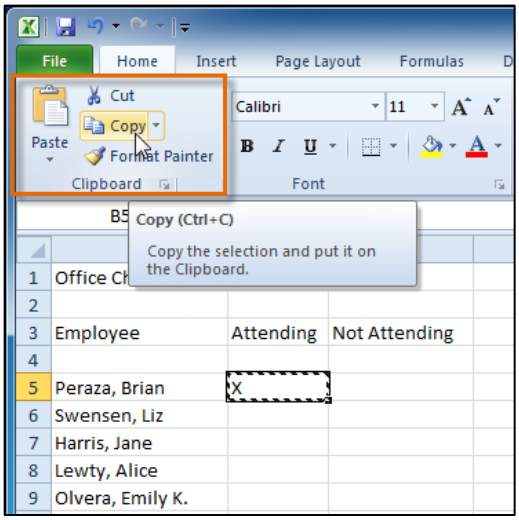


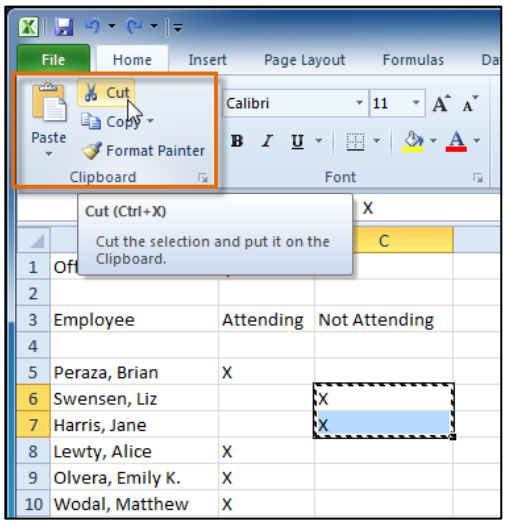
To Delete Cells:



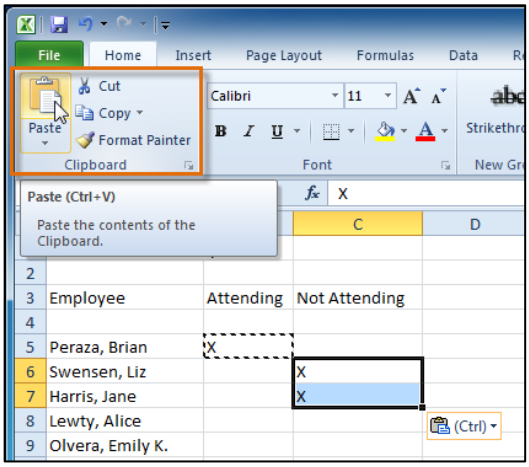
1. Select the cells that you want to delete.
2. Choose the **Delete** command from the **Cell Group** ribbon.

*Note: There is an important difference between **deleting the content of a cell** and **deleting the cell itself**. If you delete the cell, by default the cells underneath it will shift up and replace the deleted cell.*





To Copy and Paste Cell Content:



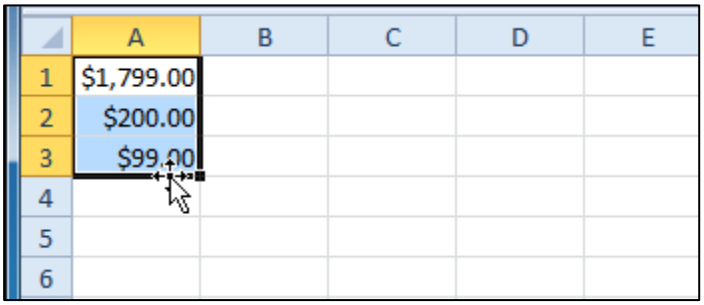
1. Select the cells you wish to copy.
2. Click the **Copy** command. The border of the selected cells will change appearance.
3. Select the cell or cells where you want to paste the content.
4. Click the **Paste** command. The copied content will be entered into the highlighted cells.

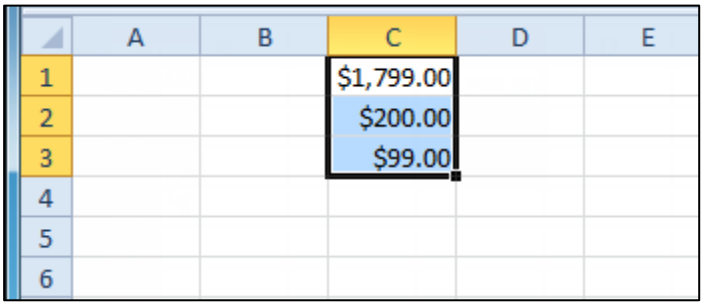
To Cut and Paste Cell Content:

1. Select the cells you wish to cut.
2. Click the **Cut** command. The border of the selected cells will change appearance.
3. Select the cells where you want to paste the content.
4. Click the **Paste** command. The cut content will be removed from the original cells and entered into the highlighted cells.

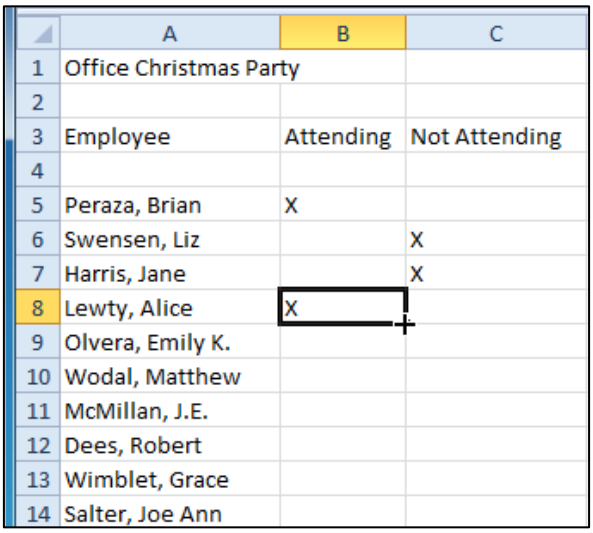
To Drag and Drop Cells:

1. Select the cells that you wish to move.
2. Position your mouse on one of the outside edges of the selected cells. The mouse changes from a white cross ✞ to a black cross with 4 arrows ✥.
3. Click and drag the cells to the new location.
4. Release your mouse and the cells will be dropped there.

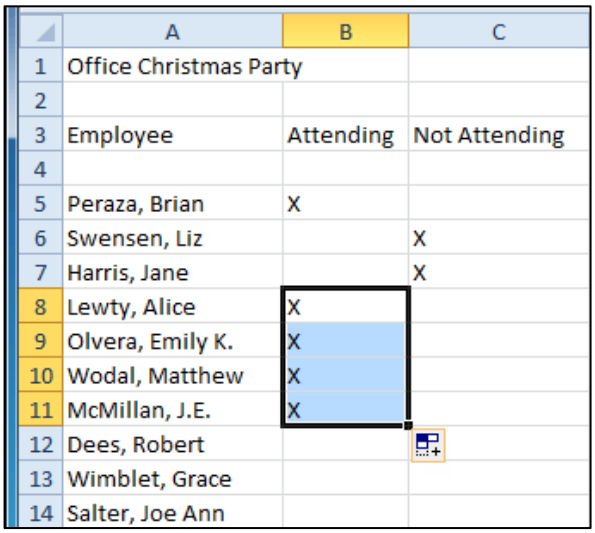




To Use the Fill Handle to Fill Cells:



	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		



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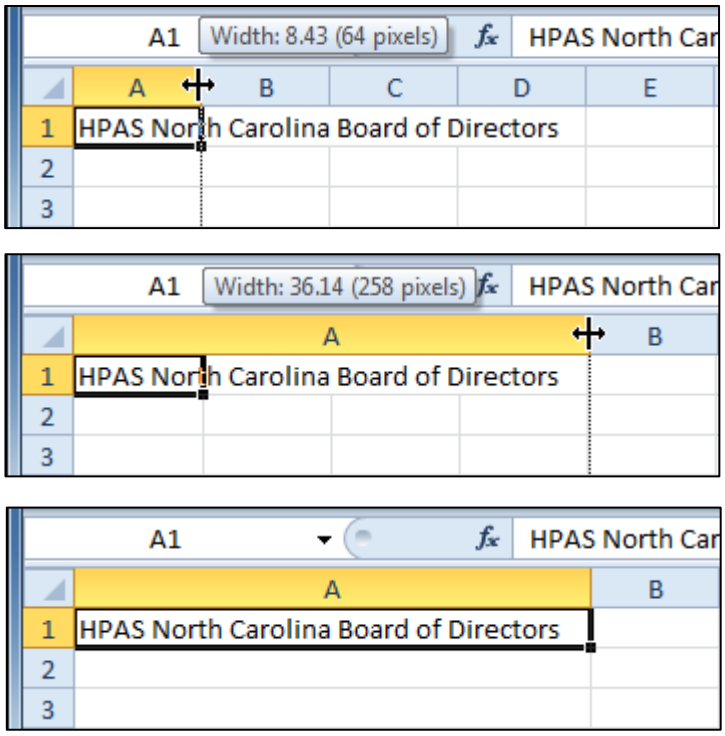
10	Wodal, Matthew	X	
11	McMillan, J.E.	X	
12	Dees, Robert		
13	Wimblet, Grace		
14	Salter, Joe Ann		

1. Select the cell or cells containing the content you want to use. You can fill cell content either vertically or horizontally.
2. Position your mouse over the fill handle so that the white cross ✞ becomes a black cross +.
3. Click and drag the fill handle until all the cells you want to fill are highlighted.
4. Release the mouse and your cells will be filled.

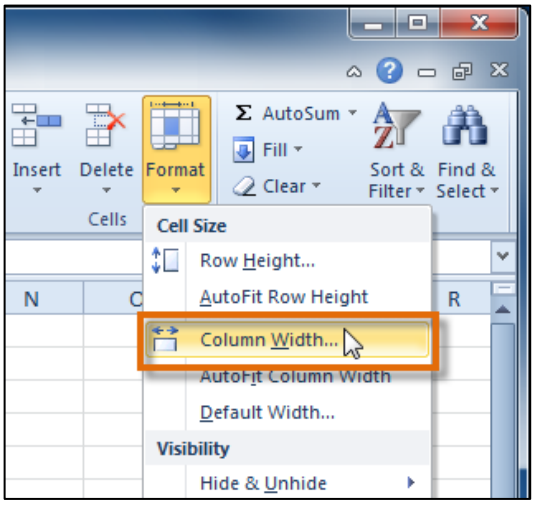
Columns and Rows

To Modify Column Width:

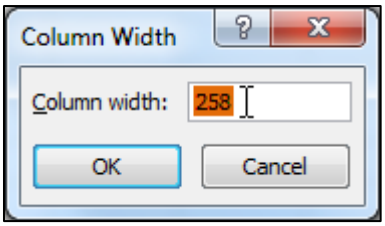


1. Position your mouse over the column line in the column heading so that the white cross ✚ becomes a double arrow ✢.
2. Click and drag the column to the right to increase the column width or to the left to decrease the column width.
3. Release the mouse. The column width will be changed in your spreadsheet.

To Set Column Width with a Specific Measurement:



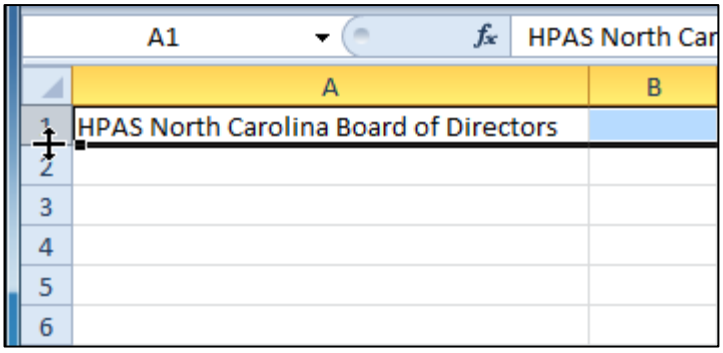
1. Select the columns you want to modify.
2. Click the Format command on the Home tab. The format drop-down menu appears.
3. Select Column Width.
4. The Column Width dialog box appears. Enter a specific measurement.
5. Click OK. The width of each selected column will be changed in your worksheet.

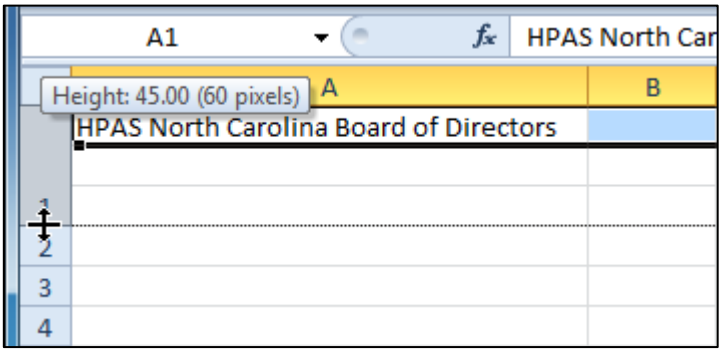


6. Select AutoFit Column Width from the format drop-down menu and Excel will automatically adjust each selected column so that all the text will fit.

To Modify the Row Height:

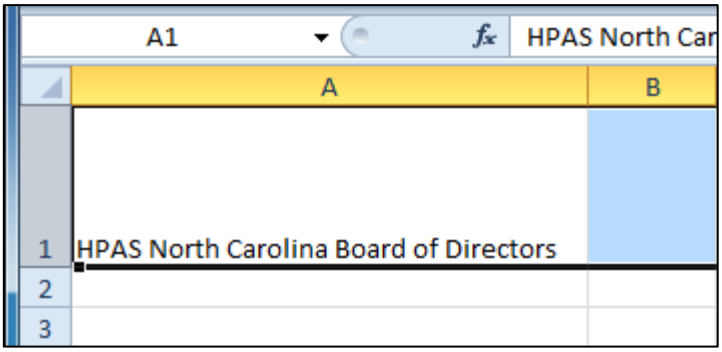
1. Position the cursor over the row line so that the white cross ✚ becomes a double arrow ↕.
2. Click and drag the row downward to increase the row height or upward decrease the row height.
3. Release the mouse. The height of each selected row will be changed in your worksheet.

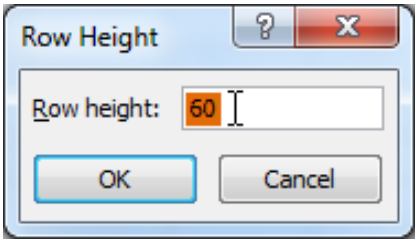


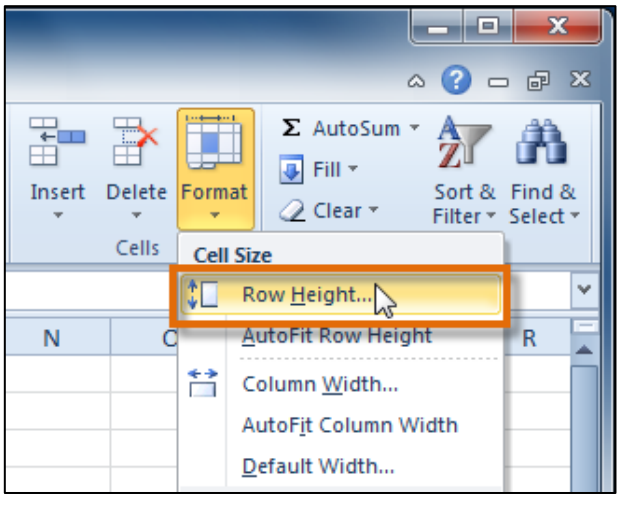


To Set Row Height with a Specific Measurement:

1. Select the rows you want to modify.
2. Click the Format command on the Home tab. The format drop-down menu appears.
3. Select Row Height.
4. The Row Height dialog box appears. Enter a specific measurement.

