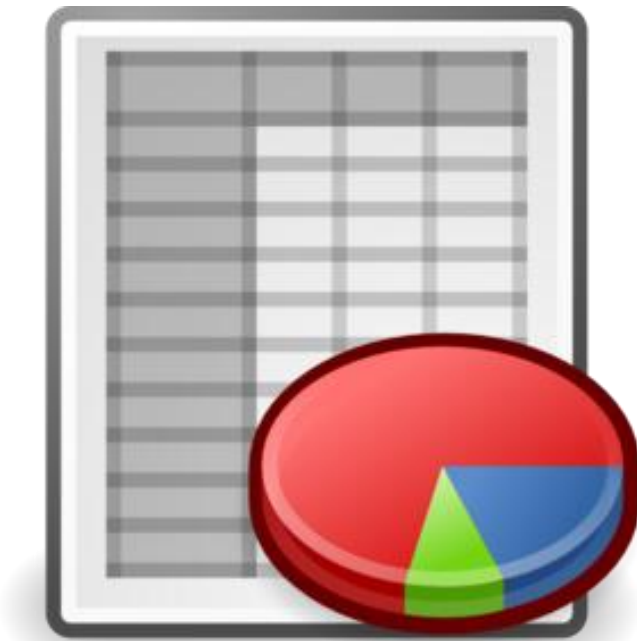




Software Application Tutorial

Introduction to Microsoft Excel 2010



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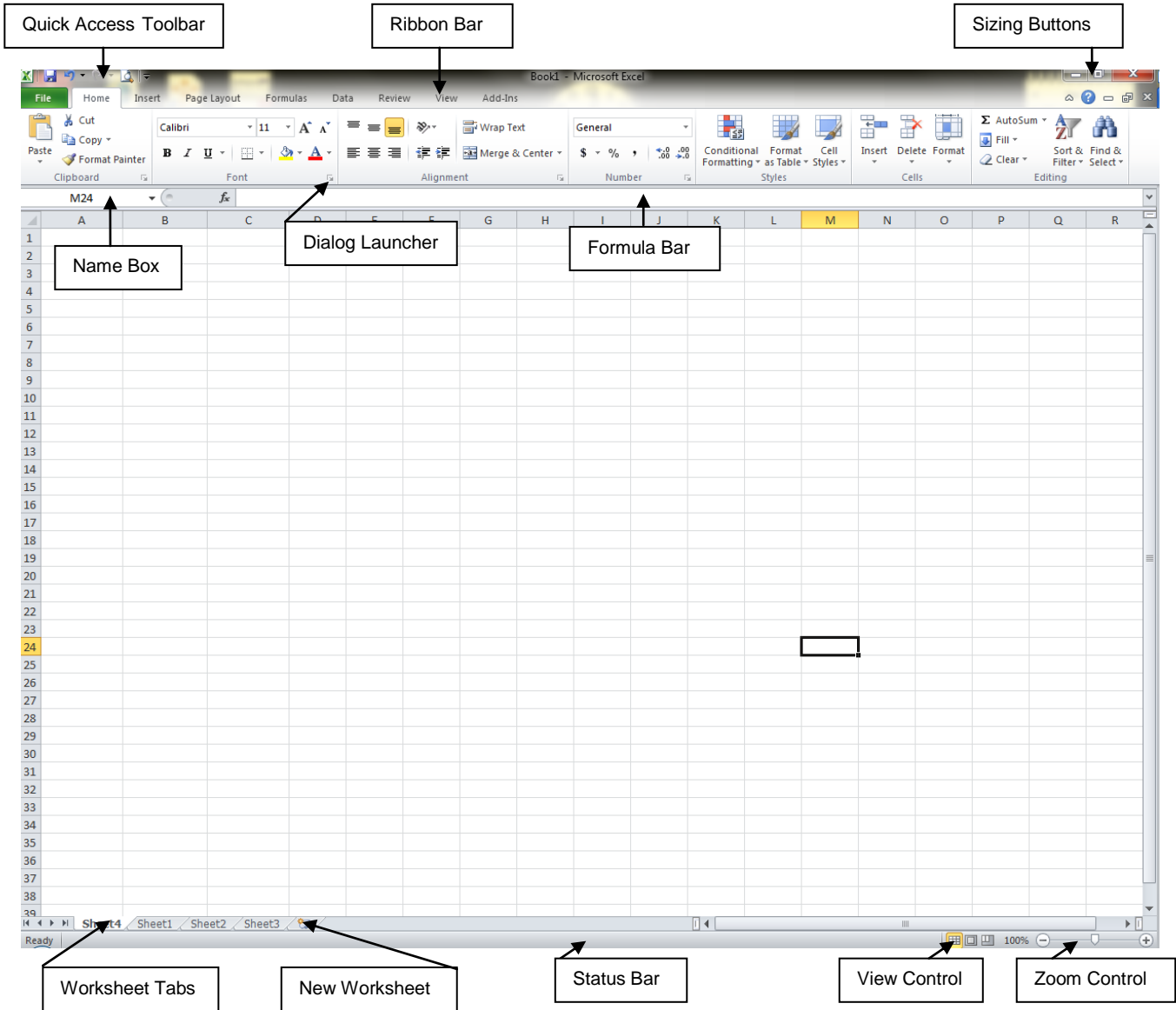
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EXCEL SPREADSHEET



