

Excel 2007: Basics

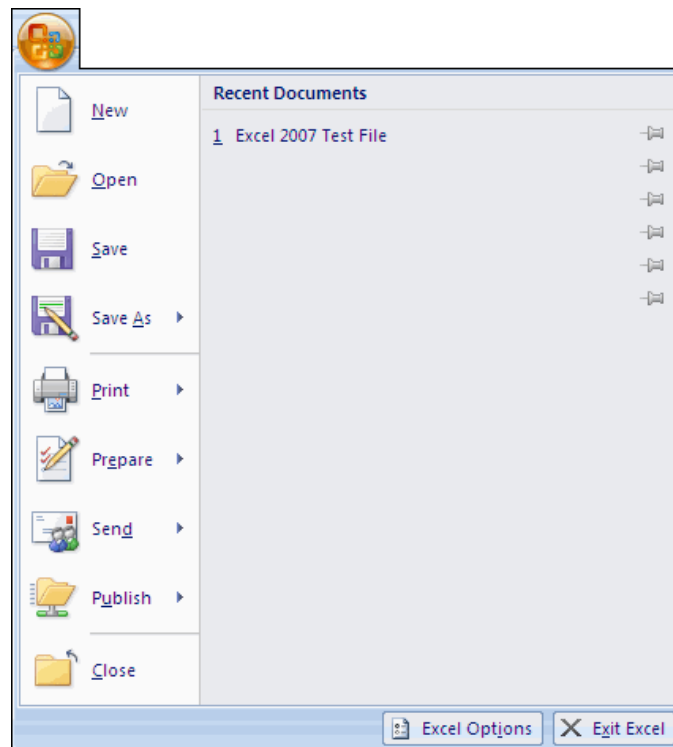
Learning Guide

Exploring Excel

At first glance, the new Excel 2007 interface may seem a bit unsettling, with “fat bands” called **Ribbons** replacing cascading text menus and task bars. This guide will help put you at ease as it introduces you to the new design and it explains the new nomenclature.

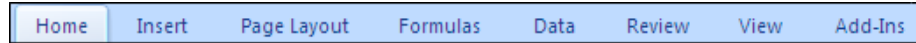
The Office Button

The **Office** button, located in the top left corner of your screen, replaces the File menu found in earlier versions of Word. The Office button allows you to carry out many functions, such as saving, printing, and opening your document.



Ribbons

Located where taskbars used to be, **ribbons** graphically display the changing features as you click on the menu-bar tabs. It may take you time to adjust to the new locations of familiar options, but **ribbons** may expose you to new commands and tools. The image and table shown below will help familiarize you with the various options.



The Ribbon...	Allows you to...
Home	Change the Font, Paragraph and Heading styles and view the clipboard and editing options
Insert	Insert pages, tables, illustrations, links, headers, footers, text and symbols
Page Layout	Alter page setup, background, themes, paragraph properties, and arrangement of document
Formulas	Insert functions and create custom formulas.
Data	Get external data, sort, filter, and outline existing.
Review	Use proofing techniques, insert comments, track changes, compare and protect documents
View	Change document and window layout, show/hide thumbnails, and view/record macros
Add-Ins	Customize toolbars

Hiding and Redisplaying Ribbons

If you wish to have more room while working, you can hide the contents of the ribbons. To hide the ribbons:

- Double-click on one of the ribbons.
- To redisplay the contents of the ribbons, double-click on them a second time.

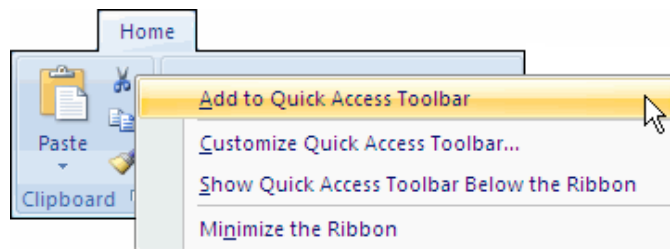
The Quick Access Toolbar

The Quick Access toolbar, located to the right of the Office button, contains the three most frequently used buttons, Save, Undo, and Redo.



