Creating an Excel 2007 Spreadsheet

Created: 12 December 2006

Starting Excel 2007

In the following exercises you will **learn** some of the necessary steps to **create** a **spreadsheet** using **Microsoft Excel 2007**. You will learn not only how to type various items into the spreadsheet, but also how to copy columns, widen columns, fill columns, add, subtract, multiply, divide, do graphics and a variety of other "things."

To begin, **load** the spreadsheet by **quickly** **clicking twice** on the **Excel 2007 Windows Icon** in the **Windows Desktop**. If you **do not see** an **Excel Icon**, **click** the **Start Button** in the **lower left corner** of the screen, move the cursor up to **Programs**, then move to **Microsoft Office.** Move down to **Microsoft Excel 2007** and **click**.

A **spreadsheet** is a "**number manipulator**." To make the handling of numbers easier, **all spreadsheets** are organized into **rows** and **columns**. Your initial spreadsheet will look something like the one below:
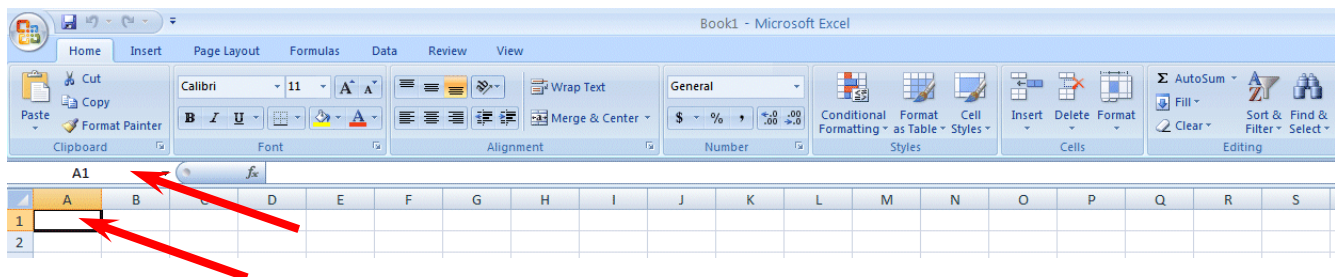

Notice that the "**main**" part of the spreadsheet is composed of **Rows (Labeled 1, 2, 3, 4**, etc.) and **Columns (Labeled A, B, C, D**, etc.). There are a lot of rows and columns in a spreadsheet. The "**intersection**" of **each row** and **column** is called a **cell**. In the image above the **cursor is on** the "**home**" **cell** – **A1**. **Notice Row 1 and Column A are "bold,"** and **colored "orange."** This **indicates** what is called the "**address** of the **cell**. **Notice right above cell A1**, that **A1** is **displayed** in a **small box** called the **Name Box**. Whenever you "click" on a cell the address of that cell will be shown in the Name Box.

If you have used previous versions of Microsoft Excel you will quickly notice that the above image is very different from what you are used to seeing. In Excel 2007 you will now use Tabs, Ribbons and Groups, as well as special Tabs/Ribbons. These replace the Menu Bar and Buttons in older versions. For an overview of 2007 Office, please see the Introduction to Microsoft Office 2007 Tutorial. This short tutorial introduces you to the many enhancements in the 2007 Office Suite.

1

In this tutorial, whenever we indicate that you need to click the mouse, it will mean to click the left mouse button – unless we indicate that you should click the RIGHT mouse button. So, always "click left" unless we tell you otherwise.
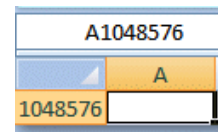
Moving Around the Spreadsheet

You can move around the spreadsheet/cells by **clicking** your mouse **on** various **cells**, or by using the **up, down, right and left arrow movement keys on the keyboard**. Or, you can move up and down by using the "**elevator**" bars on the **right** and **bottom** of the spreadsheet. Go ahead and **move around the spreadsheet**. **Hold down** the **down arrow key** on the **keyboard** for a few seconds – then **click**-on a **cell**. **Notice** how the **Name Box** always **tells** you "**where you are**." Now hold down the **right arrow key** on the keyboard for a few seconds. **Notice** how the **alphabet changes** from **single letters (A, B, C,. …. Z)** to **several letter combinations (AA, AB, AC)**. There are **hundreds of columns** and **thousands of rows** in a spreadsheet. **Anytime** you desire to **return** to the **Home Cell (A1)** simply **click-in** the **Name Box** and **type-in A1**. Then **tap** the **Enter key** and you will **go** to cell **A1**. You can go to any cell by this method. Simply type-in a row and column, tap the Enter key, and you'll go to that cell.
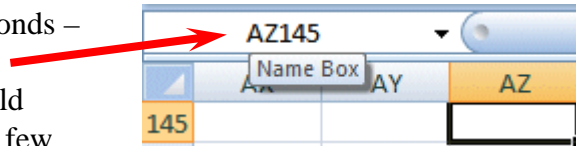
If you want to go to the last column on the right, hold down the Ctrl key and tap the right arrow key.
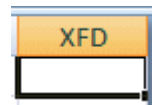
If you want to go to the last row at the bottom, hold down the Ctrl key and tap the down arrow key.