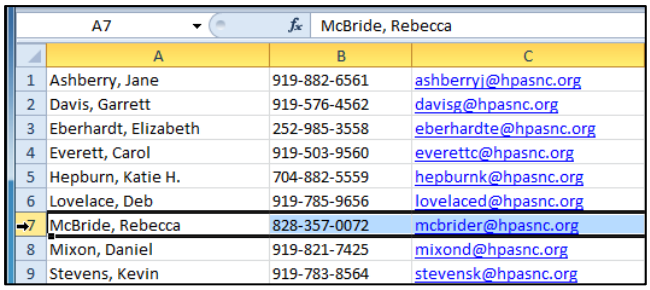




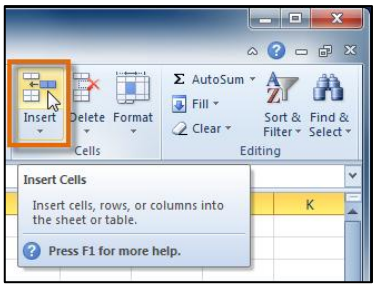


5. Click OK. The selected rows heights will be changed in your spreadsheet.
6. Select AutoFit Row Height from the format drop-down menu and Excel will automatically adjust each selected row so that all the text will fit.

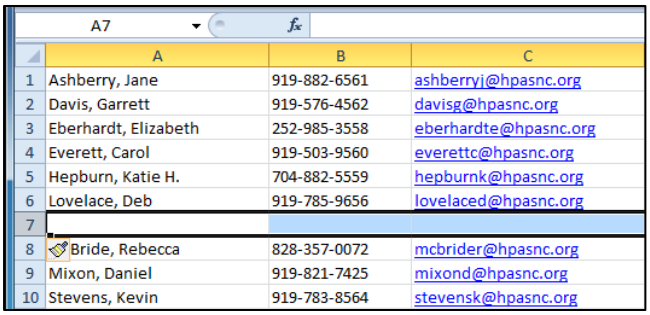
To Insert Rows:



	A	B	C
1	Ashberry, Jane	919-882-6561	ashberryj@hpasnc.org
2	Davis, Garrett	919-576-4562	davisg@hpasnc.org
3	Eberhardt, Elizabeth	252-985-3558	eberhardte@hpasnc.org
4	Everett, Carol	919-503-9560	everettc@hpasnc.org
5	Hepburn, Katie H.	704-882-5559	hepburnk@hpasnc.org
6	Lovelace, Deb	919-785-9656	lovelaced@hpasnc.org
7	McBride, Rebecca	828-357-0072	mcbrider@hpasnc.org
8	Mixon, Daniel	919-821-7425	mixond@hpasnc.org
9	Stevens, Kevin	919-783-8564	stevensk@hpasnc.org



1. Select the row below where you want the new row to appear.
2. Click the Insert command on the **Home** tab.
3. The new row appears in your worksheet.



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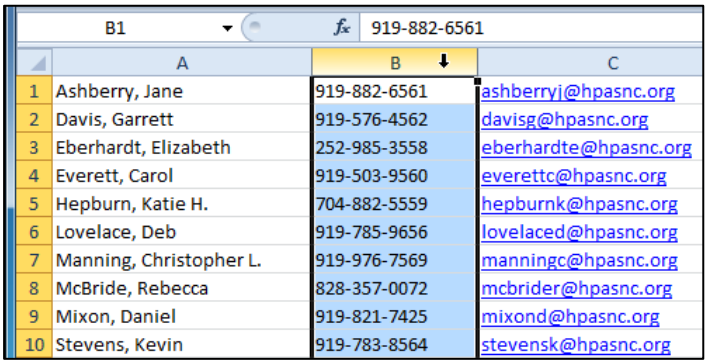
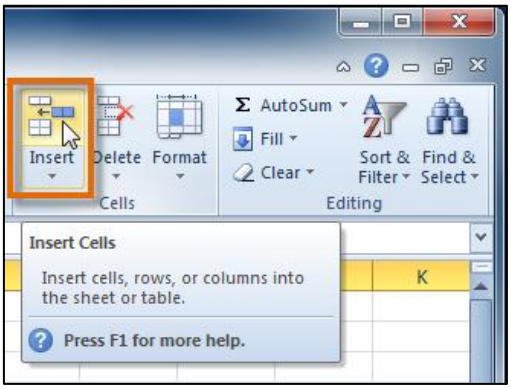
*Note: When inserting new rows, columns, or cells, you will see the **Insert Options** button*  *by the inserted cells. This button allows you to choose how Excel formats them. By default, Excel formats inserted rows with the same formatting as the cells in the row above them. To access more options, hover your mouse over the **Insert Options** button and click on the drop-down arrow that appears.*

To Insert Columns:

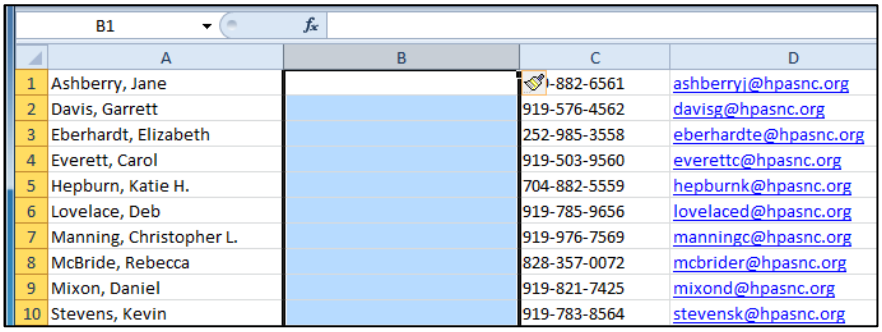


	A	B	C
1	Ashberry, Jane	919-882-6561	ashberryj@hpasnc.org
2	Davis, Garrett	919-576-4562	davisg@hpasnc.org
3	Eberhardt, Elizabeth	252-985-3558	eberhardte@hpasnc.org
4	Everett, Carol	919-503-9560	everettc@hpasnc.org
5	Hepburn, Katie H.	704-882-5559	hepburnk@hpasnc.org
6	Lovelace, Deb	919-785-9656	lovelaced@hpasnc.org
7	Manning, Christopher L.	919-976-7569	manningc@hpasnc.org
8	McBride, Rebecca	828-357-0072	mcbrider@hpasnc.org
9	Mixon, Daniel	919-821-7425	mixond@hpasnc.org
10	Stevens, Kevin	919-783-8564	stevensk@hpasnc.org



1. Select the column to the right of where you want the new column to appear. For example, if you want to insert a column between A and B, select column B.
2. Click the Insert command on the Home tab.
3. The new column appears in your worksheet.

