

LEARNING EXCEL

Microsoft Excel is a spread sheet program that makes it easy for you to create, track, and update all sorts of data. Excel's calculating functions are ideal for creating products, such as inventories, check registries, or sales invoices.

1. Getting Started

Terms

Before we even learn about the "Excel" program itself here are a few keywords that you will hear frequently hear during your sessions:

Mouse: A device that allows you to select onscreen items by pointing at them with the mouse pointer. A mouse is connected to the computer by a long, thin cord that resembles a mouse tail – hence the name.

Spreadsheet: Also known as worksheet, a spreadsheet is a grid composed of rows and columns that intersect to form cells. You enter data (text, numbers and formulas) into these cells, and the spreadsheet performs calculations on the data.

Active Cell: The cell in which the cursor (or cell pointer) is currently located. A cell must be active in order for you to enter data into it.


Cell Pointer: A dark border around a cell in a worksheet, indicating that it's the active cell. You can move the cell pointer with the mouse or the keyboard.

Menu: A list of commands. You'll find a program's menu located at the top of the program window, just below the title bar.

Toolbar: A long bar or row of buttons (small pictures) that represent various commands.

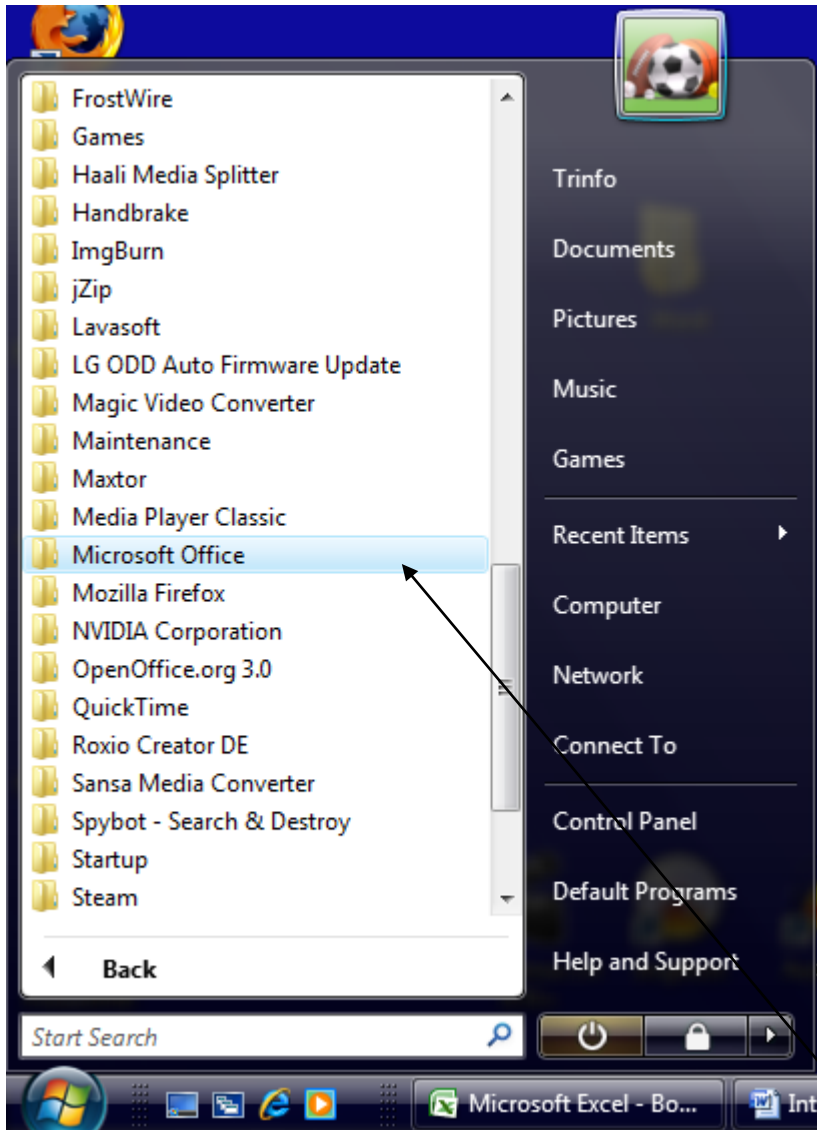
Opening Excel:

In order to open the Microsoft Excel program you must:

Click the  button in the lower left corner of the screen.

Click on the option "All Programs"

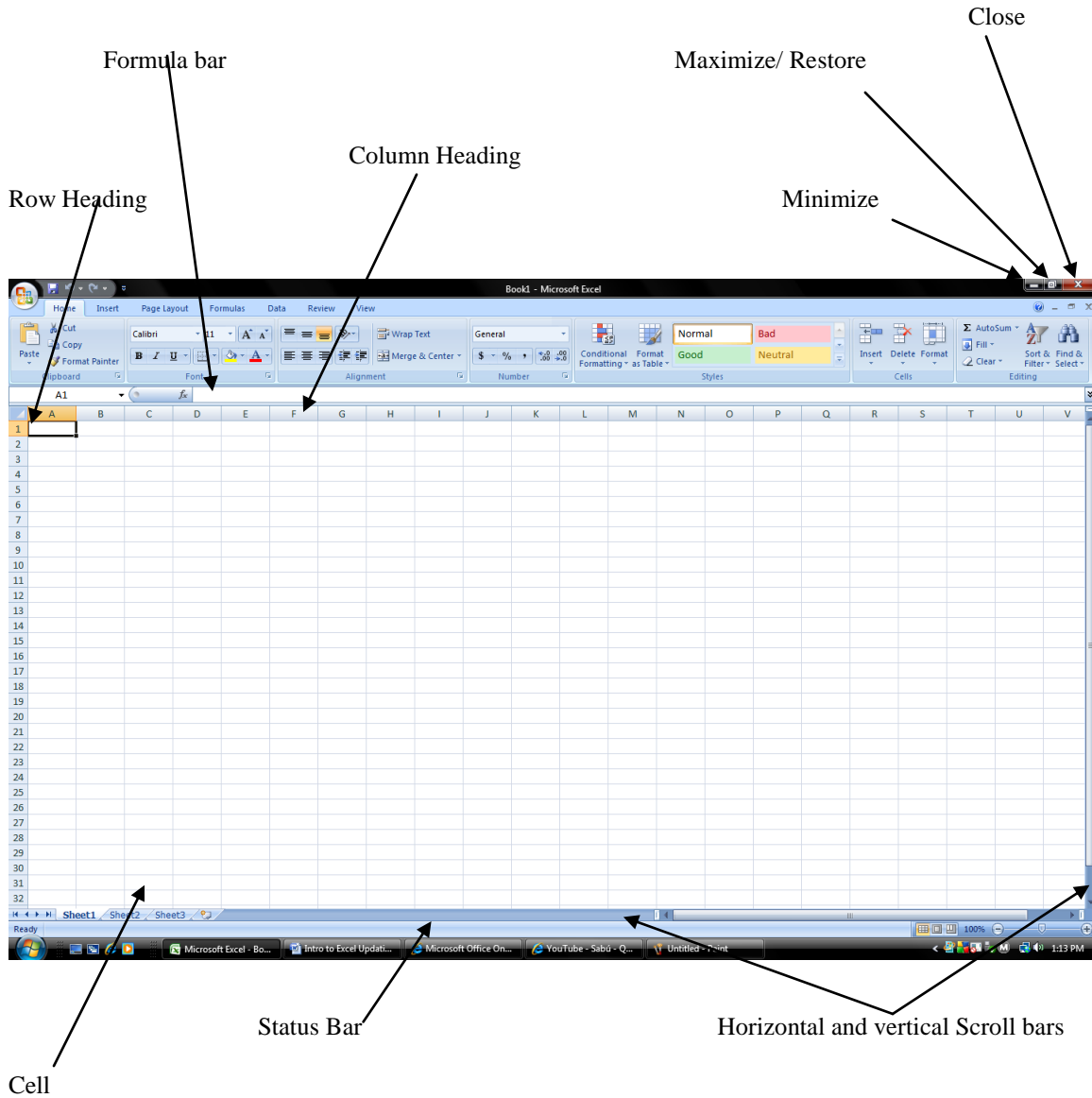
Scroll down and click on "Microsoft Office" as shown.