Now that you have the "feel" of how to move around the Excel spreadsheet, **go to** the **cells** as **indicated below** and **type-in** the following:

C1 **(Your Name)'s Budget.** It should **look similar** to **the image below**. Do not tap Enter when you finish
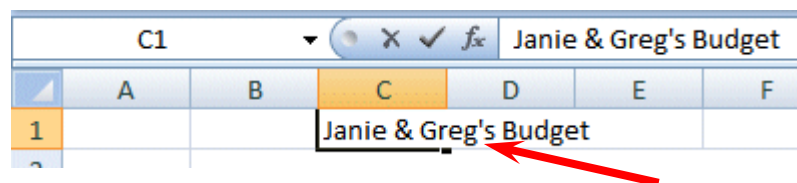
Look at cells **C1** and **D1**. Notice how your **entry has spilled over from C1 into D1**. Sometimes this is a problem, and sometimes it is not.

Tap the **Enter key** and then **click-**on cell **D1** and **type-in** the word **BONZO** and **tap** the **Enter** key**.**
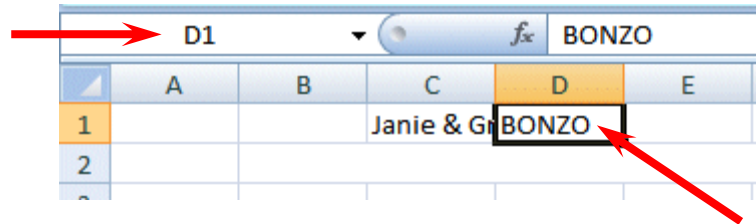
Notice how **BONZO** now **COVERS** the **right part of your original entry**!!   M**ove your cursor over** cell **C1** and **click-on it**. Look at the upper part of the spreadsheet, just above the cells where you typed BONZO. Your name and the word budget are still there! Bonzo only **COVERED** the **portion in cell D1**. **See the image and arrows below.**
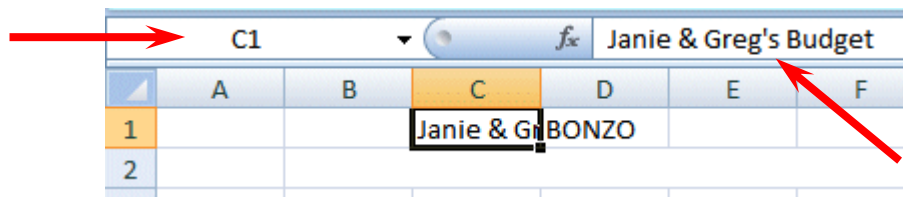
There are **several ways** to **take care** of this. For the moment **move back** to cell **D1** and **click**-on cell **D1**. **Tap** the **Delete** key (above the arrow movement keys on the **keyboard**). Notice that **Bonzo disappears** and your **entire entry reappears**. This is one way to expose the entry. We'll look at some others as we go along.

Now we'll continue entering text and data. We think that creating a simple personal budget would be a logical way to show you how a spreadsheet "works." **Move** to the **following cells** and **type-in** the **information indicated**. You can click-on each cell and then type-in the entries.

If you happen to **make a mistake** simply **retype the entries**. Later on we'll see how to edit mistakes. Any time you want to replace something in a cell you can simply retype and the new entry and it will replace the old one.

Cell	Type-in
A3	Income
B4	Parents
B5	Job
B6	Investments
B7	Total
A10	Expenses
B11	Food
B12	Beverages
B13	Parties
B14	Miscellaneous
B15	Total

Your **spreadsheet** should now **look similar to** the **image** on the **right**.

At this point you probably **noticed**, the words "**Investments**" and "**Miscellaneous**" **run over** the spaces given in the cells. Do not be concerned at this point. We'll soon fix this.

Now, **type** the **numbers** in the **cells indicated:**

C4	**300**
C5	**50**
C6	**150**

When you **type**-in the **150**, **tap Enter**.

Your **spreadsheet** should **look like** the image on the **right**.

Notice, when you enter text that the **words** line up on the **left** side of the cells. When you enter **numbers**, they line up on the **right** side. This is because we are using the United States (English) version of Excel. Other international versions will line up logically for their text and monetary forms.

We would like to **place an underline** at the **bottom of the three figures** so that we can **indicate** a **total below** – in cell **C7**. Point to cell **C7** (with the mouse). That's where we want the line -- **always move the cursor to the place where you want to insert a line**. With the Arrow on cell **C7** tap the **RIGHT** mouse button.

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A sub-menu with a caption **Format Cells appears**.