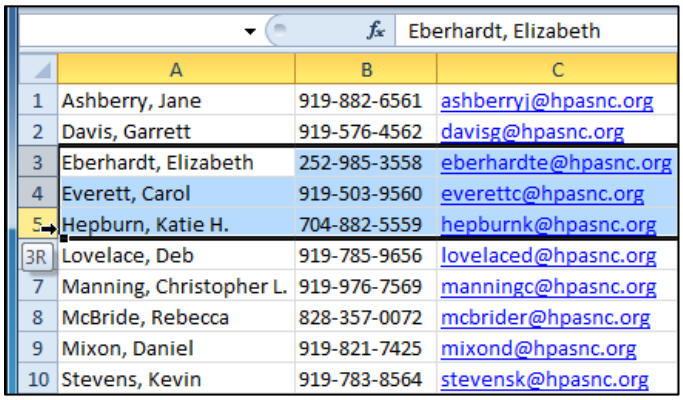
Note: By default, Excel formats inserted columns with the same formatting as the column to the left of them. To access more options, hover your mouse over the ***Insert Options*** *button and click on the drop-down arrow that appears.*



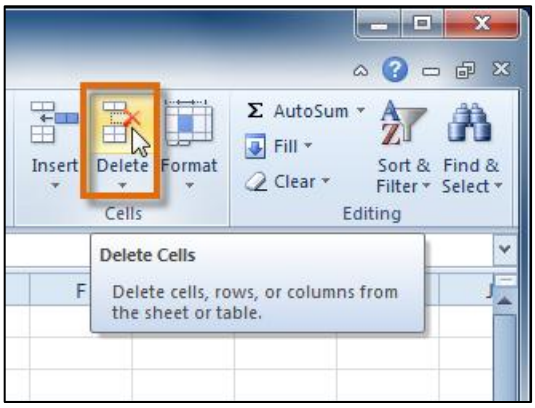
	A	B	C	D
1	Ashberry, Jane		)-882-6561	ashberryj@hpasnc.org
2	Davis, Garrett		919-576-4562	davisg@hpasnc.org
3	Eberhardt, Elizabeth		252-985-3558	eberhardte@hpasnc.org
4	Everett, Carol		919-503-9560	everettc@hpasnc.org
5	Hepburn, Katie H.		704-882-5559	hepburnk@hpasnc.org
6	Lovelace, Deb		919-785-9656	lovelaced@hpasnc.org
7	Manning, Christopher L.		919-976-7569	manningc@hpasnc.org
8	McBride, Rebecca		828-357-0072	mcbrider@hpasnc.org
9	Mixon, Daniel		919-821-7425	mixond@hpasnc.org
10	Stevens, Kevin		919-783-8564	stevensk@hpasnc.org

When inserting rows and columns, make sure you select the row or column by clicking on its heading so that all the cells in that row or column are selected. If you select just a cell in the row or column then only a new cell will be inserted.

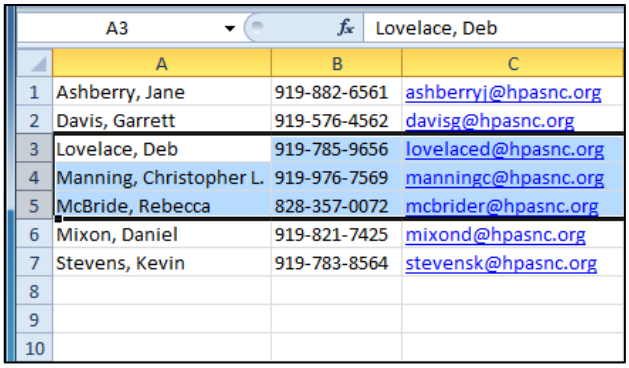
To Delete Rows:



	A	B	C
1	Ashberry, Jane	919-882-6561	ashberryj@hpasnc.org
2	Davis, Garrett	919-576-4562	davisg@hpasnc.org
3	Eberhardt, Elizabeth	252-985-3558	eberhardte@hpasnc.org
4	Everett, Carol	919-503-9560	everettc@hpasnc.org
5	Hepburn, Katie H.	704-882-5559	hepburnk@hpasnc.org
3R	Lovelace, Deb	919-785-9656	lovelaced@hpasnc.org
7	Manning, Christopher L.	919-976-7569	manningc@hpasnc.org
8	McBride, Rebecca	828-357-0072	mcbrider@hpasnc.org
9	Mixon, Daniel	919-821-7425	mixond@hpasnc.org
10	Stevens, Kevin	919-783-8564	stevensk@hpasnc.org

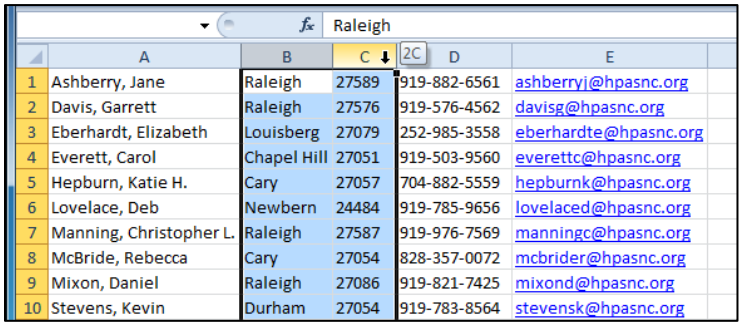


1. Select the rows you want to delete.
2. Click the **Delete** command on the **Home** tab.
3. The rows are deleted from your worksheet.
4. The rows are deleted

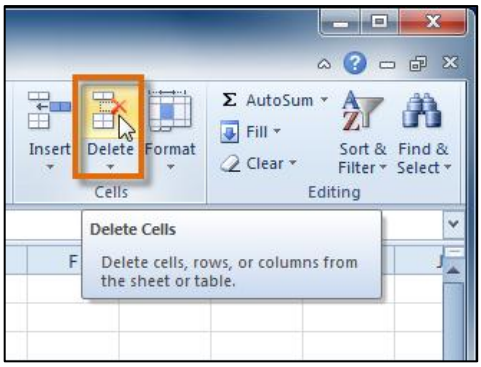


	A	B	C
1	Ashberry, Jane	919-882-6561	ashberryj@hpasnc.org
2	Davis, Garrett	919-576-4562	davisg@hpasnc.org
3	Lovelace, Deb	919-785-9656	lovelaced@hpasnc.org
4	Manning, Christopher L.	919-976-7569	manningc@hpasnc.org
5	McBride, Rebecca	828-357-0072	mcbrider@hpasnc.org
6	Mixon, Daniel	919-821-7425	mixond@hpasnc.org
7	Stevens, Kevin	919-783-8564	stevensk@hpasnc.org
8			
9			
10			

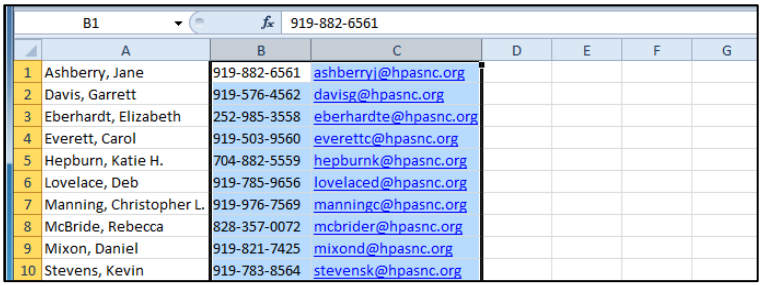
To Delete Columns:



	A	B	C	D	E
1	Ashberry, Jane	Raleigh	27589	919-882-6561	ashberryj@hpasnc.org
2	Davis, Garrett	Raleigh	27576	919-576-4562	davisg@hpasnc.org
3	Eberhardt, Elizabeth	Louisberg	27079	252-985-3558	eberhardte@hpasnc.org
4	Everett, Carol	Chapel Hill	27051	919-503-9560	everettc@hpasnc.org
5	Hepburn, Katie H.	Cary	27057	704-882-5559	hepburnk@hpasnc.org
6	Lovelace, Deb	Newbern	24484	919-785-9656	lovelaced@hpasnc.org
7	Manning, Christopher L.	Raleigh	27587	919-976-7569	manningc@hpasnc.org
8	McBride, Rebecca	Cary	27054	828-357-0072	mcbrider@hpasnc.org
9	Mixon, Daniel	Raleigh	27086	919-821-7425	mixond@hpasnc.org
10	Stevens, Kevin	Durham	27054	919-783-8564	stevensk@hpasnc.org

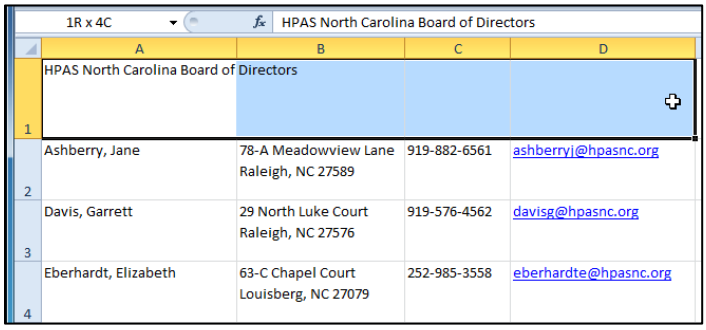


1. Select the columns you want to delete.
2. Click the Delete command on the Home tab.
3. The columns are deleted from your worksheet.