Quick Access Bar

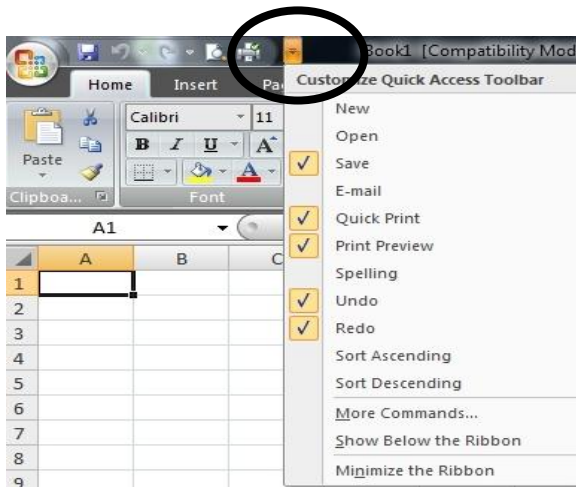


A Customizable toolbar that contains a set of commands that are independent of the tab that is currently displayed. You may modify this toolbar by adding and or deleting commands on the toolbar.

To add /delete commands

1. Click the arrow on the right hand side of the bar
2. Select the name of the Command that you want to add or delete

Check mark indicates that the command is currently active on the toolbar.



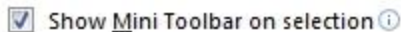
Mini Toolbar



The Mini Toolbar floats above your text and displays the more commonly-used formatting choices. The toolbar will only show when you are in editing mode or when you right-click in the cell.

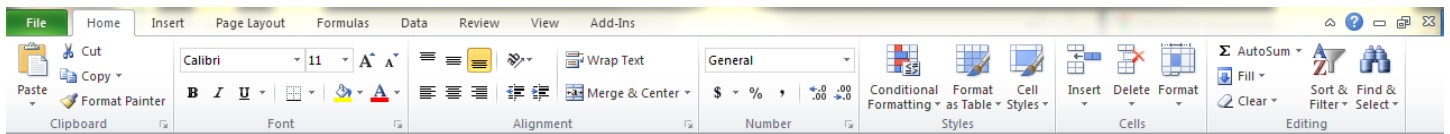
To turn the toolbar on or off

1. Click the Office Button – Excel options
2. Under the Popular option uncheck Show Mini Toolbar on selection



The Ribbon

The traditional menus and toolbars have been replaced by the Ribbon — a new device that presents commands organized into groups. The groups on the Ribbon display the commands that are most relevant for each of the task areas in the applications.



Minimizing the Ribbon

The Ribbon can be minimized so that it is not visible while you are in your spreadsheet.

3. Click the arrow on the right hand side of the Quick Access Toolbar.
4. Select Minimize the Ribbon

Ribbon Bar Groups

File Tab – Save, Open, Close, Print

Home Tab - Clipboard, Font, Alignment, Number, Styles, Cells, and Editing

Insert Tab – Tables, Illustrations, Charts, Hyperlink, Text

Page Layout Tab – Themes, Page Setup, Scale to Fit, Sheet Options, Arrange

Formulas Tab – Function Library, Defined Names, Formula Auditing, Calculation

Data Tab – Get External data, Connections, Sort & Filter, Data Tools, Outline

Review Tab - Proofing, Comments, Changes

View Tab – Workbook Views, Show/Hide, Zoom, Window, Macros

Quick Access Toolbar - This is a customizable toolbar that contains a set of commands that are independent of the tab that is currently displayed. You may modify this toolbar by adding and or deleting commands on the toolbar.