The **RIGHT click** will "**always bring up**" a **menu** that is "**tailored**" to the "**place**" **where you click**. This will work in any Microsoft Windows product. You can always **tell "where" you click the right mouse** button for the **cursor arrow will always be in a corner of the menu that** appears – exactly where you clicked the right mouse button..
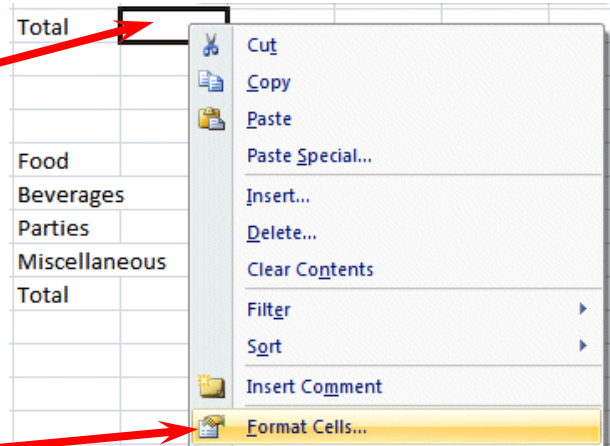
Select **Format Cells.**

When the Format Cells menu screen (below) **appears,** select the **Border Tab**.

Look at the **Line Style** box on the **right side** of the **menu screen**. There are several types of lines that you can choose. Point to the **thick single line** in the **Style Area (see arrow)** and **click** the **left** mouse button. A **box** will **go around the line**. Look at the area which says **Border.** Point to the **upper part of the Text box (see arrow)** and **click** the **left** mouse button. A **thick black line will appear** at the **top** of the **Text** box.
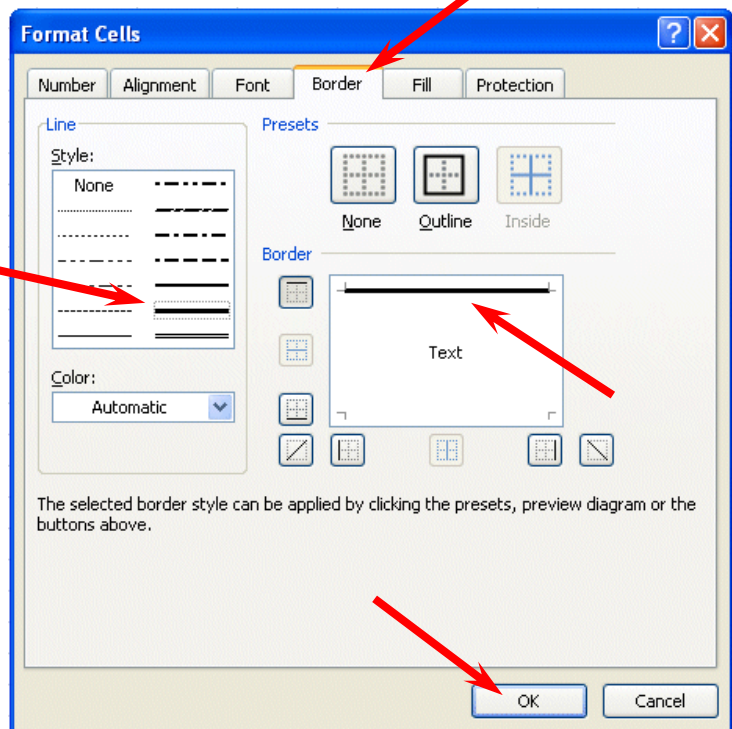
If the **thick line does not show-up at the top** of the **Text box**, **click-again** at the "top line area in the Text box" and the line will "disappear". Then click-on the thick, single line in the Line Style box again and repeat the previous instructions. If, somehow, you make a **mistake**, simply **click** "**on and off in the Text line boxes.**" You will notice that the lines appear and disappear. This is called a "toggle" in computer "talk." So, work at this until you get the line on the top of the cell. We have indicated that we want a single thick underline at the top of the cell C7. Point to **OK** and **click** the **left** mouse button.

When you **return** to the **spreadsheet, click somewhere other than cell C7**.   This is called "**clicking away**." You should now **see** a **line** at the **top** of cell **C7**. Sometimes the box highlighting a cell hides the lines. If you "messed-up", try again.

Now type in the numbers in the cells indicated.

      C11   **30**
      C12   **50**
      C13   **150**
      C14   **70**   (**After** you **type 70, tap** the **Enter key**)

Now, **underline** the **top** of cell **C15** like you did cell **C7**.

Your spreadsheet should now look like the image on the right.

Widening Columns

You probably **noticed**, as you typed in the numbers, **some** of the **words** were just **too wide** for the default **cell width** (Investments and Miscellaneous). Let's **widen column B** to take care of this.