Click on this option

Once you click in Microsoft Office, simply select Microsoft Office Excel 2009 in the drop-down menu.

Once opened, the Excel screen should look as follows.



The Excel Window contains many parts:

Scroll Bars: Used to display a part of a worksheet that is currently hidden from view – there is a horizontal and vertical scroll bar.

Formula Bar: Provides an area for entering and changing cell data and reviewing cell formulas

Row Headings: Contains numbers for each row in the worksheet. Rows are labeled 1, 2,

and 3 and so on. A worksheet usually contains 1,048,576 rows.

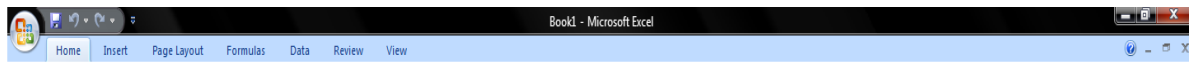
Column Headings: Contain letters for each column in the worksheet. Columns are labeled **A** to **Z** then **AA** to **AZ** and so on. Worksheets usually contain 16,384 columns.

Cell: The intersection of a column and a row. The active cell is marked with a dark outline. A cell's address is composed of its column letter followed by its row number, as in cell B3.

Status Bar: Displays the current status of the workbook, along with other data, such as The sum of the selected cells.

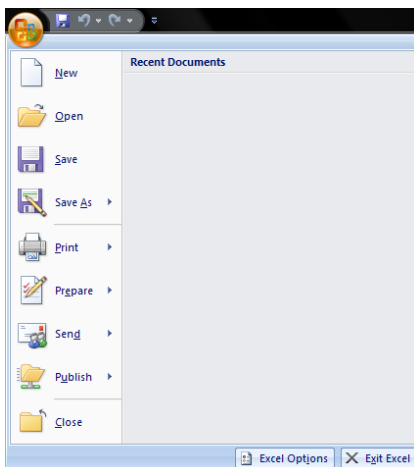
Getting Familiar with Excel

The Title Bar



This lesson will familiarize you with the Microsoft Excel screen. We will start with the Title bar, which is located at the very top of the screen. On the Title bar, Microsoft Excel displays the name of the workbook you are currently using. At the top of your screen, you should see "Book1 – Microsoft Excel" or a similar name.

The Office Button



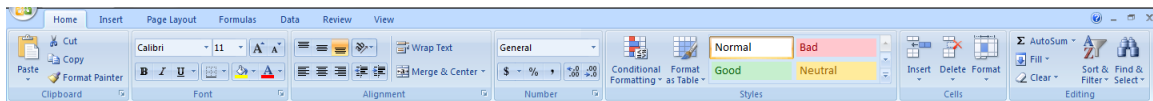
The Office Button is located on the upper left corner of the Microsoft Excel screen. Once clicked, a drop-down menu appears with the commands New, Open, Save, Save As, Print, Prepare, Send, Publish and Close. We will discuss each of these commands throughout the lessons. You use the Office Button to give instructions to the software, to be applied in the current book or project.

Point with your mouse to a menu option and click the left mouse button. To select an option, highlight the item on the drop-down menu and press Enter. An ellipse after a menu item signifies additional options; if you select that option, a dialog box will appear.

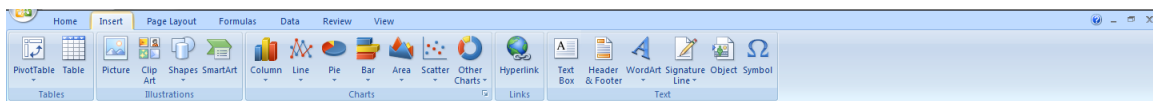
Do the following exercise, which demonstrates using the Microsoft Excel menu.

1. Point to the Office Button with your mouse.
2. Click your left mouse button.
3. Press the down arrow key until Close is highlighted.
4. Press the Up arrow key until Print is highlighted.
5. Press the right arrow key once.
6. Press the down arrow key until Quick Print is highlighted.
7. Now simply click on the Office Button once more.