You can customize the Quick Access toolbar and add any button that you frequently use. To add any button to the Quick Access toolbar:

- Right click on the button you want to add to the Quick Access toolbar (for example, **Cut**).
- From the menu that appears, select **Add to Quick Access Toolbar**.



- The button will now appear on the Quick Access toolbar



Excel Terminology

To understand Excel better, you should familiarize yourself with the following terminology: spreadsheet, workbook, and worksheet.

Spreadsheets and Workbooks

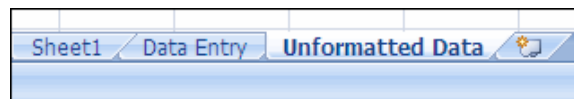
A **spreadsheet** is a grid of data divided into *numbered rows* and *lettered columns*. Each block in this grid is called a **cell**, and it can hold an individual piece of text or data. In Excel, a file/document is considered a spreadsheet, although it is commonly referred to as a **workbook**.

	A	B	C	D
1	Sales Comparison, in dollars			
2				
3	Agent	January	February	March
4	Jack	1243	2241	2254
5	Alexis	3230	4000	3998.98
6	Max	2541.23	2356.66	2555.99
7	Samantha	4421.08	5000	5676.21
8				

Worksheets

The **worksheet** is a *page* of data in your spreadsheet (or workbook) that is organized by the labeled tabs displayed at the bottom of the Excel window.

- Your spreadsheet can contain as many worksheets as you want. By default, however, all newly opened Excel spreadsheets have three worksheets.
- To view the contents of a worksheet, click on its tab.

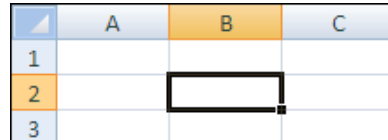


Navigating Around Your Spreadsheet

In order to enter data in Excel and/or create functions and formulas, you should be able to identify the active cell(s).

Locating the Active Cell

- A thick dark border surrounds any active cell or range of cells.
- The corresponding column letter and row number will be highlighted in orange (in the example below, the active cell is B2).



	A	B	C
1			
2			
3			

Changing the Active Cell

To change the active cell:

- Using your mouse, **click** on a cell.
- Use the **tab** key to move the active cell over one cell to the right in that row.
- Press **Shift + Tab** to move the active cell left one cell in the current row.
- Press the **Enter** key to move the active cell down one cell in that column.
- Press **Shift + Enter** to move the active cell up one cell in the current column.
- Use the **arrow keys**.

Identifying an Active Cell

Every cell is identified using a combination of a **letter** and a **number**. To identify an active cell cell:

- Name the **letter** of the cell's column
- Identify the **number** of the cell's row
 - *For example, in the example above, the active cell's is **B2** since it's located in **column B** and **row 2**.*

Selecting Multiple Cells

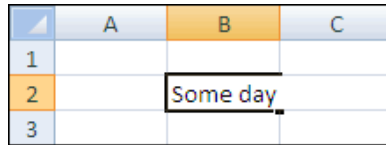
To select multiple cells for use in a calculation, or to move the data in those cells to a new location, drag your mouse across those cells. *You'll have the most success if you drag your mouser from the top corner to the bottom corner of your block of cells.*

Creating a Basic Spreadsheet

Excel is most commonly used for data entry and basic calculations. To create a basic spreadsheet:

Entering Data

- Click to select the cell where you wish to enter your data.
- Type the new data into the cell.

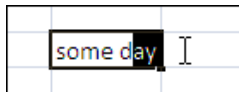


	A	B	C
1			
2		Some day	
3			

- Used one of the techniques from the section labeled **Changing the Active** cell to move the active cell to another location of your spreadsheet.

Editing Existing Data

- Click the cell you wish to edit and begin typing. *This will replace your old data with new data.*
- You can change existing data by double-clicking on the cell. *You will be able to edit this info as you would in a Word Document.*
 - To replace only part of the data, highlight the desired section and begin typing.
 - To delete only part of the data, highlight the appropriate section and hit either the *backspace* or *delete* keys.



Cutting, Copying, and Pasting Data

Cutting, copying, and pasting allow you to move your data (or copies of that data) from its current location to another location in your spreadsheet.