Slowly move the **mouse arrow** to the **right edge** of the **B** cell (**between the B and the C**). The cursor will turn into an **arrow pointing right and left with a small vertical line in the middle** (see arrow below). **Hold** **down** the **left mouse button** and **move** (drag) **the line to the right.**
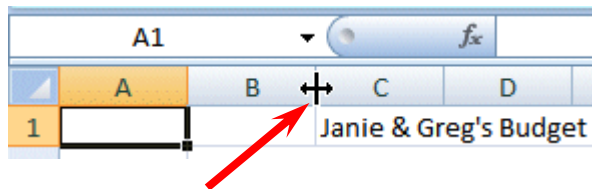
As soon as you **start to move (drag)** the **mouse,** a **dotted vertical line** will **go down the spreadsheet** and it will **move as you hold down the left button and drag the mouse to the right**. **Keep moving your mouse** to the right **until** you are **past** the **widest word -** and a bit more (for some space). Release the button. The column is widened. Notice, above the two headed arrow cursor, that as you hold down and drag, it indicates the current width of the column.
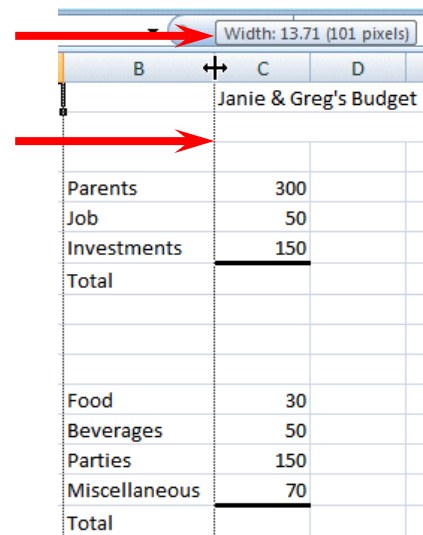
6

Here is **another way to widen a column**. Point to the **B at the top of column B** (in the **Gray** area) and **click** the **left** mouse button (The **cell** should turn **dark blue** and the **column light blue**.).

Now, **keeping** the **cursor** somewhere in the "**blue**" area, **click** the **RIGHT Mouse Button**. Notice that a **menu** with **Column Width…** appears. **Click**-on **Column Width…** A new Column Width menu appears. **Type** in **15** and **click**-on **OK**. This is another way to widen a column.
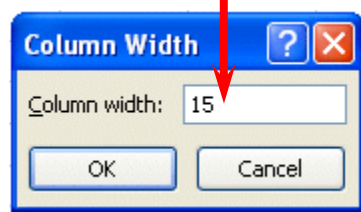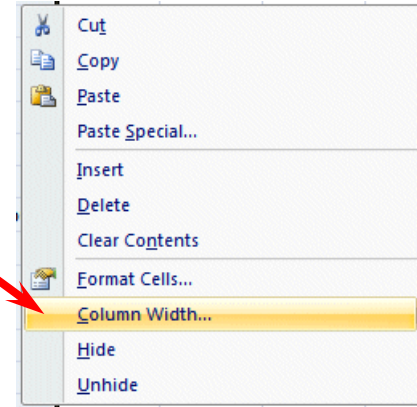
Inserting Rows

Oops... a **mistake** (on purpose). We **haven't left enough room** at the top of the spreadsheet **to insert** some budget **months**. So... move the cursor to the **gray 2** along the **left** edge (this is the second row) **so we can insert two new rows.** **Click** the **left** mouse button. You will notice that the whole row goes **light blue and the 2 turn's dark blue.** **Make sure** the cursor **arrow** is either **on the 2** or **somewhere in the blue row**.

Click the **RIGHT** mouse button. A drop down menu will appear. Point to **Insert. Click** the left **button** on **Insert**. **Notice** how **one row** was **inserted** and how **everything below moved down**. Do this **again** to **insert another row**. Excel, and all spreadsheets, will remember where they moved your work and automatically adjust for these changes. **Income** should **now** be in **cell A5**.

Aligning Cells

Now we'll type some more text. Go to cell

**C3**   **SEPT (Type-in SEPT** and **tap** the **Enter** key**)**

Notice how **SEPT** is **automatically left aligned**. Logically, since you are using Excel, the English version, the text is left aligned so that all of the text entries will line up nicely in the column cells. We would like to **center SEPT** in **cell C3**. **Click** on cell **C3** to "**mark**" the cell. One way to **center SEPT** is to simply **click-on** the **Center button** in the **button bar** at the **top of the screen**. **Make sure** that you are **ON cell C3,** then **click-**on the **center button** (**see image above right**). You'll notice that SEPT is now centered in cell C3.
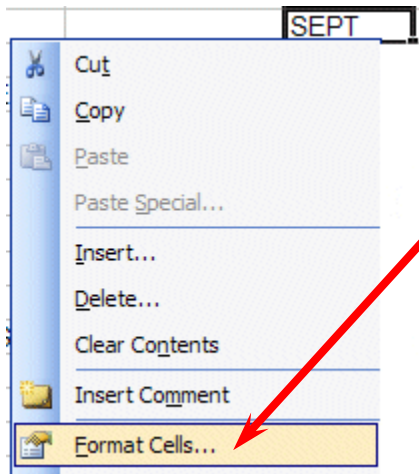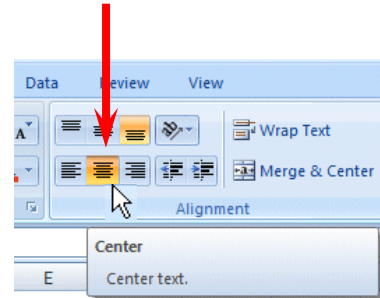
Here is another way to **center** SEPT. **Click RIGHT** on cell **C3**. Then click on **Format Cells.**

When the **Format Cells Menu appears, click-on** the – **Alignment Tab** and then **click-on -- Horizontal - Center --Vertical - Center --** then click **OK**. Try it.