Ribbon Bar - The traditional menus and toolbars have been replaced by the Ribbon — a new device that presents commands organized into a set of tabs. The tabs on the Ribbon display the commands that are most relevant for each of the task areas in the applications.

Sizing Buttons - These buttons are used to manipulate the size of the spreadsheet window.

Name Box - This box displays the active cell.

Dialog Launcher – This appears in the lower right corner of a Group providing access to the Group's corresponding dialog box.

Formula Bar - This bar displays the data in the active cell.

Worksheet Tabs - These are new ledger sheets. You can rename these sheets using up to 31 characters in the name.

Zoom Control – This option will allow you to magnify your spreadsheet. Click and drag the slider to the right to increase magnification and click and drag to the left to decrease the magnification.

Status Bar – This bar displays the current settings and commands in Excel. Also, when two or more cells are selected, and one or more contains a value, the status bar displays a total for the selected cells.

WORKSHEET TABS

Adding a Worksheet

Click on the New Worksheet sheet tab

OR

1. Right-Click on a worksheet tab
2. Select Insert
3. Select Worksheet
4. Click OK



Renaming Sheet Tabs

1. Right-Click on the tab
2. Select Rename
3. Type in a name for the sheet

Color Coding Sheet Tabs

1. Right Click on the tab
2. Select Tab Color
3. Pick a color

Hide and Unhide Sheet Tabs

1. Select the Page Layout Tab
 2. Select Cells – Format – under Visibility select Hide Sheet
- OR**
1. Click the View tab
 2. In the Window box select Hide or Unhide

CELLS

As you begin to type you will notice that your information will appear in the formula bar as well as in the cell itself. Once you are done typing in a cell, you have to remember to **ENTER** that information in the cell. If you do not enter your information in that particular cell then Excel will not let you continue to the next step. Once your information has been entered, Excel will look at that particular cell as a **label cell**, any character that Excel cannot interpret as a number, date, time, or formula, or **value cell**, any character Excel interprets as a number, date, time or formula.

Ways to enter information in a cell

- Click in another cell
- Hitting the enter key
- Hitting the tab key
- Hitting the arrow keys
- Clicking the blue check mark on the formula bar

Moving within the Spreadsheet

The mouse is easy to point, click, and drag but it's sometimes difficult to control. Therefore there are several keystrokes that can be made to accomplish the same tasks.

- **Arrow keys** allow you to move one cell in the direction of that arrow
- **Ctrl Key + Arrow keys** will take you to the four corners of the worksheet
- **Ctrl + Home** will take you to cell A1
- **Tab** moves one to the right and **Shift + Tab** moves one to the left
- **Ctrl + N** will open up a new workbook
- **Ctrl + Page Down** takes you to the next sheet in a workbook
- **Ctrl + Page Up** takes you to the previous sheet
- **Ctrl + Spacebar** will highlight the entire column containing the selected cell

Selecting Cells

Non-consecutive cells

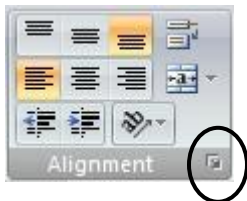
1. Select the first cell
2. Hold down the **Ctrl** key
3. Select any additional cells