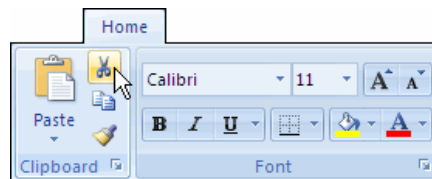
Cutting and Pasting Data

To move your data from its current location to a new location:

- Select the cell or range of cells containing the data you wish to cut.
The selected data will have a black border around it.

	A	B
1	cut data	
2	copy data	
3	paste data	
4		

- From the **Clipboard** area of the **Home** ribbon, click on the **Cut** button.



- Click in the destination cell for your data
- From the **Clipboard** area of the **Home** ribbon, click on the button labeled **Paste**.



Copying and Pasting Data

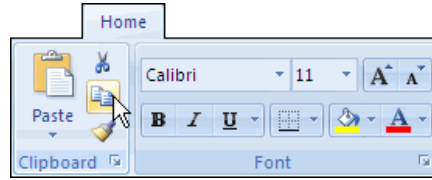
To move a copy of your data from its current location to a new location:

- Select the cell or range of cells containing the data you wish to cut.
The selected data will have a black border around it.

	A	B
1	cut data	
2	copy data	
3	paste data	
4		

- Click in the destination cell for your data.

- From the **Clipboard** area of the **Home** ribbon, click on the **Copy** button.



- From the **Clipboard** area of the **Home** ribbon, click on the button labeled **Paste**.



Tip: Cut, Copy, and Paste Shortcut Keys

To simplify the process of cutting, copying, and pasting data use one of the following shortcut key combinations.

To ...	Type...
Cut	Ctrl-X
Copy	Ctrl-C
Paste	Ctrl-V

*The **Enter** button on your keyboard can also be used to paste text.*

- *Selected the text to be cut or copied.*
- *Hit the cut or copy buttons, or their shortcuts.*
- *Click in the destination cell.*
- *Type the **Enter** button on your keyboard.*

Fixing Mistakes

For every document that you create, you will make at least a few mistakes. Excel allows you to quickly and easily fix your mistakes using the Undo and Redo buttons.

Undoing a Mistake

- From the **Quick Access** toolbar, locate the **Undo** button.



- Click once on the **Undo** button to undo the most recent action you completed.



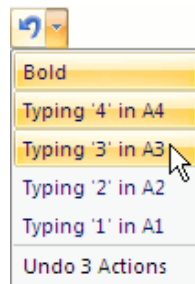
- Click on the **Undo** button again to undo the second most recent action.

Undoing Multiple Mistakes at Once

- From the **Quick Access** toolbar, locate the **Undo** button.



- Click on the down-facing arrow of the **Undo** button.
- From the list that appears, select the actions you wish to undo. *Excel will highlight the actions in orange.*



Redoing an Action

Do you wish you had not just undone an action? The **Redo** button allows you to restore the action

- From the **Quick Access** toolbar, locate the **Redo** button.



- Click once on the **Redo** button to restore your previous content.

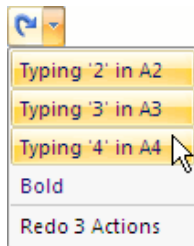


Redoing Multiple Actions at Once

- From the **Quick Access** toolbar, locate the **Undo** button.



- Click on the down-facing arrow of the **Redo** button.
- From the list that appears, select the actions you wish to restore. *Excel will highlight the actions in orange.*



Tip: You can only reverse an action immediately after it has been undone. Once you make further changes to your document you can no longer redo previous actions.