This is how you can align words for neatness. You can also point to several cells you want aligned and do this. We'll try that next.
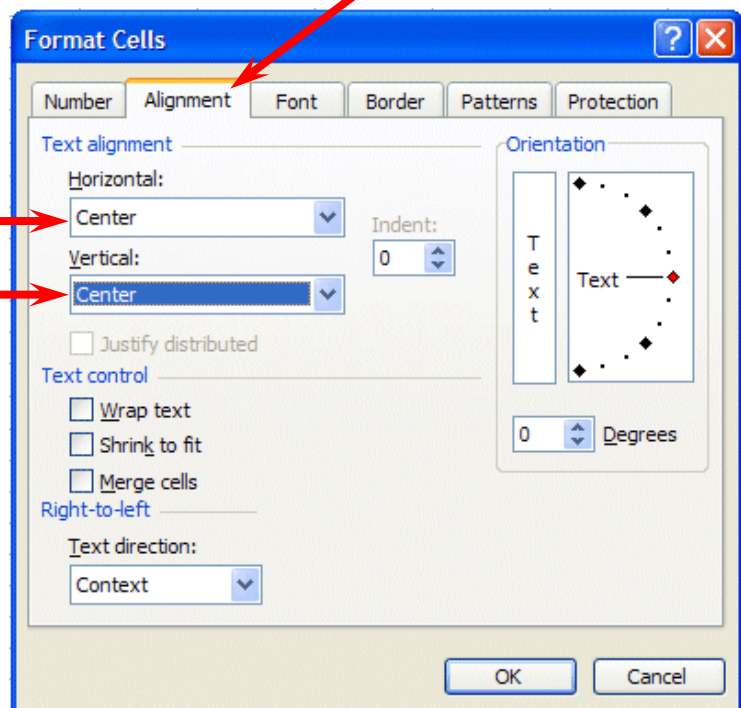
Now type the below text in the cells indicated.

D3   OCT
E3   NOV
F3   DEC
G3   MONTHLY TOTALS   (**tap** the **Enter** key and then **widen the width** of
                                                  Column G)

Next we'll highlight cells **C3 through G3**. To do this, point to **C3** and click the **Left
mouse button**. Then, **holding down** the left mouse button, **drag (move) the mouse to the right
through G3 – when the cells are highlighted – take your finger off of the left mouse button**.

Then **point** to the **group of cells** and click
the **RIGHT** mouse button to bring up
the **Format Cells** menu. Click the
Alignment Tab and choose **Center
(vertical & horizontal)**. Then point to
OK and **click** the **left** mouse button. All
of the cells will be as centered. You could
also click the **Center button** as you did before.

Don't forget to **widen Column G** and **MONTHLY TOTALS. You know what to do.** Move
the cursor over the line between cells G and H and drag the line to the right to widen the G
column, just like you did a few minutes ago.

Saving Spreadsheets

We have done quite a bit of work so now is a good time to save your spreadsheet.

If you have used previous versions of Microsoft Office, **2007 Office will be quite different** - in
many ways. You've already **noticed** the **Tabs** and **Ribbons**, and that there is **no File choice** in a
Menu Bar. Many "selections" have **changed significantly** in 2007 Office. This is one of them.

Microsoft Office Button

The **Microsoft Office Button** has **replaced File** in the Menu Bar. In the **upper left corner** of your Excel 2007 screen you will **see** a button similar to the **image** on the **right**. This is the **Microsoft Office Button**.
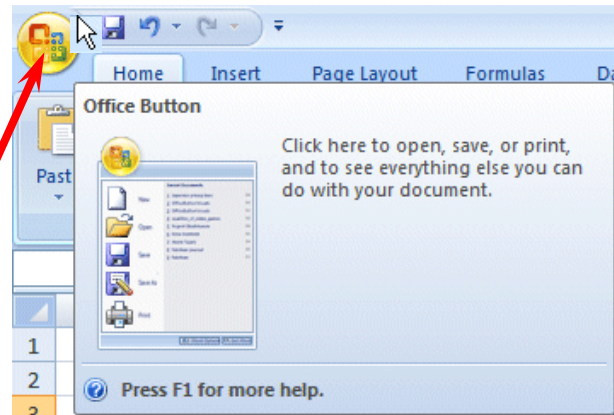
Click the **Microsoft Office Button**.

You will now see the Excel 2007 Microsoft Office Button selections.

First, **notice** that **many of the "old" File-Menu Bar choices** are **included in this menu** (they are all here – we'll show you.)

When we **move** our **cursor** over **Save As** an expanded menu of **Save choices** appear on the **right**.

Notice that You can save your spreadsheet in many different formats.

If you save as **Excel Workbook**, it will **save** your spreadsheet **in an .xlsx format**. This will save your spreadsheet in an **Extensible Markup Language (XLS) format**. This format **requires less storage** space and makes the **spreadsheet** more "**shareable**" with others. However, folks using previous version may have a problem opening your spreadsheet (and may have to download a special program to assist them).

Many folks really like to save their files in **Portable Document Format (PDF)**. One of the neat **new features of 2007 Office** is the ability to save applications as PDF.