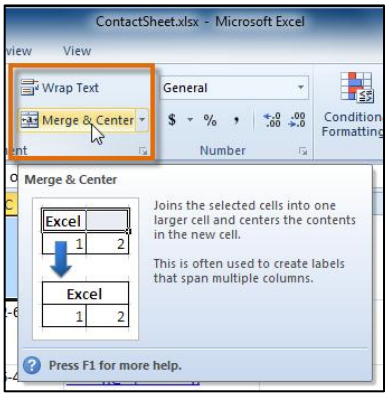


	A	B	C	D	E	F	G
1	Ashberry, Jane	919-882-6561	ashberryj@hpasnc.org				
2	Davis, Garrett	919-576-4562	davisg@hpasnc.org				
3	Eberhardt, Elizabeth	252-985-3558	eberhardte@hpasnc.org				
4	Everett, Carol	919-503-9560	everettc@hpasnc.org				
5	Hepburn, Katie H.	704-882-5559	hepburnk@hpasnc.org				
6	Lovelace, Deb	919-785-9656	lovelaced@hpasnc.org				
7	Manning, Christopher L.	919-976-7569	manningc@hpasnc.org				
8	McBride, Rebecca	828-357-0072	mcbrider@hpasnc.org				
9	Mixon, Daniel	919-821-7425	mixond@hpasnc.org				
10	Stevens, Kevin	919-783-8564	stevensk@hpasnc.org				

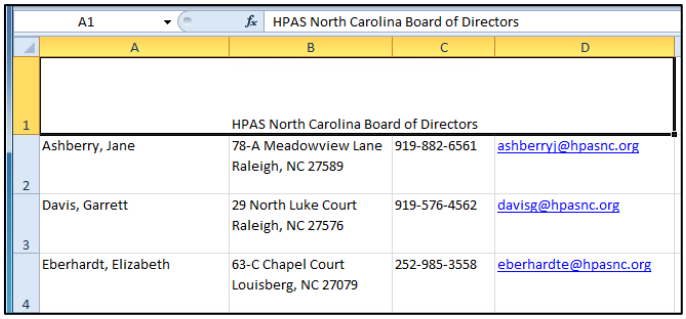
To Merge Cells Using the Merge & Center Command:



	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



1. Select the cells you want to merge together.
2. Select the Merge & Center command on the Home tab.
3. The selected cells will be merged and the text will be centered.



	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

If you change your mind, re-click the Merge & Center command to unmerge the cells.

Excel Practice Exercises – Part 1

Exercise 1A: GETTING STARTED

1. Open Excel 2010 on your computer. A new blank workbook will appear on the screen.
2. Try minimizing and maximizing the Ribbon.
3. Click through all of the tabs and notice how the Ribbon options change.
4. Try switching page views.
5. Add any commands you wish to the Quick Access Toolbar.
6. Close Excel without saving the workbook.

Exercise 1B: CELL BASICS

1. Open an existing Excel 2010 workbook (Christmas Party Lesson).
2. Select D3 and notice how its cell address appears in the Name box and its content appears in the Formula bar.
3. In the D column, under “Bringing Guest,” insert numbers to indicate the number of guests each person will bring. (Just make up numbers.)
4. In columns B and C, place an “x” indicating whether a guest is “Attending” or “Not Attending.”
5. Use the Fill handle to fill in data to adjoining cells both vertically and horizontally.
6. Cut cell B9 and paste into C9. Do the same for B12, pasting into C12.
7. Delete the cell with “Olds, Hannah” and note how the content underneath it shifts up to fill in its place.
8. Close Excel without saving the workbook.

Exercise 1C: MODIFYING COLUMNS, ROWS, CELLS

1. Open an existing Excel 2010 workbook (Contact Sheet).
2. Make column A bigger by dragging the column or double-clicking the column header. Do the same for column B.
3. Modify the size of rows 1-11 to be 20 pixels.
4. Insert a column between column A and column B.
5. Insert a row between row 3 and row 4.
6. Delete column D. Delete row 11.
7. Try merging some cells together. If you are using the example, merge the cells (columns A-D) in the top or title row (row 1).
8. Close Excel without saving the workbook.

Part 2: Working with Rows, Columns, Formulas and Charts

Formulas

A **formula** is an equation that performs a calculation. Like a calculator, Excel can execute formulas that add, subtract, multiply, and divide.

Creating Simple Formulas

Excel uses standard operators for equations:

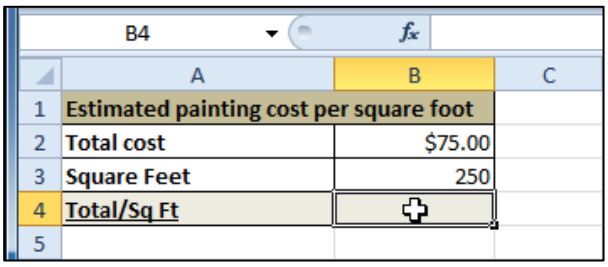
- **plus sign** for addition (+)
- **minus sign** for subtraction (-)
- **asterisk** for multiplication (*)
- **forward slash** for division (/)
- **carat** (^) for exponents.

Addition	+	=5+5
Subtraction	-	=5-5
Multiplication	*	=5*5
Division	/	=5/5
Exponents	^	=5^5

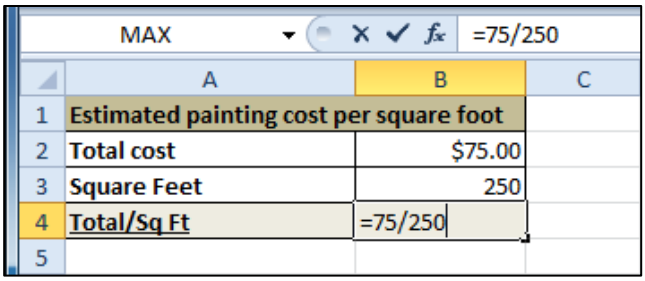
The key thing to remember when writing formulas for Excel is that **ALL** formulas must begin with an **equal sign** (=). This is because the cell contains, or is equal to, the formula and its value.

To Create a Simple Formula in Excel: (Type in the data in the cells to follow the examples.)

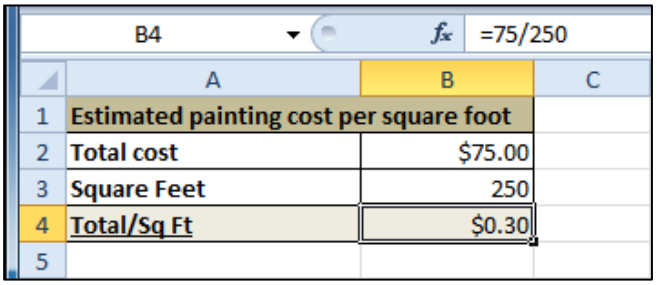
1. Select the cell where the answer will appear (B4, for example).