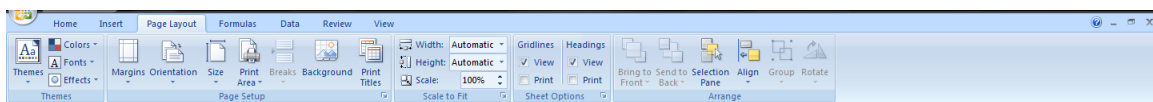
Tabs



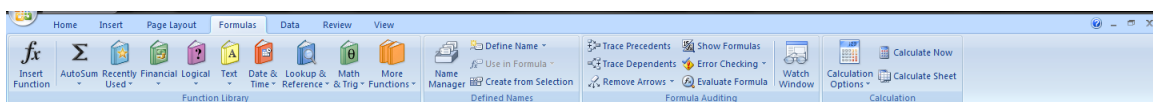
Home Tab



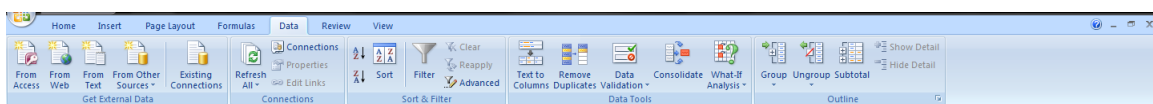
Insert Tab



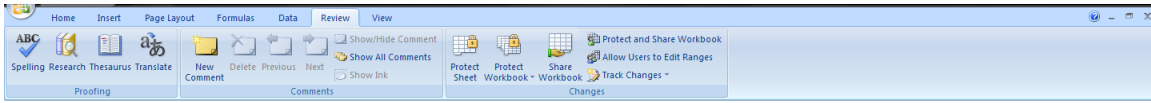
Page Layout Tab



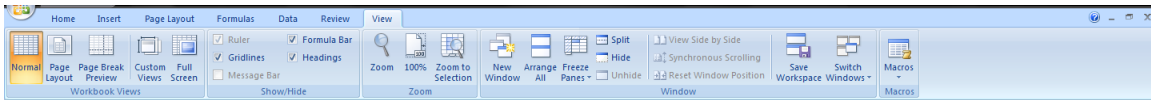
Formula Tab



Data Tab



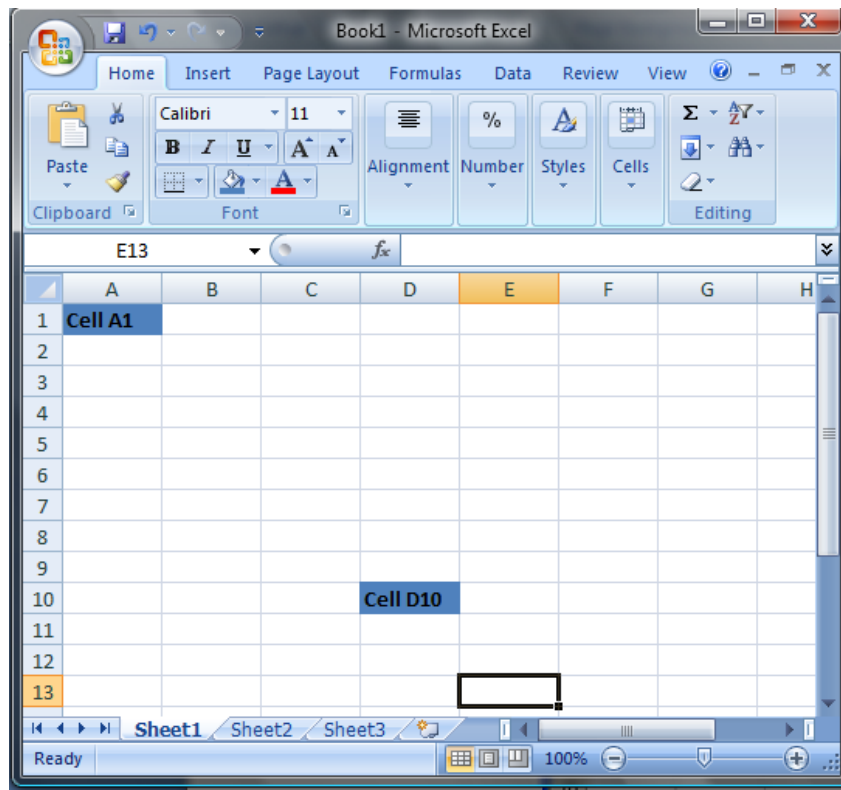
Review Tab



View Tab

Tabs provide shortcuts to menu commands. Toolbars are generally located just below the Title Bar.

Worksheets



Microsoft Excel consists of worksheets. Each worksheet contains columns and rows. The columns are lettered A to XFD; the rows are numbered 1 to 1,048,576 rows. The combination of column and row coordinates make up a cell address. For example, the cell located in the upper left corner of the worksheet is cell A1, meaning column A, row 1.

Cell D10 is located under column D on row 10. You enter your data into the cells on the worksheet.

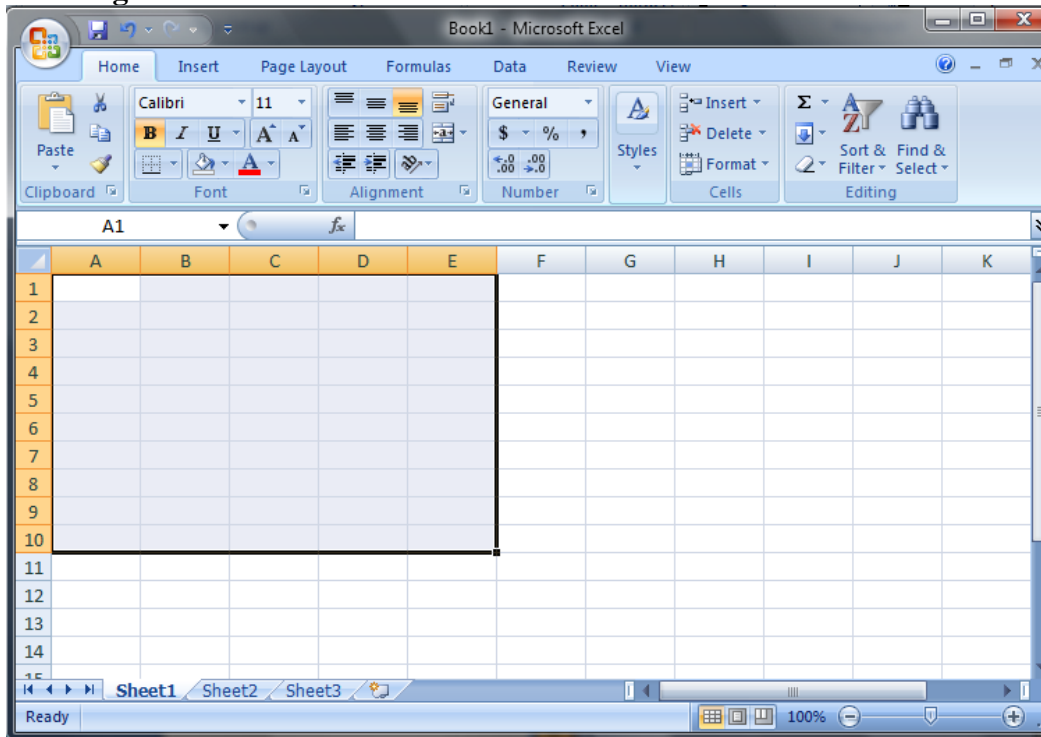
The Formula Bar



If the Formula bar is turned on, the cell address displays on the left side of the Formula bar. Cell entries display on the right side of the Formula bar. Before proceeding, make sure the Formula bar is turned on.

1. Point to the View Tab, which is located under the Title Menu.
2. Click the left mouse button. The View toolbar will show up.
3. On the Show/Hide, check if Formula Bar has a checkmark next to it. If not, simply click on the square to place a checkmark on it. Click back to the Home tab.
4. Note that the current cell address displays on the left side of the Formula bar.

Selecting Cells



If you wish to perform a function on a group of cells, you must first select those cells by highlighting them. To highlight cells A1 to E1:

1. Place the cursor in cell A1.
2. Press the F8 key. This anchors the cursor.
3. Note that “Extend Selection” appears on the Status bar in the lower right corner of the screen. You are in the Extend mode.
4. Click in cell E7. Cells A1 to E7 should now be highlighted.
5. Press Esc and click anywhere on the worksheet to clear the highlighting.