For this introductory Excel tutorial, we'd suggest that you save in the Excel 97-2003 Workbook format.

It's your choice, so you select the format you desire.
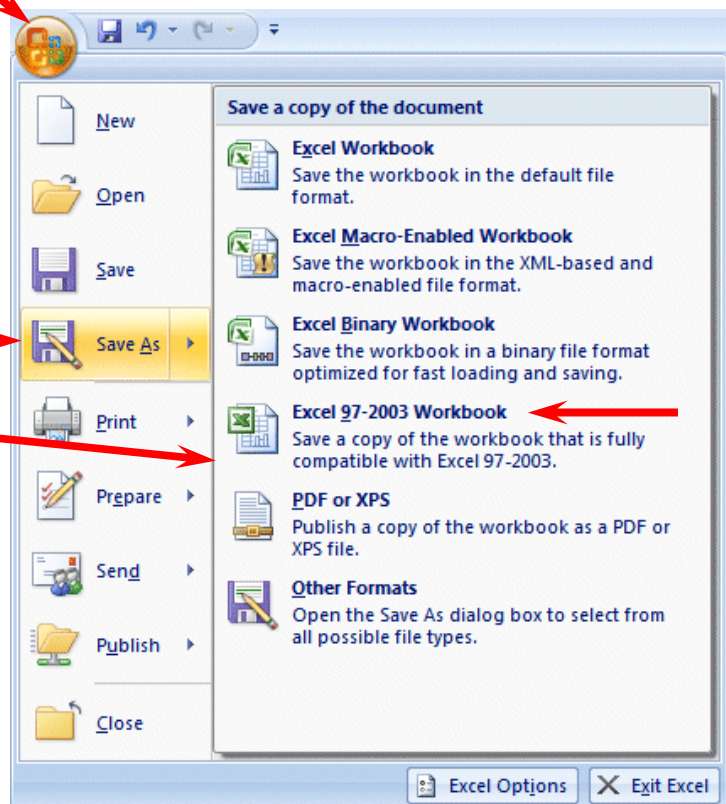
Notice in the **upper left corner** that there is a "**box**" to the **right** of **Save In:** with a **down pointing arrow** to the **right**. **Click-on** the **arrow**. This will **show** you **all** of the "**drives**" and "**folders**" where you may save your work**.**
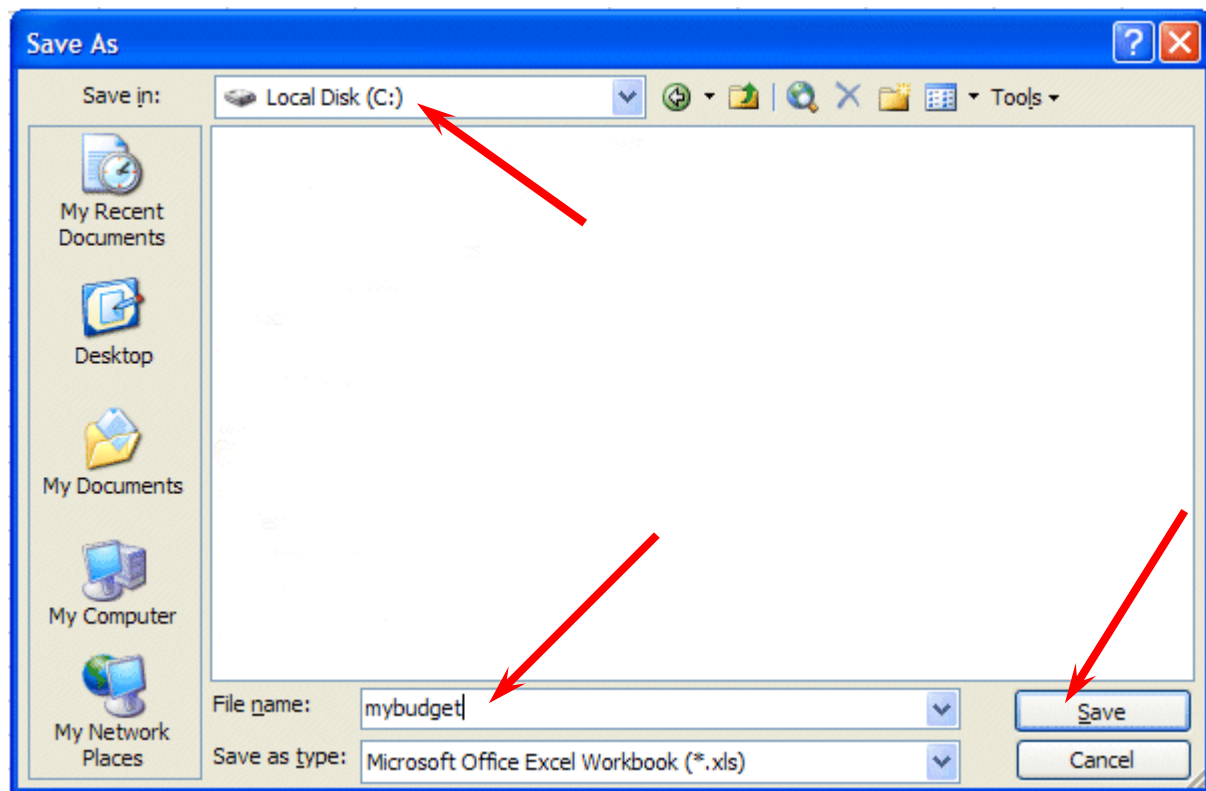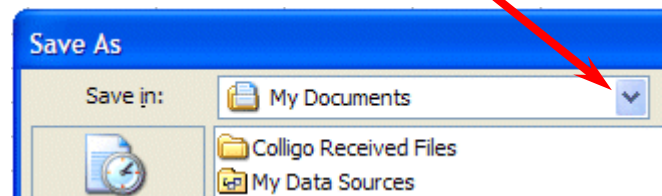
When you see the drop-down list in the Save in: area, choose the drive where you want to save your file. If you are going to use a diskette, **put a formatted 3 ½ diskette in the A Drive,** then **click**-on the **3 ½ Floppy (A):.** We are going to save our file on the Local Disk (C:) – our hard drive, so we chose that drive in the image above (see **top arrow**).