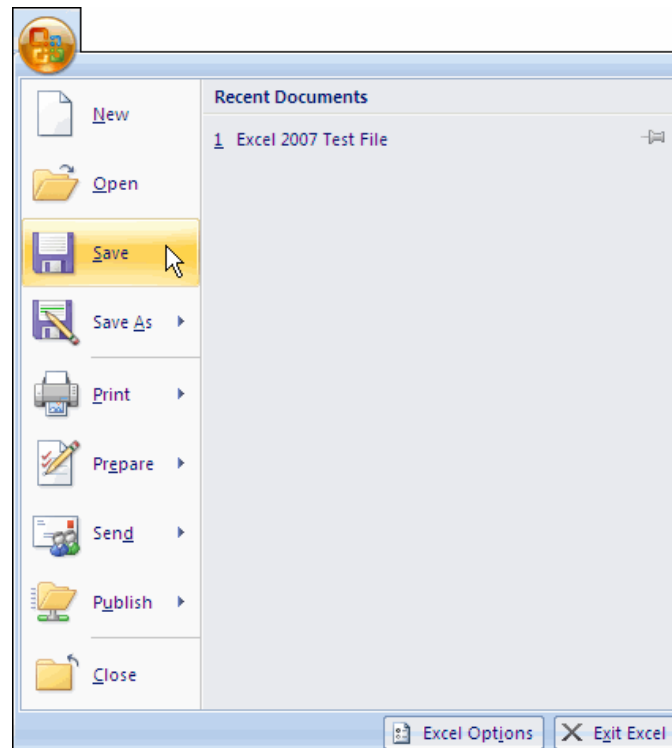
Saving Your Spreadsheet

Most people save their spreadsheet only after they have completed some substantial work on it. If you delay saving you risk losing your work if you encounter computer problems or a power outage. For best results you should save your document early and often, for example:

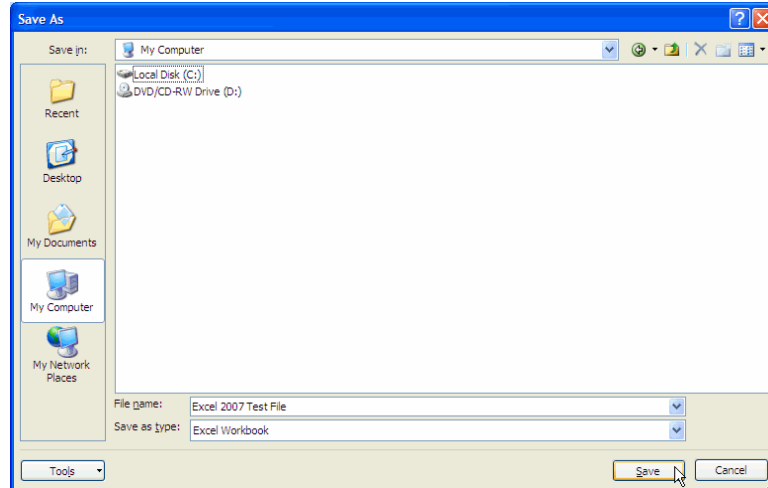
- Save frequently.
- Be sure you know where you are saving your document.
- Save whenever you complete a thought, not just when you complete a major section of your document.
- Save a backup copy when working on a critical document.

Saving Your Spreadsheet

- From the **Office** button, select **Save**.



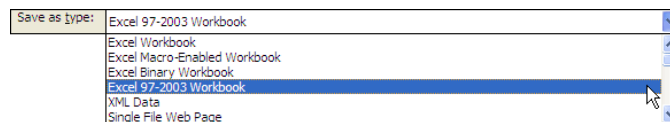
- The **Save As** window will appear.
- Navigate to the location where you wish to save your spreadsheet.
- In the box labeled **File Name**, type a descriptive name.
- Click on the button labeled **Save**.



Saving for Office 2003 Compatibility

By default, Excel saves your spreadsheet in a format that is unreadable by older versions. To save your spreadsheet to for Excel 2003 compatibility:

- From the **Office Button**, select **Save**.
- The **Save As** window will appear.
- Navigate to the location where you wish to save your Spreadsheet.
- In the box labeled **File Name**, type a descriptive name.
- Click on the down-facing arrow next to the box labeled **Save as type**
- From the list that appears, select **Excel 97-2003 Workbook**.



- Click on the button labeled **Save**

The Save Button

In addition to the office button, you can use the Save button to save changes that you have made to your spreadsheet.

- From the **Quick Access Toolbar** (located to the right of the Office button), click on the **Save** button.

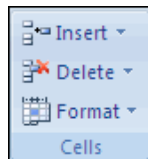


Formatting Your Spreadsheet

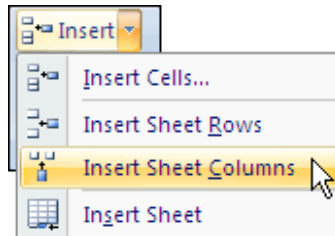
Sometimes you may think that your worksheet looks downright boring, or it doesn't cleanly display your data. In this situation, you can adjust your worksheet to make it look more presentable.