2. Type the **equal sign (=)**.
3. Type in the formula you want Excel to calculate. For example, "75/250".



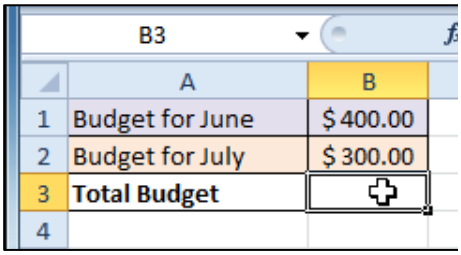
4. Press **Enter**. The formula will be calculated and the value will be displayed in the cell.



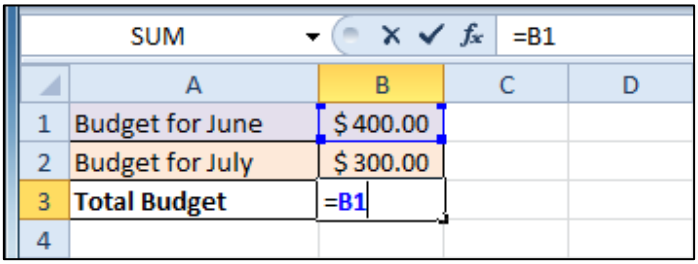
Creating Formulas with Cell References

When a formula contains a cell address, it is called a **cell reference**. (Type in the data in the cells to follow the examples.)

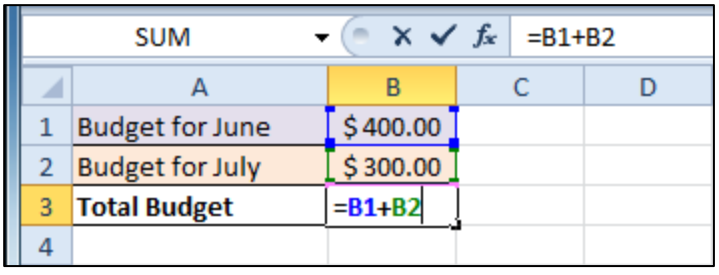
1. Select the cell where the answer will appear (B3, for example).



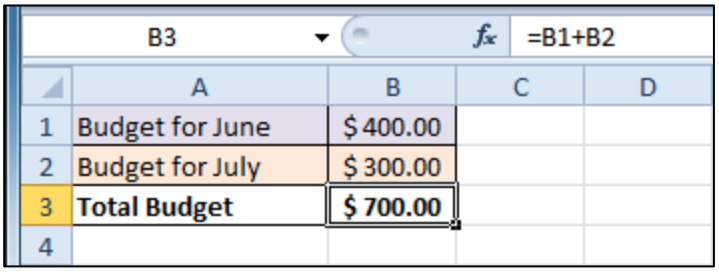
2. Type the **equal sign (=)**.
3. Type the cell address that contains the first number in the equation (B1, for example).



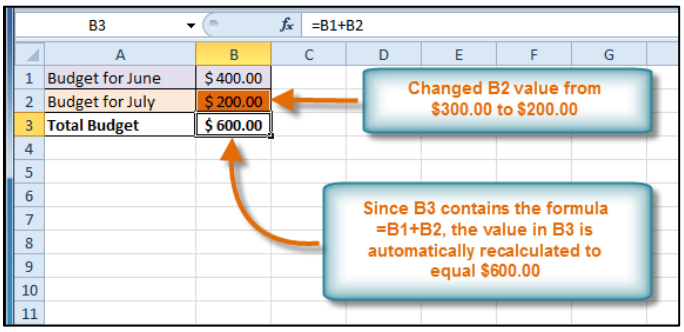
4. Type the operator you need for your formula. For example, type the **addition sign (+)**.
5. Type the cell address that contains the second number in the equation (B2, for example).



6. Press **Enter**. The formula will be calculated and the value will be displayed in the cell.

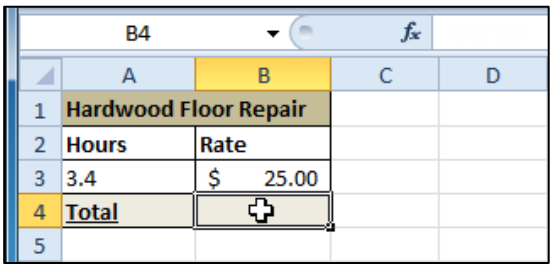


If you change a value in either B1 or B2, the total will automatically recalculate.

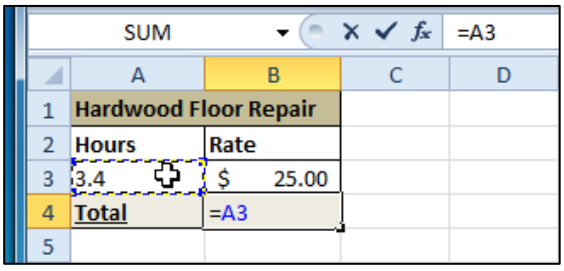


To Create a Formula using the Point and Click Method:

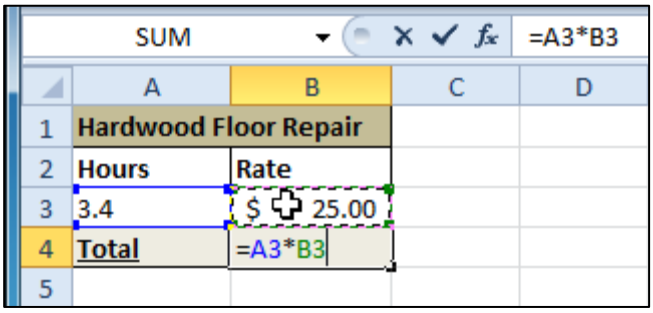
1. Select the cell where the answer will appear (B4, for example).



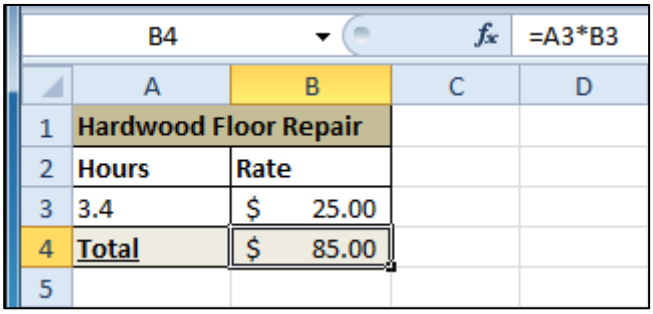
2. Type the **equal sign (=)**.
3. Click on the **first cell** to be included in the formula (A3, for example).



4. Type the operator you need for your formula. For example, type the **multiplication sign (*)**.
5. Click on the **next cell** in the formula (B3, for example).



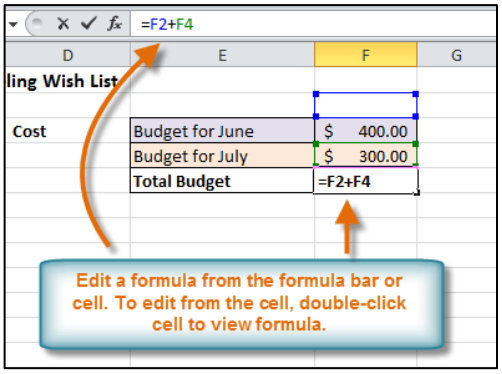
6. Press **Enter**. The formula will be calculated and the value will be displayed in the cell.