To the right of **File name:,** delete the information (which is in the box) and **type-in MYBUDGET** (see **lower left arrow above**). This is the name under which you are saving your file. (In the future you will choose logical names for your spreadsheets as you save them.) Now point to **Save** and **click** the **left** mouse button (see **lower right arrow above**).

Exiting Spreadsheets

Anytime you need to leave your spreadsheet, click the **Microsoft Office Button** in the **upper left corner** of your **Excel screen,** then **click Exit Excel**. If you **have not saved** your spreadsheet, a reminder box will appear **asking you to do so**.
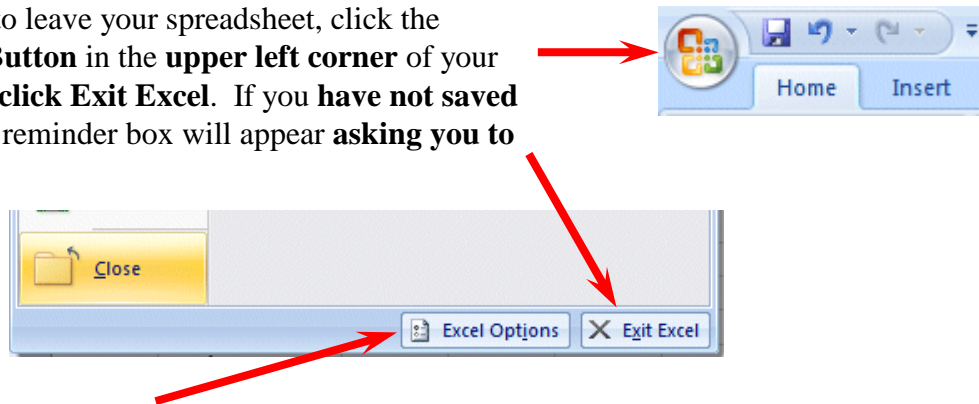
Notice the **Excel Options button** to the **left** of **Exit Excel**. Earlier, we indicated that all of the choices under File in the Menu Bar are still available using the Microsoft Office Button. **Click** the **Excel Options button.