Alternative Method - Selecting Cells by Dragging

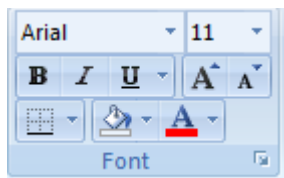
You can also highlight an area by holding down the left mouse button and dragging the mouse over the area. In addition, you can select noncontiguous areas of the worksheet by doing the following:

1. Place the cursor in cell A1.
2. Hold down the Ctrl key. Do not release it until you are told. Holding down the Ctrl key enables you to select noncontiguous areas of the worksheet.
3. Press the left mouse button.
4. While holding down the left mouse button, use the mouse to move from cell A1 to E7.
5. Continue to hold down the Ctrl key, but release the left mouse button.
6. Using the mouse, place the cursor in cell G8.
7. Press the left mouse button.
8. While holding down the left mouse button, move to cell I17. Release the left mouse button.
9. Release the Ctrl key.
10. Press Esc and click anywhere on the worksheet to remove the highlighting

Entering Text

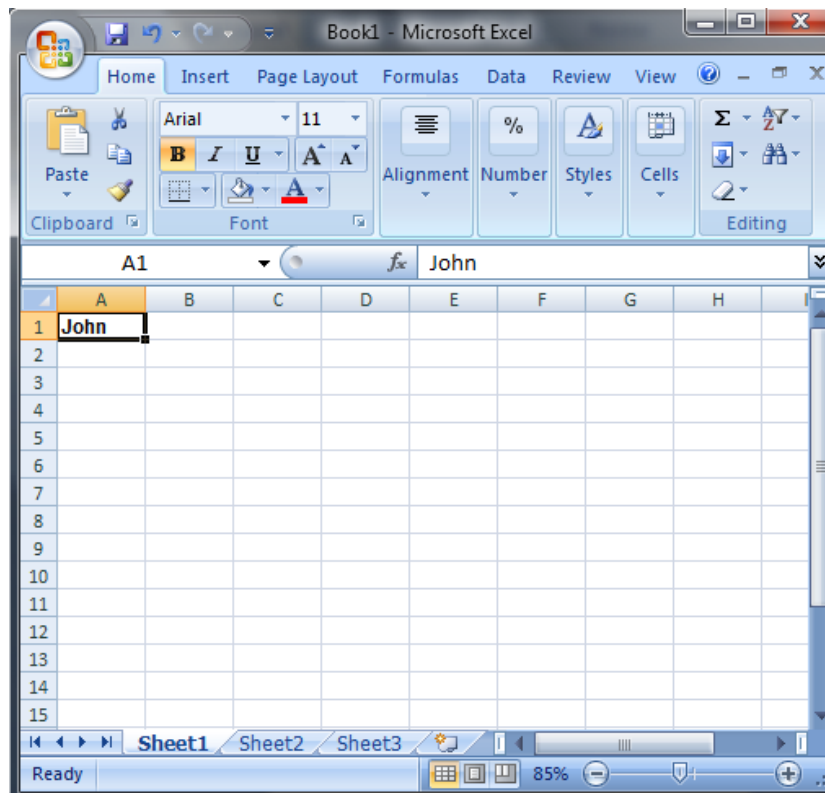
In this lesson you are going to learn how to enter text. To begin, open Microsoft Excel. For this lesson, your default font should be set to Arial. Let's check to make sure it is.

1. Make sure you are in the Home Tab, and find the Font group.
2. Make sure it reads "Arial" in the font bar. If not click the down arrow and select Arial.



This lesson will teach you how to enter data into your worksheet. First you place the cursor in the cell in which you would like to enter data, type the data, and then press Enter.

1. Place the cursor in cell A1.
2. Type **John Jordan**. Note that the word Ready on the Status bar changes to Enter.
3. The Backspace key erases one character at a time. Erase "Jordan" by pressing the backspace key until Jordan is erased.
4. Press Enter. The name "John" should appear in cell A1.

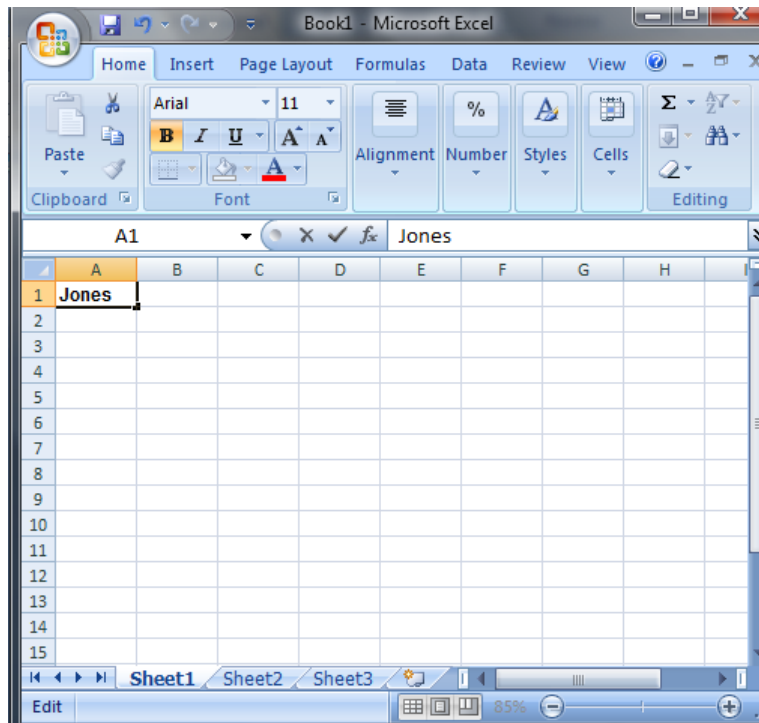


Editing a Cell

After you enter data into a cell, you can edit it by pressing F2 while you are in the cell you wish to edit.

1. Move the cursor to cell A1.

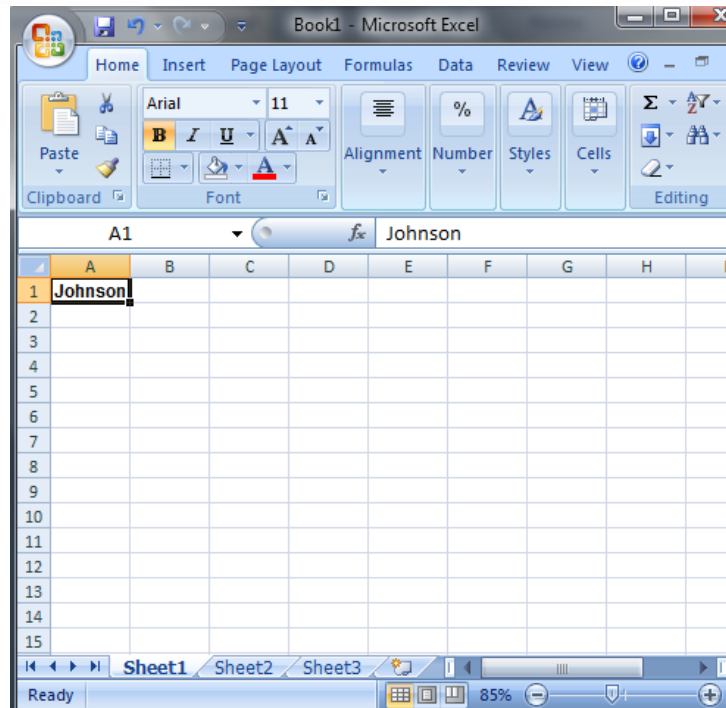
2. Press F2. Note that the word Ready on the Status bar changes to Edit.
3. Change "John" to "Jones."
4. Use the backspace key to delete the "n" and the "h."
5. Type **nes**.
6. Press Enter.