Inserting Columns

- Click to select an active cell **to the right** of the location where you wish to insert your new column.
- Locate the **Cells** area of the **Home** ribbon.



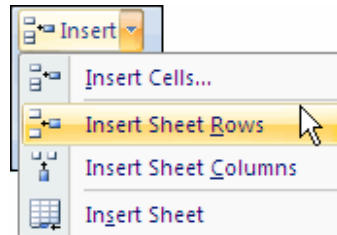
- Click on the down-facing arrow of the button labeled **Insert**.
- From the menu that appears, select **Insert Sheet Columns**.



- Excel will insert a new column **to the left** of your active cell.

Inserting Rows

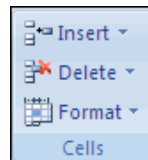
- Click to select an active cell **below** the location where you wish to insert your new row.
- Locate the **Cells** area of the **Home** ribbon.
- Click on the down-facing arrow of the button labeled **Insert**.
- From the menu that appears, select **Insert Sheet Rows**.



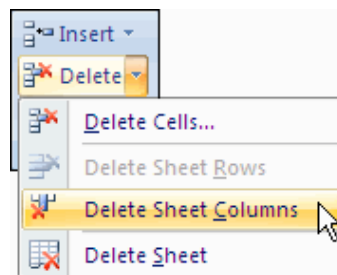
- Excel will insert a new row **above** your active cell.

Deleting Columns

- Select the column(s) you wish to delete.
- Locate the **Cells** area of the **Home** ribbon.



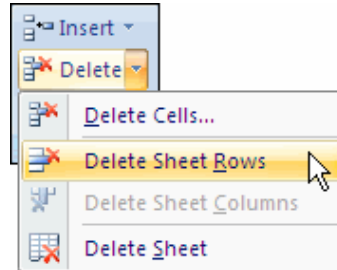
- Click on the down-facing arrow of the button labeled **Delete**.
- From the menu that appears, select **Delete Sheet Column**.



- Excel will delete the column(s) you selected and shift the rest of the data to the left.

Deleting Rows

- Select the row(s) you wish to delete.
- Locate the **Cells** area of the **Home** ribbon.
- Click on the down-facing arrow of the button labeled **Delete**

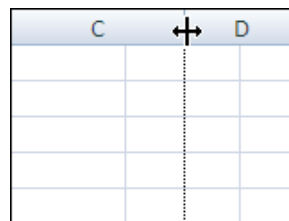


- Excel will delete the row(s) you selected and shift the rest of the data up.

Resizing Columns

In many situations, a cell will be too wide or too narrow to properly display the data it contains. In these situations, you can resize the column to correctly display your data. To resize a column to a new width:

- Place your cursor on the **gridline** between the column to be resized and the column to the right of it. *The cursor will become a special **double-arrow** indicating that you can now resize the column.*
- Drag the column gridline left or right to resize the column.
- Release the mouse when the column is at the width you want.



Resizing rows

To resize a row to a new height:

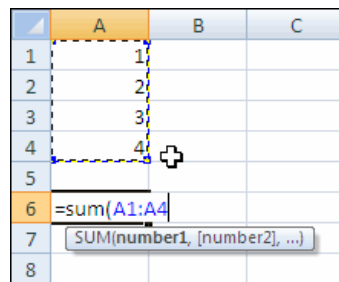
- Place your cursor on the **gridline** between the row to be resized and the one directly below it. *The cursor will become a special **double-arrow** indicating that you can resize the row.*
- Drag the gridline up or down to resize the row.
- Release the mouse when the row is the height you wish.

Inserting a Function

Calculating a Sum

The **Sum** function, one of the most commonly used functions in Excel, will produce a sum of the values in the range of cells.