Consecutive cells

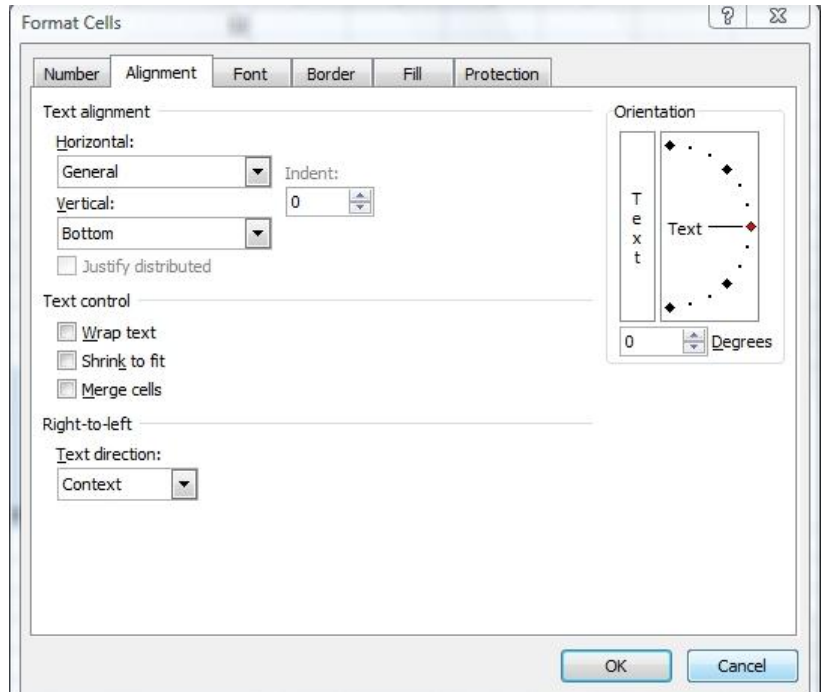
1. Select the first cell
2. Hold down the Shift key
3. Select the last cell

Label and Value cells

To access the Format Cells box click on the Dialog Launcher in the lower right-hand corner of the alignment box.



- Select the **Number** tab to format any value cells
- Select **Alignment** to format your value and label cells
- Select **Font** to format the appearance of your value or label cells
- Select **Border** to add a border to your cells
- Select **Fill** to shade your cells
- Select **Protection** to lock your cells

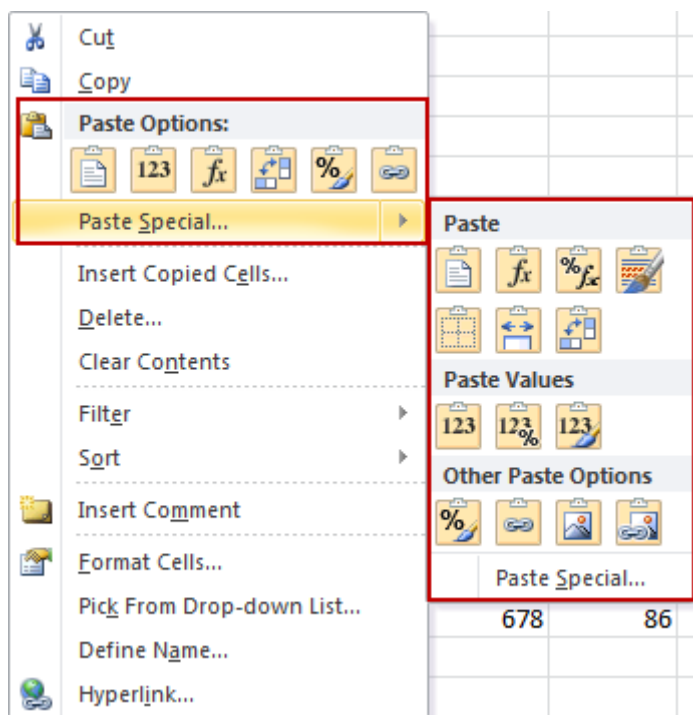


CUT, COPY, PASTE

In Office 2010 you have the Paste with Live Preview option. This option allows you to determine how your content will be pasted.

1. Right-click on the content that is to be cut or copied.
2. Select Cut or Copy
3. Right-click the cell where the content will be placed
4. Select a paste option. To preview before you paste, hover your mouse over the available options.

Note: Available paste options change to best fit the content you are reusing.



FORMULAS AND FUNCTIONS

Formulas

A formula is a mathematical arrangement of one or more values, cell references, functions, and operators that produce a numeric value. The operators for formulas include:

- + Addition
- * Multiplication
- ^ Exponentiation
- Subtraction
- / Division

Functions

A function is an abbreviation of a formula. It provides a quick way to calculate the value of a cell that would often require a long expression. Each function begins with an equal sign followed by the name of the function.