Alternate Method – Editing a Cell by Double-Clicking in the Cell

You can change "Jones" to "Johnson" as follows:

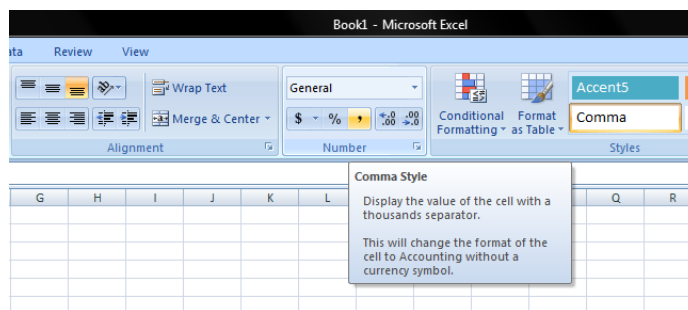
1. Move the cursor to cell A1.
2. Double-click in cell A1.
3. Press the End key. That will place the cursor at the end of your text.
4. Use the backspace to erase "n," "e," and "s."
5. Type **hnson**.
6. Press Enter.



Formatting Cells

Formatting cells allows you to change the way in which the cell displays the information you enter. Cells can be formatted to show the numbers in many different ways. To begin to format a cell, follow these steps:

1. Type the number 98467 in cell C1 and press enter
2. Locate the Number bar in the Home tab.

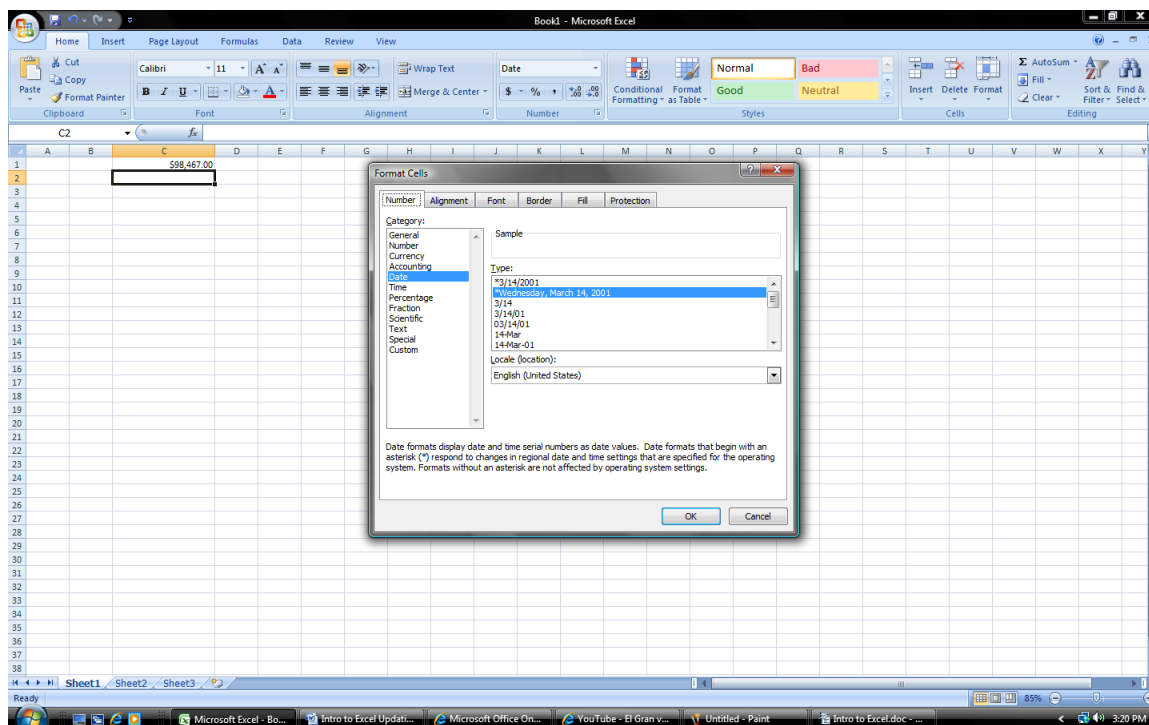


3. Click on the comma sign **,** to use the 1000 separator

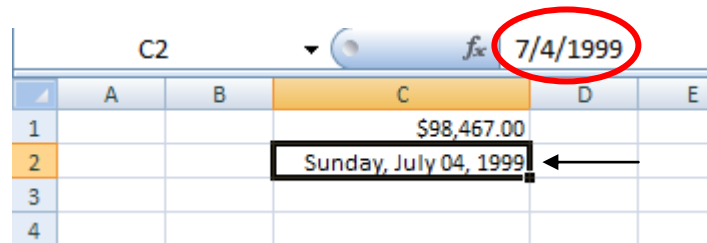
4. The number in cell C1 should now read 98,467.00
5. Now the cell needs to be formatted again to show that it is a monetary value.
6. Click on the box on top of the comma, in the number bar.
7. Press the down arrow key to see the drop-down menu.
8. Select the Currency option on the drop-down menu
9. Leave the symbol as a “\$” and click Ok.
10. Cell C1 should now read \$98,467.00

Formatting Dates

1. Put the cursor on cell C2
2. Click on the box on top of the comma. The same one we used before.
3. Press the down arrow key until Cells is highlighted.
4. Click on “More Number Formats.”
5. Under type click on *Wednesday, March 14, 2001 and click Ok



- Now in type 7/4/99 in cell C2 and hit enter.



- Cell C2 should now read Sunday, July 04, 1999. Notice how the formatting automatically changed the way in which the date is displayed but the Formula Bar shows the date still as 7/4/1999.
- Similar procedures are used to format cells to show times and percentages.

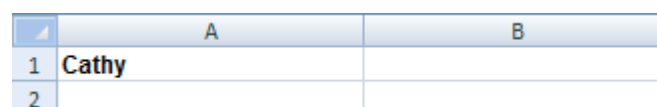
Adjusting the Standard Column Width

When you enter Microsoft Excel, the width of each cell is set to a default width. This width is called the standard column width. We need to change the standard column width to complete our exercises. To make the change, follow these steps:

- Click on Format, which is located on the Cells slot in the Home tab.
- Press the down arrow key until Default Width... is highlighted.
- Press Enter.
- Type **25** in the Standard Column Width field.
- Click on OK. The width of every cell on the worksheet should now be set to 25.

Cell Alignment

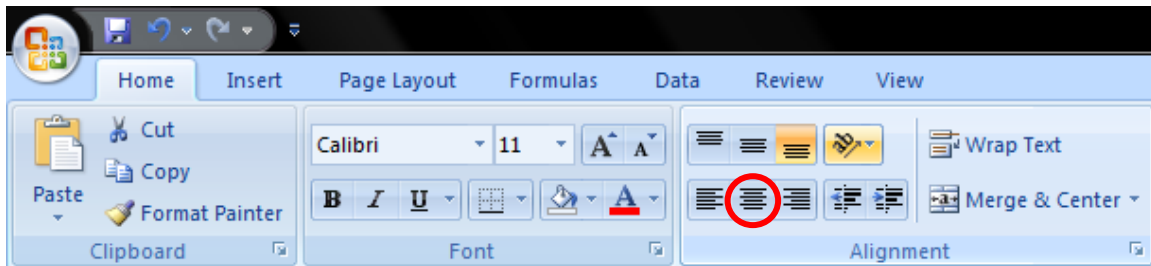
Look at cell A1. The name "Cathy" is aligned with the left side of the cell. You can change the cell alignment.