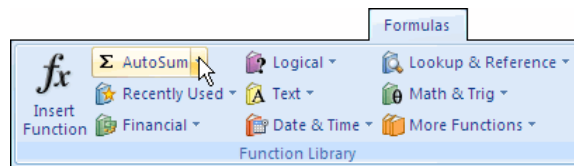
- Click on the cell into which you want to enter your function.
- Type **=sum(**
- Select the range of cells you wish to sum. *A blinking dashed border will be around the cell range.*
- Type **)**
- If you wanted to calculate the sum of the values in the range beginning with **A1** and ending with **A4** you would type **=sum(A1:A4)**



Calculating a Sum with the AutoSum Button

Excel's AutoSum tool allows you to quickly create sums without needing to type any function syntax. To calculate a sum:

- Click in the cell into which you want to enter your sum.
- Locate the **Function Library** area of the **Formulas** ribbon.
- Click on the **AutoSum** button.



- Select the range of cells to be summed.
- Type the **Enter** key on your keyboard to complete the calculation.

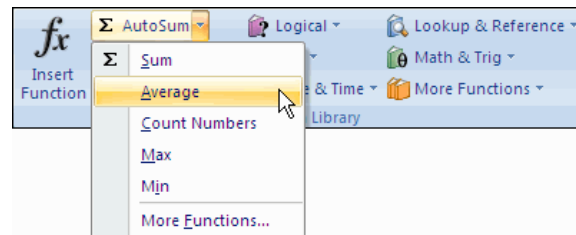
Calculating Other Functions with the AutoSum Button

In addition to calculating the Sum, the AutoSum button also allows you to quickly calculate other results, using several common functions (each of which is a ready-to-insert mathematical formula). The table below summarizes the results you can create.

The function...	Allows you to ...
Average	Calculate the average value of a range of cells
Count	Count the number of cells in a range that contain a numeric value
Max	Find the largest value in a range of cells
Min	Find the smallest value in a cell range

To Insert a Function:

- Click in the cell into which you want to enter your sum.
- Locate the **Function Library** area of the **Formulas** ribbon.
- Click on the down-facing arrow of the **AutoSum** button.
- From the menu that appears, select the function you wish to insert (for example, average).



- Select the range of cells you wish to use.
- Type the **Enter** key on your keyboard to complete your calculation.

Constructing a Formula

In addition to Excel's built in function, you can create custom formulas. In order to successfully calculate your values, you must take into consideration the following guidelines.

Guidelines for Creating Formulas

- All formulas begin with the = symbol.
- Excel uses the following symbols as mathematical operators.

The symbol...	Is used for...
*	Multiplication
/	Division
+	Addition
-	Subtraction
^	Raise to an exponent

- Excel calculates your formula
 - From left to right
 - Starts with any exponents
 - Then performs any *multiplication* and/or *division*
 - Followed by *addition* and/or *subtraction*.
- To perform a calculation that does follow the previously described order, use parenthesis to indicate the order in which your formula should be calculated.
 - *In the formula $= (8-3)*4$, Excel will subtract the values in the parenthesis before multiplying.*
- You can create formulas using numbers to calculate a result that will not change.
 - *The formula $=3*8$ produces the result 24*
- You can create formulas using cell references so that the calculated result will update itself as the data in the cells are changed.
 - *The formula $=A1+C1+B2$ produces a result based upon the data in cells A1, C1, and B2.*

	A	B	C	D
1	1		2	
2		3		
3			=A1+C1+B2	
4				

A Function Example

- To calculate $10 \times (5 - 2) - \frac{18}{9}$
- Click in the cell into which you want to enter your formula.
- Type **=10*(5-2)-18/9**.

	A	B	C
1	=10*(5-2)-18/9		
2			
3			

- Type the **Enter** key on your keyboard to complete your calculation.

Formatting Text

Excel provides many capabilities to format text and data within cells. These text formats allow you to transform a spreadsheet that is nearly unreadable to one that is attractive and persuasive.

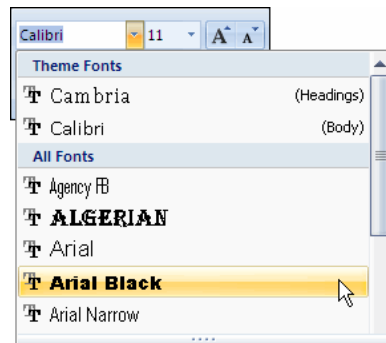
Changing the Font and Size of Your Text

Changing the Text Font

- Select the cell or range of cells you wish to reformat
- Locate the **Font** area of the **Home** ribbon



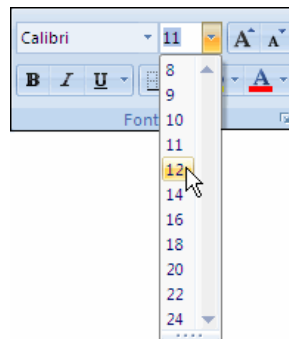
- Click on the down-facing arrow next to the drop-down **font** list
- From the list that appears, click on the **name** of the font you want.