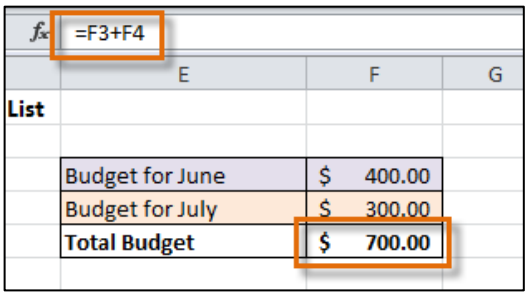


To Edit a Formula:

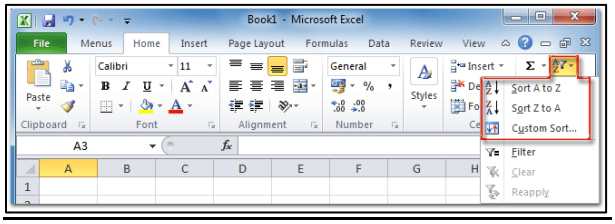
1. Click on the cell you want to edit.
2. Insert the cursor in the **formula bar** and edit the formula as desired. You can also **double-click the cell to view and edit the formula directly** from the cell.
3. When finished, press **Enter** or select the **Enter** command ✓.
4. The new value will be displayed in the cell.

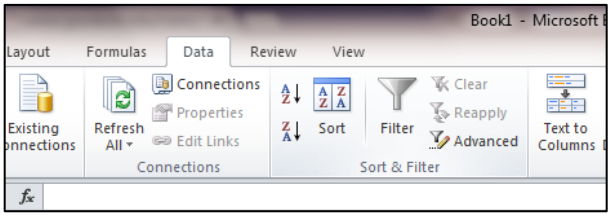
*Note: If you change your mind, use the **Cancel** command ✗ in the formula bar to avoid accidentally making changes to your formula.*





Sorting Data



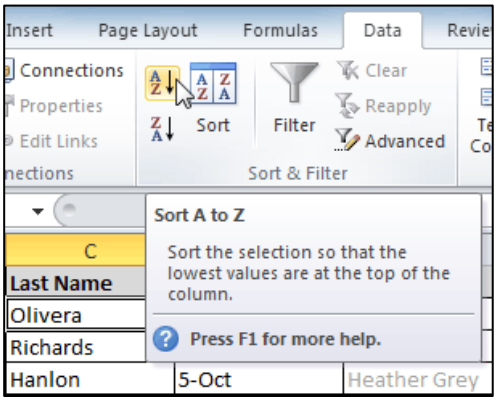


MS Excel also makes it easy for you to sort data whether it is alphabetical or by other criteria. You may choose to sort a section or the entire spreadsheet. You may access this command in two places: **Home > Editing Group** or **Data > Sort & Filter Group**.

To Sort in Alphabetical Order:

1. Select a cell in the column you want to sort by. In this example, we will sort by Last Name.

	C	D	E
1	**Last Name**	**Payment**	**T-Shirt Color**
2	Olivera	1-Oct	White
3	Richards	4-Oct	Dark Red
4	Hanlon	5-Oct	Heather Grey
5	Means	5-Oct	Dark Red



2. Select the **Data** tab, and locate the **Sort and Filter** group.
3. Click the ascending command to **Sort A to Z**, or the descending command to Sort **Z to A**.
4. The data in the spreadsheet will be organized alphabetically.

	C	D	E
1	**Last Name**	**Payment**	**T-Shirt Color**
2	Ackerman	1-Oct	Heather Grey
3	Albee	13-Oct	Heather Grey
4	Bell	11-Oct	Dark Red
5	Benson	11-Oct	White
6	Chen	5-Oct	Dark Red
7	Del Toro	13-Oct	White
8	Ellison	Pending	Dark Red
9	Flores	6-Oct	White

To Sort in Numerical Order:

1. Select a cell in the column you want to sort by.

	A	B	C
1	**Homeroom #**	**First Name**	**Last Name**
2	110	Kris	Ackerman
3	105	Nathan	Albee
4	220-B	Samantha	Bell
5	110	Matt	Benson

2. From the **Data** tab, click the ascending command to Sort **Smallest to Largest,** or the descending command to Sort **Largest to Smallest**.
3. The data in the spreadsheet will be organized numerically.

	A	B	C
1	**Homeroom #**	**First Name**	**Last Name**
2	105	Nathan	Albee
3	105	Christiana	Chen
4	105	Sidney	Kelly
5	105	Derek	MacDonald
6	105	Melissa	White
7	105	Esther	Yaron
8	110	Kris	Ackerman

To Sort by Date or Time:

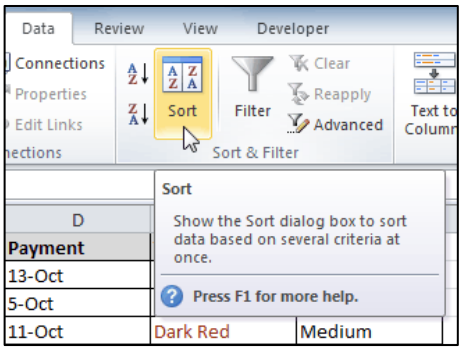
1. Select a cell in the column you want to sort by.

	D	E	F
1	**Payment**	**T-Shirt Color**	**T-Shirt Size**
2	13-Oct	Heather Grey	Medium
3	5-Oct	Dark Red	Medium
4	11-Oct	Dark Red	Medium
5	Pending	Dark Red	Large

	D	E	F
1	**Payment**	**T-Shirt Color**	**T-Shirt Size**
2	1-Oct	Heather Grey	Large
3	1-Oct	White	Large
4	4-Oct	Dark Red	X-Large
5	5-Oct	Dark Red	Medium
6	5-Oct	Heather Grey	Large
7	5-Oct	Dark Red	Medium
8	5-Oct	Heather Grey	X-Large

2. From the Data tab, click the ascending command to Sort **Oldest to Newest**, or the descending command to Sort **Newest to Oldest**.
3. The data in the spreadsheet will be organized by date or time.

To Sort in the Order of Your Choosing:



1. From the **Data** tab, click the **Sort** command to open the **Sort dialog box**.
2. Identify the column you want to Sort by by clicking the drop-down arrow in the **Column** field.
3. Make sure **Values** is selected in the **Sort On** field.
4. Click the drop-down arrow in the **Order field**, and choose **Custom List**...
5. Select **NEW LIST**, and enter how you want your data sorted in the List entries box.
6. Click Add to save the list, then click OK.
7. Click OK to close the Sort dialog box and sort your data.

Sorting Multiple Levels:

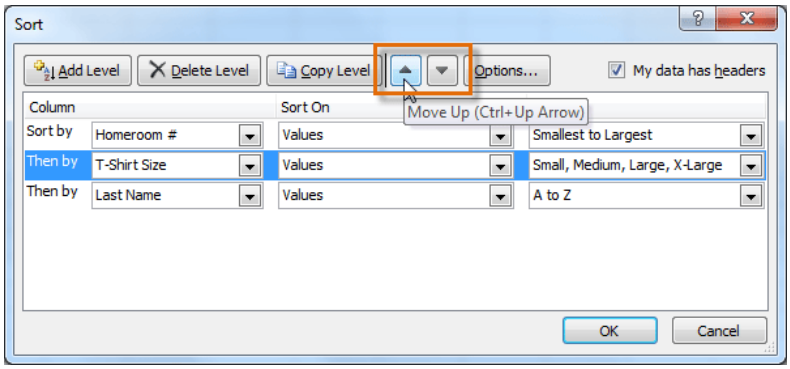
Another feature of custom sorting, sorting multiple levels allows you to identify which columns to sort by and when, giving you more control over the organization of your data.

To Add a Level:

1. From the **Data** tab, click the **Sort** command to open the **Sort dialog box**.
2. Identify the first item you want to Sort by
3. Click **Add Level** to add another item.
4. Identify the item you want to sort by next.
5. Click OK.

To Change the Sorting Priority:

1. From the **Data** tab, click the **Sort** command to open the **Custom Sort dialog box**.
2. Select the level you want to re-order.
3. Use the **Move Up** or **Move Down** arrows. The higher the level is on the list, the higher its priority.
4. Click OK.