Centering by Using the Alignment Group

To center the name "Cathy," follow these steps:

1. Move the cursor to cell A1.
2. Click on the Center icon, which is located on the Alignment Group.

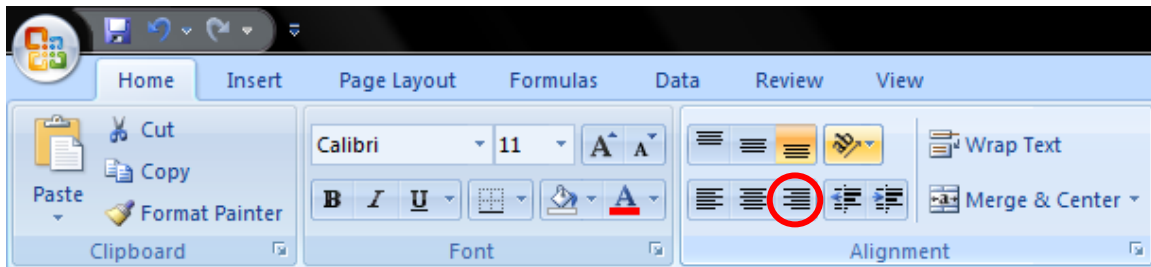


The red circle designates the Align Center icon.

Right-Aligning by Using the Alignment Group

To right-align the name "Cathy," follow these steps:

1. Move the cursor to cell A1.
2. Click on the Align Right icon, which is located on the Formatting toolbar.

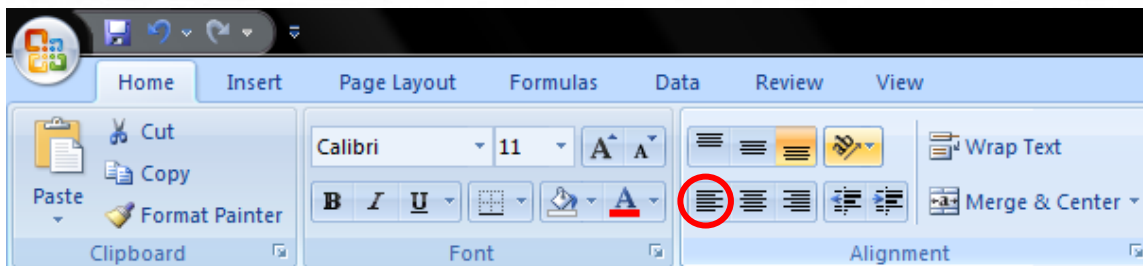


The red circle designates the Align Right icon.

Left-Aligning by Using the Alignment Group

To left-align the name "Cathy," follow these steps:

1. Move the cursor to cell A1.
2. Click on the Align Left icon, which is located on the Formatting toolbar.



The red circle designates the Align Left icon.

Adding Bold, Underline, and Italic

Adding Bold by Using the Icon

1. Type **Bold** in cell A3.
2. Click on the checkmark located on the Formula bar.
3. Click on the Bold icon, which is on the Formatting toolbar. **B**
4. Click again on the Bold icon if you wish to remove the bolding.





Alternate Method – Adding Italic by Using the Icon

1. Type **Italic** in cell B3.
2. Click on the checkmark located on the Formula bar.
3. Click on the Italic icon, which is on the Formatting tab. *I*
4. Click again on the Italic icon if you wish to remove the italics.

Alternate Method – Adding Underline by Using the Icon



1. Type **Underline** in cell C3.
2. Click on the checkmark located on the Formula bar.
3. Click on the Underline icon, which is on the Formatting tab. U
4. Click again on the Underline icon if you wish to remove the underline.

Alternate Method – Bold, Underline, and Italicize Using Icons


1. Type **All Three** in cell D3.
2. Click on the checkmark located on the Formula bar. 
3. Click on the Bold icon. 
4. Click on the Italic icon. 
5. Click on the Underline icon. 

Changing the Font and Font Size

You can change the Font and Font Size of the data you enter.

1. Type **Times New Roman** in cell A5.
2. Click on the checkmark located on the Formula bar. 
3. Click the font box in the Font Slot.
4. Click on  and select Times New Roman. This will change you current font to Times New Roman

Changing the Font Size


1. Place the cursor in cell A5.
2. Click on the box next to the font. It should have a number in it.
3. Click on  and select 15 in the Size Box

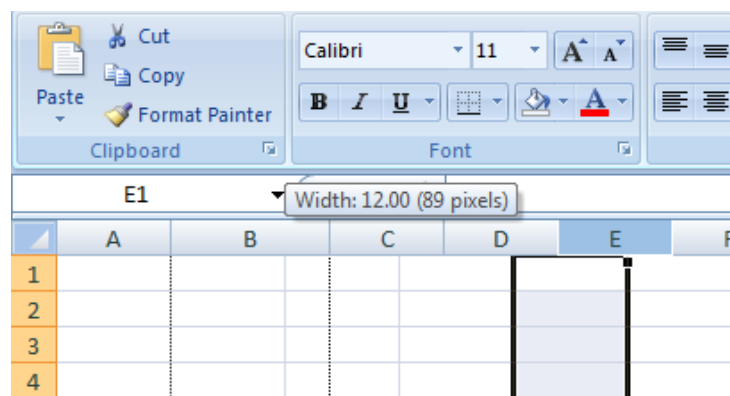
Deleting a Cell Entry

To delete an entry in a cell or a group of cells, you place the cursor in the cell or highlight the group of cells and press Delete.

1. Place the cursor in cell A5.
2. Press the Delete key.

Changing a Single Column Width

1. Place the cursor on the line between the B and C column headings. The cursor should look like  with two arrows.
2. Move your mouse to the right while holding down the left mouse button. The width indicator will appear on the screen.

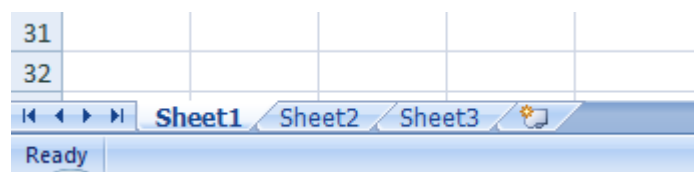


3. Release the left mouse button when the width indicator shows approximately 40.

Moving to a New Worksheet

In Microsoft Excel, each workbook is made up of several worksheets. Before moving to the next topic, move to a new worksheet.

1. Click on Sheet2, which is located in the lower left corner of the screen.



Filling Cells Automatically

You can use Microsoft Excel to automatically fill cells with information that occur in a series. For example, you can have word automatically fill in times, the days of the week or months of the year, years, and other types of series. The following demonstrates:

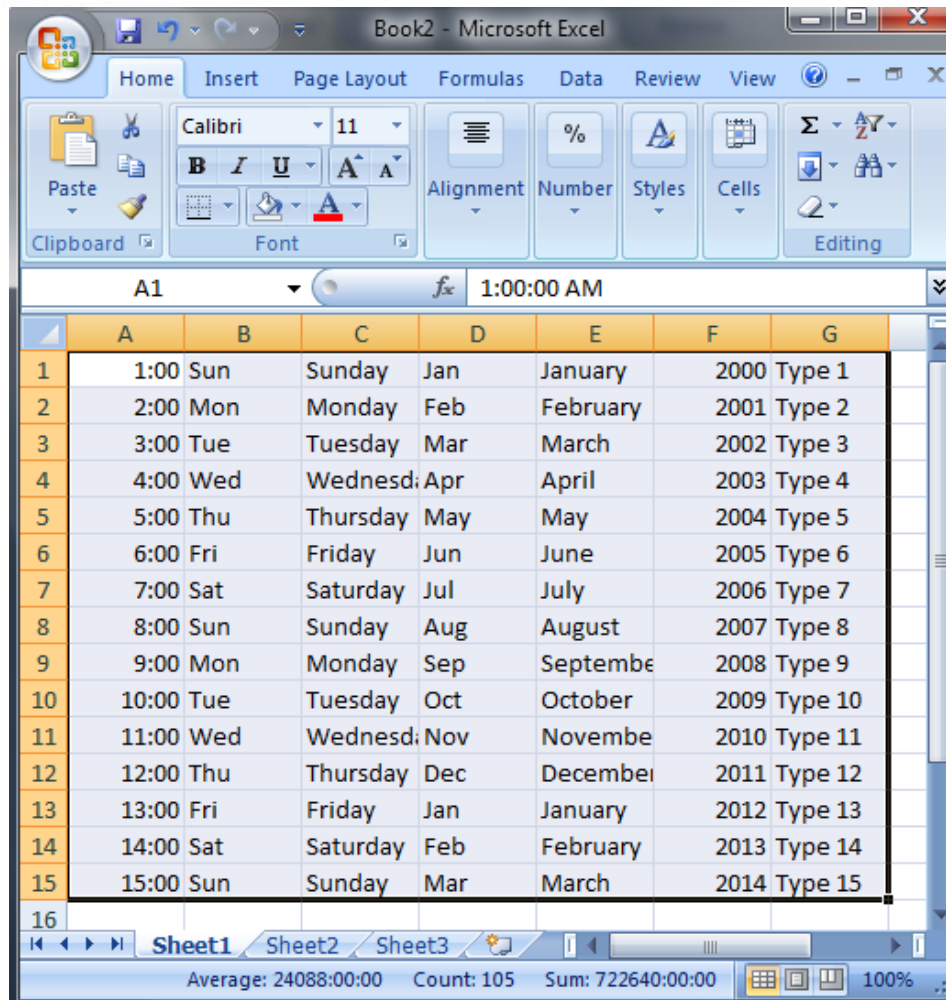
1. Type the following into the worksheet as shown.

	A	B	C	D	E	F	G
1	1:00	Sun	Sunday	Jan	January	2000	Type 1

2. Place the cursor in cell A1.
3. Press F8. This will anchor the cursor.
4. Press the right arrow key six times to highlight cells A1 through G1.
5. Find the small black square in the lower right corner of the highlighted area. This is called the Fill Handle.

A1		fx 1:00:00 AM						
	A	B	C	D	E	F	G	H
1	1:00	Sun	Sunday	Jan	January	2000	Type 1	
2								
3								

6. Grab the Fill Handle and drag with your mouse to highlight cells A1 to G24.
7. Note how each cell fills.



2. Press Esc and then click anywhere on the worksheet to remove the highlighting.

Numbers and Mathematical Calculations

In this lesson you will learn how to work with numbers and how to perform mathematical calculations. To begin, open Microsoft Excel.

Making Numeric Entries

In Microsoft Excel, you can enter numbers and mathematical formulas into cells. When a number is entered into a cell, you can perform mathematical calculations such as addition, subtraction, multiplication, and division. When entering a mathematical

formula, precede the formula with an equals sign. Use the following to indicate the type of calculation you wish to perform:

+ Addition

- Subtraction

* Multiplication

/ Division

Performing Mathematical Calculations

The following exercises demonstrate how to perform mathematical calculations.

Addition

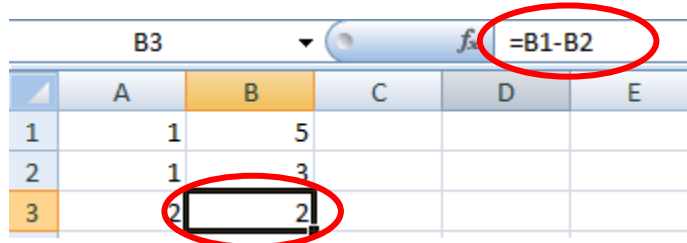
1. Move the cursor to cell A1.
2. Type **1**.
3. Press Enter.
4. Type **1** in cell A2.
5. Press Enter.
6. Type **=A1+A2** in cell A3.
7. Press Enter.
8. Note that cell A1 has been added to cell A2 and the result is shown in cell A3.

	A	B	C	D	E
1	1				
2	1				
3	2				

Place the cursor in cell A3 and look at the Formula bar.

Subtraction

1. Press F5. The Go To dialog box will appear.
2. Type **B1**.
3. Press Enter.
4. The cursor should move to cell B1.
5. Type **5** in cell B1.
6. Press Enter.
7. Type **3** in cell B2.
8. Press Enter.
9. Type **=B1-B2** in cell B3.
10. Press Enter.
11. Note that cell B2 has been subtracted from B1 and the result is shown in cell B3.



	A	B	C	D	E
1		5			
2		3			
3		2			

Place the cursor in cell B3 and look at the Formula bar.

Multiplication

1. Hold down the Ctrl key while you press "g" (Ctrl-g). The Go To dialog box will appear.
2. Type **C1**.
3. Press Enter. You should now be in cell C1.
4. Type **2** in cell C1.
5. Press Enter.
6. Type **3** in cell C2.
7. Press Enter.
8. Type **=C1*C2** in cell C3.

9. Press Enter.
10. Note that C1 is multiplied by C2 and the answer is displayed in C3.

	C	D	E
5	2		
3	3		
2	6		

Place the cursor in cell C3 and look at the Formula bar.

Division

1. Press F5.
2. Type **D1**.
3. Press Enter. You should now be in cell D1.
4. Type **6** in cell D1.
5. Press Enter.
6. Type **3** in cell D2.
7. Press Enter.
8. Type **=D1/D2** in cell D3.
9. Press Enter.
10. Note that D1 is divided by D2 and the answer is displayed in cell D3.

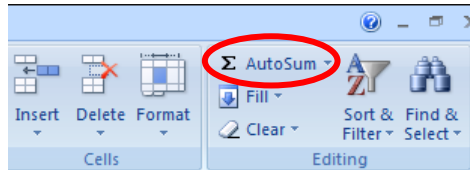
	C	D	E
5	2	6	
3	3	3	
2	6	2	

Place the cursor in cell D3 and look at the Formula bar.

The AutoSum Icon

The AutoSum icon on the Home Tab in the Editing group, it automatically creates a SUM function. The following illustrates using the SUM function to total the Region 1 sales:

1. Press F5.
2. Type **B16**.
3. Press Enter.
4. Click on the AutoSum button, which is located on the Standard toolbar.



B4 to B15 should now be highlighted.

	A	B	C	D	E
2					
3		Region 1	Region 2	Region 3	
4	January	789	460	574	
5	February	736	1230	1265	
6	March	785	564	652	
7	April	799	952	954	
8	May	723	851	854	
9	June	2086	965	1122	
10	July	1744	2147	1955	
11	August	1143	1120	1235	
12	September	854	1230	1256	
13	October	753	654	654	
14	November	1747	751	852	
15	December	1760	1789	1622	
16	Total	=SUM(B4:B15)			
17		SUM(number1, [number2], ...)			