Changing the Text Size

To change the size of your text:

- Select the cell or range of cells you wish to reformat
- Locate the **Font** area of the **Home** ribbon
- Click on the down-facing arrow next to the font size menu
- From the list that appears, click on the **size** of the font you want






Adding Bold, Italic, and/or Underline

- Select the cell or range of cells you wish to format.
- Locate the **Font** area of the **Home** ribbon.



- Click on one of the following buttons to apply text formatting

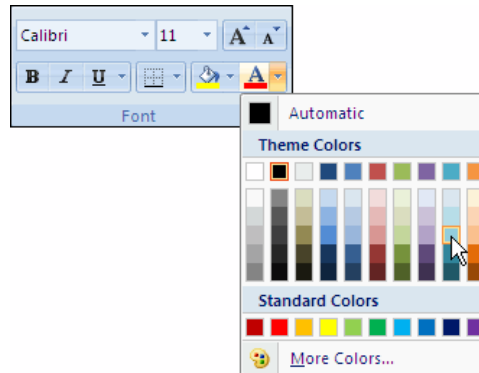
To format your text...	Click on...
Bold	
Italic	
Underline	

Changing the Text Color

- Select the cell or range of cells you wish to format.
- Locate the **Font** area of the **Home** ribbon.



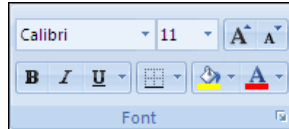
- Click on the down-facing of the **Font Color** button.
- From the font colors that appear, select the color you want.



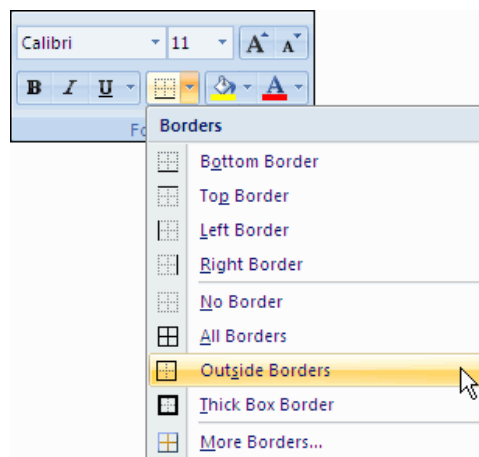
Adding Borders and Fill Color

Adding a Borders

- Select the cell or range of cells you wish to add a border to.
- Locate the **Font** area of the **Home** ribbon.

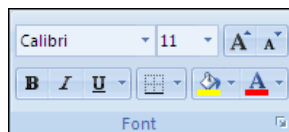


- Click on the down-facing arrow of the **Borders** button.
- From the borders styles that appear, select the one you want.

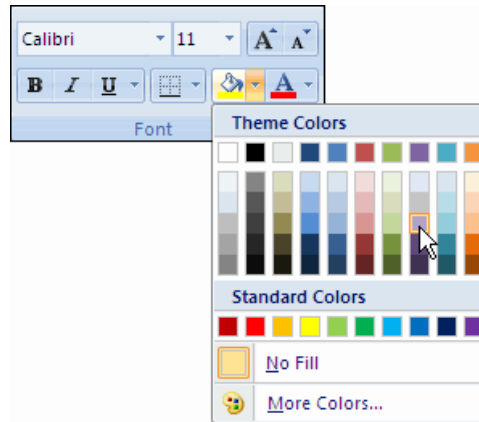


Applying a background color

- Select the cell or range of cells you wish to add a border to.
- Locate the **Font** area of the **Home** ribbon.



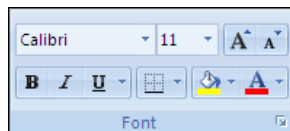
- Click on the down-facing of the **Fill Color** button.
- From the fill colors that appear, select the one you want.