Note:

- Calculations can only be performed on values.
- To create a value cell you must always precede the data with an equal symbol (=).
- When you have a formula that contains two or more operators excel performs the calculations in the following order: percent, exponentiation, multiplication and division, addition and subtraction, Concatenation, Comparison. To control this order of calculation, use parentheses. Excel evaluates all items within parentheses first, from the inside out, using the same order as listed.

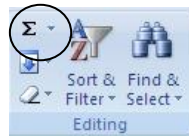
Setting up a simple Sum function

(In this example we will add the values in cells A1 through A5)

1. Select the cell where the answer will be placed. In this example, that cell is A6.

	A
1	12
2	23
3	34
4	67
5	78
6	

2. Select AutoSum, which is now located on the Home tab in the Editing section.



3. Select the values to add. Hit Enter.

	A	B
1	12	
2	23	
3	34	
4	67	
5	78	
6	=SUM(A1:A5)	
7		SUM(number1, [number2], ...)

Formula AutoComplete

1. Select the cell where the answer will be placed
2. Type the equal sign and the beginning letters of the function
3. The Formula AutoComplete box appear with valid results

	A	B	C	D	E	F	G	H	I
1	12								
2	23								
3	34								
4	67								
5	78								
6	=Sum								
7	SUM								
8	SUMIF								
9	SUMIFS								
10	SUMPRODUCT								
11	SUMSQ								
12	SUMX2MY2								
13	SUMX2PY2								

4. Double-click on the function
5. Select the values to be included in the function
6. Type in the end Parenthesis
7. Hit Enter

Cell References

Cell references can be included in formulas, built-in functions and mathematical operators. You can either type in a cell reference or select the cell with your mouse.

Relative cell reference such as A1, is based on the relative position of the cell that contains the formula and the cell the reference refers to.

*Example of a relative cell reference in a formula: =A1*23*

Absolute cell reference such as \$A\$1, always refers to a specific cell in a specific location.

*Example of an absolute cell reference in a formula: =\$A\$1*23*

Error Codes

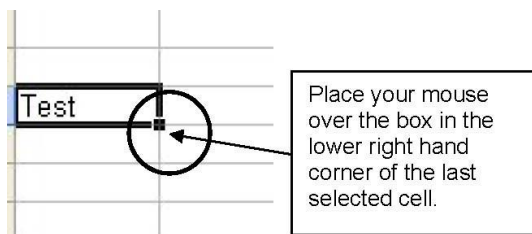
Error	What it Means	Suggestions/Solutions
#Value	Formula contains an argument of the wrong type.	Make sure the formula or function is correct for the required operand or argument, and that the cells referenced by the formula contain valid values.
#####	The numeric value entered into a cell is too wide and too long to display within the cell. In Excel 2007 the column automatically resizes to fit the number. Resizing will not work if you have already set the column manually.	Follow the directions in this handout for changing the width of a column.
#DIV/0!	Formula is trying to divide by a zero value or a blank cell.	Check the divisor in your formula and make sure it does not refer to a blank cell.
#VALUE!	This error occurs when the wrong type of argument or operand is used.	You've probably mixed two incompatible data types in one formula. Check the formula.
#N/A	This code means that "No value is available".	You can enter this in a cell that temporarily has no value.
#NAME?	Formula contains text that is neither a valid function nor a defined name.	Look to make sure you didn't misspell a function name or range name.
#NULL!	Refers to intersection of two areas that don't intersect.	Choose new labels for the row or column or both.
#NUM!	This error occurs with invalid numeric values in a formula or function.	This usually means you've used a function incorrectly. Check your function.
#REF!	This error occurs when a cell reference is not valid	Did you delete a cell or range that this formula originally referred to? Check your formula.

MOVE AND COPY

Move and copy are two powerful features available with a spreadsheet package. It gives the user the opportunity to copy or move contents of a cell to another cell without having to retype the information. The information can contain text as well as a formula or function.