5. Press Enter.

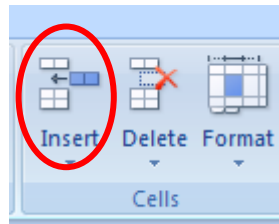
Inserting Rows

You can use Microsoft Excel to insert or delete rows on the worksheet. You need to insert three rows so you can add headings to the chart.

1. Highlight cells A1 to A3. Move the cursor to cell A1. Press F8. Press the down arrow key twice.

	A	B	C	D
1	January	789	460	574
2	February	736	1230	1265
3	March	785	564	652
4	April	799	952	954
5	May	723	851	854

2. Click on Insert, which is located on the Menu bar.



3. Press the down arrow key until Rows is highlighted.
4. Press Enter. Three new rows should be inserted.

Your worksheet should now look similar to the one shown here.

	A	B	C	D
1				
2				
3				
4	January	789	460	574
5	February	736	1230	1265
6	March	785	564	652
7	April	799	952	954
8	May	723	851	854
9	June	2086	965	1122
10	July	1744	2147	1955
11	August	1143	1120	1235
12	September	854	1230	1256
13	October	753	654	654
14	November	1747	751	852
15	December	1760	1789	1622
16	Total	13919		
17				

Inserting Columns

You can use Microsoft Excel to insert or delete columns on the worksheet. You need to insert a column.

1. Move the cursor to cell A4.
2. Click on Insert, which is located on the Menu bar.
3. Press the down arrow key until Columns is highlighted.
4. Press Enter.
5. A new column is inserted.

	A	B	C	D	E
1					
2					
3					
4		January	789	460	574
5		February	736	1230	1265
6		March	785	564	652
7		April	799	952	954
8		May	723	851	854
9		June	2086	965	1122
10		July	1744	2147	1955
11		August	1143	1120	1235
12		September	854	1230	1256
13		October	753	654	654
14		November	1747	751	852
15		December	1760	1789	1622
16		Total	13919		

Using Copy and Paste

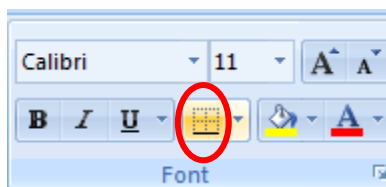
In Lesson Three you learned that you can copy and paste information. To copy the formula in cell B16 and paste it in cells C16 to D16, follow these steps:

1. Move to cell B16.
2. Click on the Copy icon. Rotating dotted lines will appear around the cell. The rotating dotted lines designate the area to be copied.
3. Highlight cells C16 to D16.
4. Click on the Paste icon, which is located on the Standard toolbar. The formula in cell B16 is copied to cells C16 and D16.
5. Press Esc.

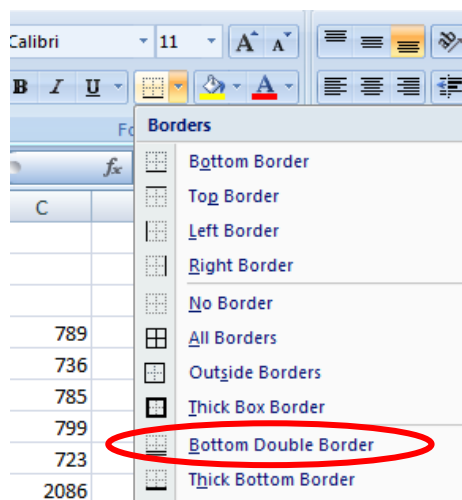
Creating a Border

You can use the Border icon to place borders around a cell. You have several options on the type of border to use and where to place the borders. Borders can be placed above, below, and/or on the sides of cells. The following illustrates using borders:

1. Place the cursor in cell C16.
2. Highlight cells C16 to F16.
3. Click on the down arrow next to the Borders icon to open the Borders palette.



4. Click on Top and Double Bottom Border (farthest right in the middle row).

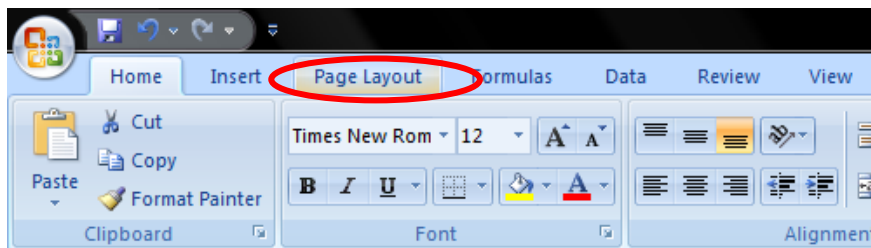


Applying Themes

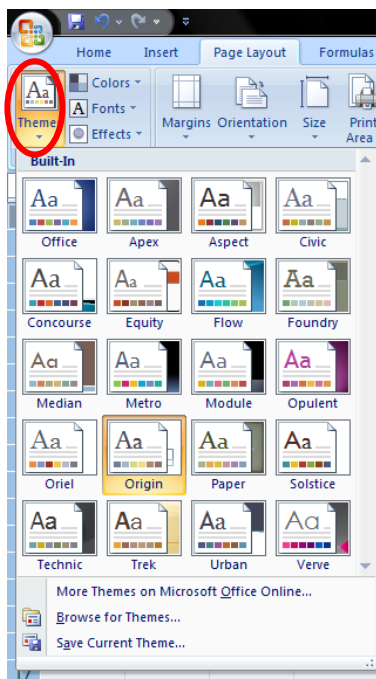
In order to be able to create a great-looking workbook without having to spend too much time on small details, you may choose to apply a theme to either the whole workbook or to specific parts of the workbook, such as tables and graphs.

To apply a theme to the whole document, follow these instructions;

1. Click on the Page Layout Tab

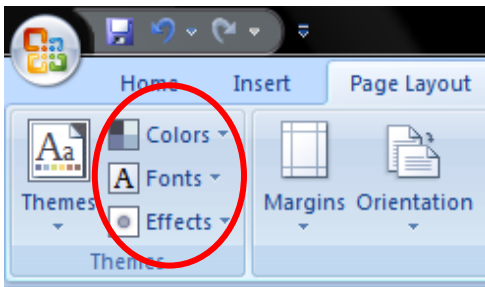


2. Now, in the themes group, click on Themes.



3. By moving your mouse over any of the built-in themes, you can see a preview of how it looks like in the current workbook.
4. Select one that you like and click on it. The theme will then be applied to your workbook.

If you feel that you may want to use a more personalized theme, you may choose to use some of the other commands, such as Effects and Fonts, located next to the Themes command.




You can change the colors used, the font and effects to create your own theme design.

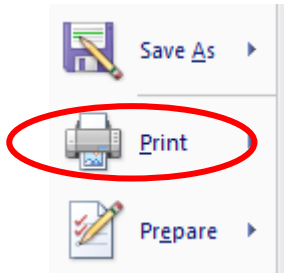
Printing

If you wish to print what you have in your workbook, you can accomplish this by following these simple steps

1. Select what you want to print (If printing everything you have on the workbook skip this step)

2. Click the Office Button , located on the top left hand corner of the window.

3. Click on the Print Command.



4. Hit OK on the printing screen.

Exit Excel

You can exit Excel by using the file menu or the close button. If you make any changes to your notebook you will be prompted to save the changes