Tip: Applying a Border or Fill Color

Once you have applied a border or fill color, the last selected border and fill color will be displayed, respectively. To apply an already-selected border or fill color:

- Select the cell or range or cells you wish to format.
- Locate the **Font** area of the **Home** ribbon.

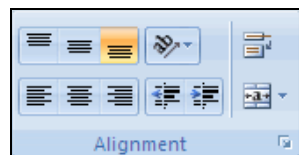


- Click on the **Border** or **Fill Color** button.




Aligning Text within a Cell

Changing the Horizontal Alignment

- Select the cell or range of cells you wish to format.
- Locate the **Alignment** area of the **Home** ribbon.






- Click the one of the following buttons to change the horizontal alignment of your text.

To align your text ...	Click on...
To the Left	
In the Center	
To the Right	

Changing the Vertical Alignment

- Select the cell or range of cells you wish to format.
- Locate the **Alignment** area of the **Home** ribbon.
- Click the one of the following buttons to change the vertical alignment of your text.

To align your text ...	Click on...
At the Top	
In the Center	
At the Bottom	

Getting Help in Excel

Excel's Help index is a good resource when you are trying to use an unfamiliar feature or starting a new project. To get help in Excel:

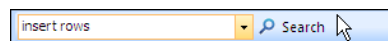
- Click on the blue question mark, the **Microsoft Office Excel Help** button, located in the upper right corner of the Excel window



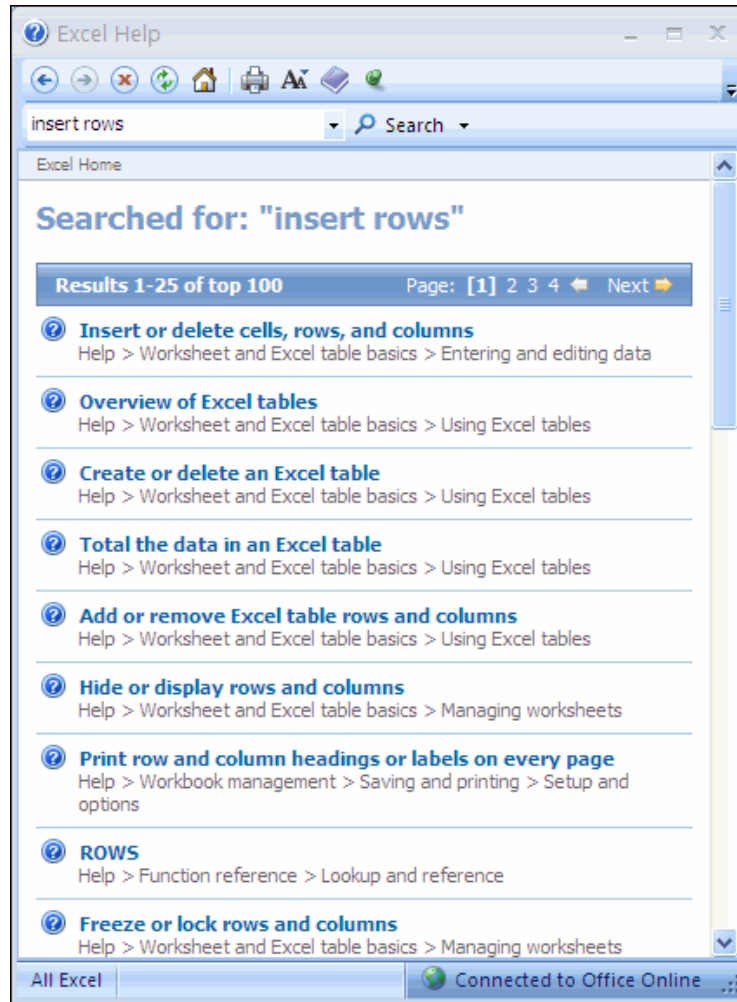
- The **Excel Help** window will appear.



- Click in the box next to the blue question mark, and type a description of the task in Excel about which you would like to learn.
- Click on the button labeled **Search**.



- The topics that relate to the task you described will display in the Excel Help window.



- From the list that appears, click one of the topics to display its contents.