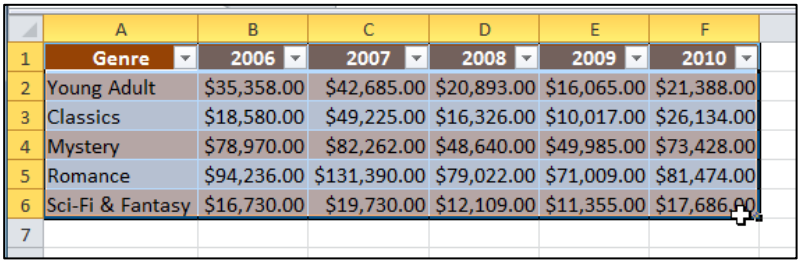


Charts

Excel workbooks can contain **a lot of data**, and that data can often be difficult to interpret. Excel has many different types of charts, so you can choose one that most effectively represents the data.

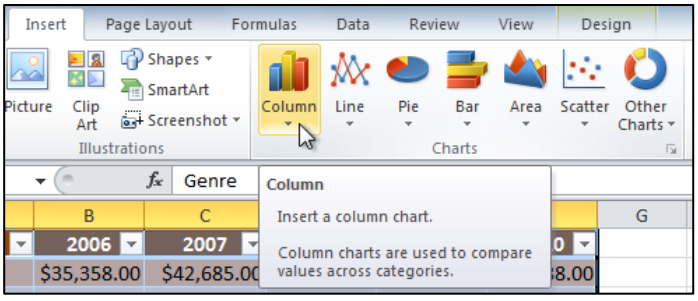
To Create a Chart:

1. Select the **cells** that you want to chart, including the **column titles** and the **row labels**. These cells will be the **source data** for the chart.

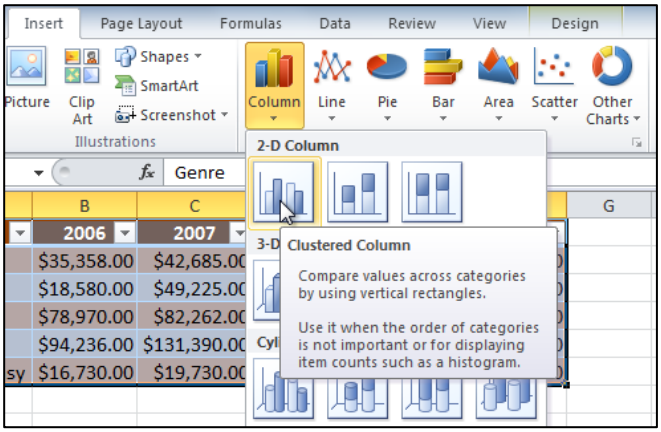


	A	B	C	D	E	F
1	Genre	2006	2007	2008	2009	2010
2	Young Adult	$35,358.00	$42,685.00	$20,893.00	$16,065.00	$21,388.00
3	Classics	$18,580.00	$49,225.00	$16,326.00	$10,017.00	$26,134.00
4	Mystery	$78,970.00	$82,262.00	$48,640.00	$49,985.00	$73,428.00
5	Romance	$94,236.00	$131,390.00	$79,022.00	$71,009.00	$81,474.00
6	Sci-Fi & Fantasy	$16,730.00	$19,730.00	$12,109.00	$11,355.00	$17,686.00
7						

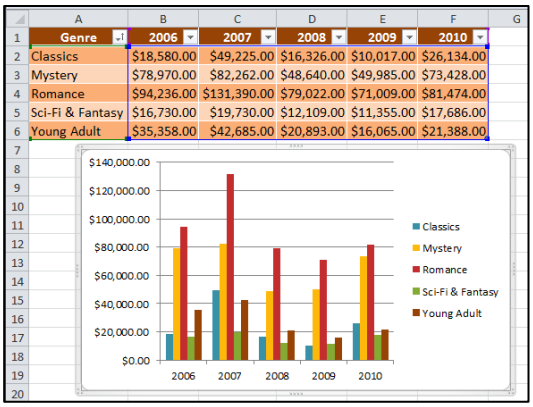
2. Click the **Insert** tab.
3. In the **Charts** group, select the desired **chart category** (Column, for example).



4. Select the desired **chart type** from the drop-down menu (Clustered Column, for example).



5. The chart will appear in the worksheet.



Other Features

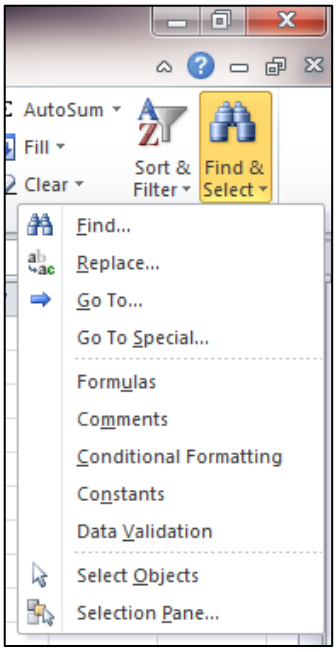
Page Setup

When you create a workbook, you need to tell Word how you want the page to be set up.

- **Size** – On the **Page Layout** tab, click the **Size** button, and select the size of the paper you desire from the gallery. *Note: If the size you want is not given as an option, click **More Paper Sizes** and specify your size.*

- **Margins** – Click the **Margins** button and select the margins you want. The standard is a 1-inch margin on all sides of the paper. *Note: If the margin size you want is not given as an option, click **Custom Margins** and specify the margin size you want.*

- **Orientation** – When you click the **Orientation** button, you are asked whether you want your page oriented as a **Portrait** (longer than wide) or as **Landscape** (wider than long).



Find and Replace Functions

Microsoft Excel makes it easy for you to locate and replace data in your spreadsheet. On the **Home** Tab, go to **Editing** to select the **Find and Replace** tool (as shown to the right). Type in the value you want to search and/or replace.

While the **Find** feature searches specified values throughout the spreadsheet, the **Replace** feature allows you to find occurrences of a value and replace it with another value.

Excel Practice Exercises – Part 2

Exercise 2A: CREATING SIMPLE FORMULAS

1. Open an existing Excel workbook (Summer Remodeling).
2. Write a simple division formula. If you are using the example, write the formula in cell B18 to calculate the painting cost per square foot (total = square feet / total cost).
3. Write a simple addition formula. If you are using the example, write the formula in cell F5 to calculate the "Total Budget" (Sum of F3 and F4).
4. Write a simple subtraction formula. If you are using the example, subtract the "Expand Bathroom" cost (C6) from the "Total" cost (C11). Calculate your answer in C12.
5. Close Excel without saving.

Exercise 2B: WORKING WITH BASIC FUNCTIONS

1. Open an existing Excel 2010 workbook (Office Supply).
2. Create a function that contains more than one argument.
3. Use AutoSum to insert a function. If you are using the example, insert the MAX function in cell E15 to find the highest priced supply.
4. Insert a function from the Functions Library. If you are using the example, find the PRODUCT function (multiply) to calculate the Unit Quantity times the Unit Price in cells F19 through F23.
5. Use the Insert Function command to search and explore functions.
6. Close Excel without saving.

Exercise 2C: WORKING WITH CHARTS

1. Open an **existing Excel workbook** (Book Sales).
2. Use worksheet data to create a **chart**. (Select the data you wish to include in the chart.)
3. Change the **chart layout** (any layout you wish).
4. Apply a **chart style** (any layout you wish).
5. Move the chart to a **different place in the worksheet.**
6. Close Excel without saving.

Exercise 2D: SORTING DATA

1. Open an existing Excel workbook (T Shirt Order).
2. Sort column A in ascending  by Homeroom #.
3. Add a second level, and sort it according to the last name (column C) in ascending order (A-Z).
4. Change the sorting from the last name to the T-Shirt size (column F) from smallest to largest.
5. Close Excel without saving.