Copying Text

1. Select the cell(s) that you want to copy.
2. Place your mouse over the bottom right corner of the cell.
3. Hold down the left mouse button and click and drag until you come to your destination



Moving Text

1. Right-click on the cell(s) you want to move
2. Select cut
3. Click on the cell you want to move the information to, right –click and select paste

COLUMNS AND ROWS

Hiding Columns

1. Select a cell within the column(s) to be hidden
2. Click the Home tab, in the Cells group click Format
3. Under the Visibility section select Hide & Unhide - Hide Columns

Unhide Columns

1. Select the columns adjacent to the hidden columns
2. Click the Home tab, in the Cells group click Format
3. Under the Visibility section, select Hide & Unhide - Unhide Columns

**** Apply the same procedures to hide/unhide ROWS. ****



Changing the width of a coulmns and rows

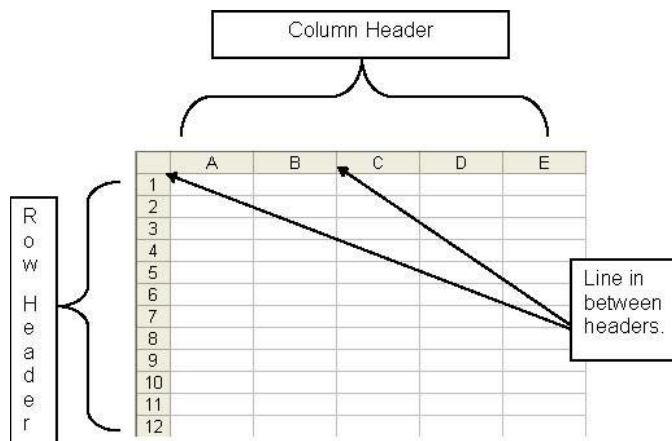
1. Place your mouse pointer between the Column or Row header (See diagram below); a cross will appear
2. Take the cross and click and drag with your mouse to the left or right depending on how wide or narrow you want your columns or rows to be

OR

Double click on the line in between the Column or Row header.

Changing the width of two or more consecutive columns or rows

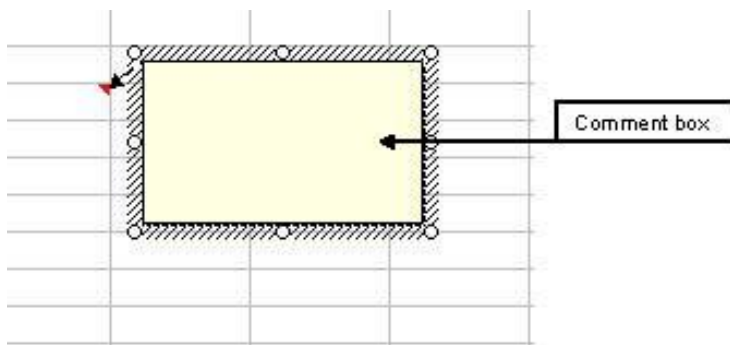
1. Highlight the entire rows or columns you want to change
2. Place your mouse between any of the rows or columns you have highlighted; a cross will appear
3. Move the cursor to the right or left depending on how wide or narrow you want your columns or rows to be



COMMENTS

Comments can be used to document information, explain calculations and reminders.

1. Select the cell where the comment is to be placed
2. Right-click in the cell and select insert comment; a comment box will appear
3. Click inside the comment box and begin typing
4. Once you are finished typing select any cell in the spreadsheet



Comment boxes will display one of two ways. They will either be **hidden** or **displayed** on the spreadsheet. To select either option right-click in the cell with the comment box and select Show Comment or Hide Comment depending on which option is available.

Note:

- To view hidden comments simply place your mouse over the cell and the comment box will appear.
- One comment per cell

Editing a Comment- To edit a comment right-click in the cell where the comment is located and select Edit Comment from the list.

PAGE LAYOUT

Select Page layout on the Ribbon



Page Setup Section	
Margins	Select the margin sizes for the entire document or the current section
Orientation	Switch the pages between portrait and landscape layouts
Size	Choose a paper size for the current section
Print Area	Mark a specific area of the sheet for printing
Breaks	Specify where a new page will begin in the printed copy
Background	Choose an image to display as the background for the sheet
Print Titles	Specify rows and columns to repeat on each printed page

Scale to fit Section	
Width	Shrink the width of printed output to fit a maximum number of pages.
Height	Shrink the height of printed output to fit a maximum number of pages.
Scale	Stretch or shrink the printed output to a percentage of its actual size.

Sheet Options
Select the boxes if you want to view or print gridlines or headings.