** The **Excel Options menu screen (below)** will **appear**. As you can see, all of the choices available under File in the menu bar are here – as well as many more.
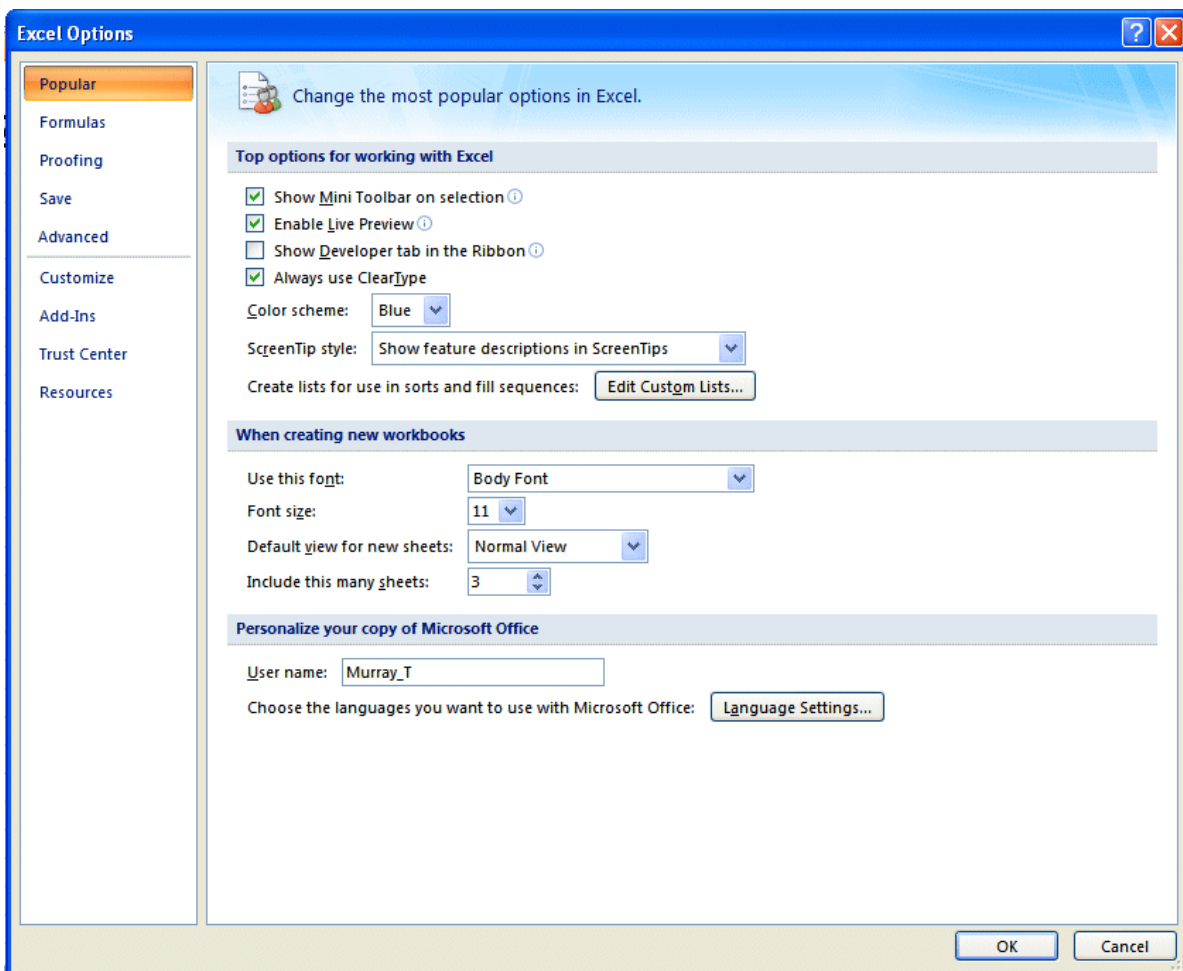
If you **click** the **Resources** selection in the Excel Options menu, you will see some great on-line resources available to assist you with Excel.
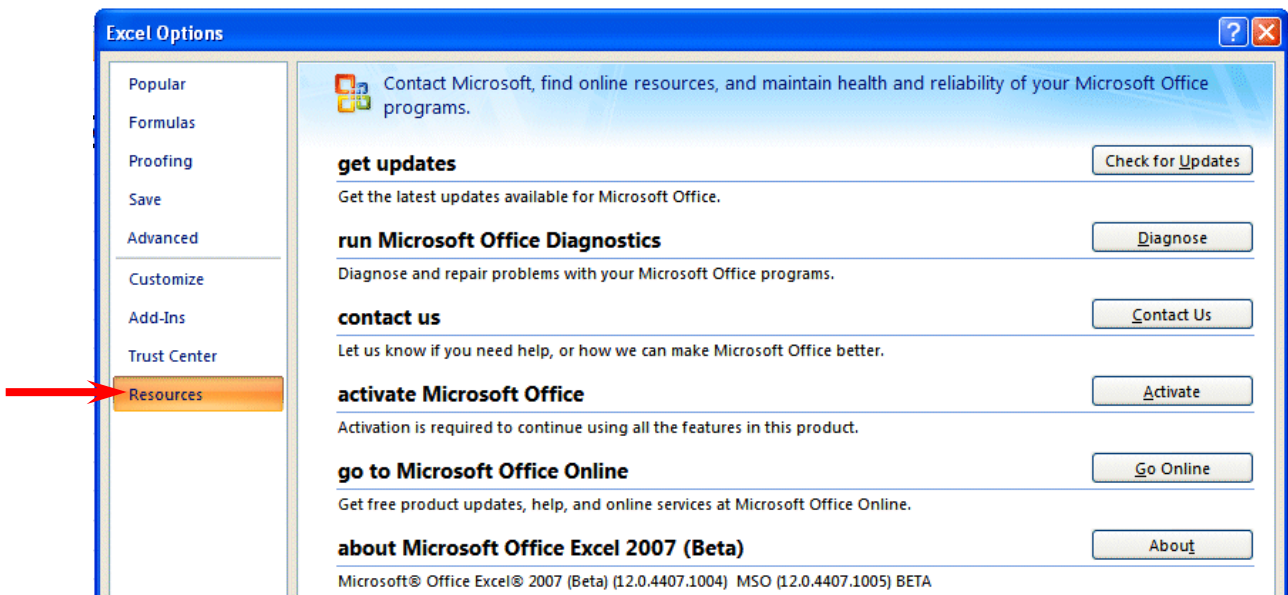
Retrieving Spreadsheets

When you need to **return to a spreadsheet, open Excel,** as you did **on Page 1**. When Excel opens, **click** the **Microsoft Office Button** in the upper left corner of the Excel screen.

When you click the Microsoft Office Button you will **see**, on the **right** of the Microsoft Office Button **menu screen** your spreadsheets (**Recent Documents**). Your **MYBUDGET** should be on the list. **Click** on MYBUDGET and your spreadsheet will **open**.
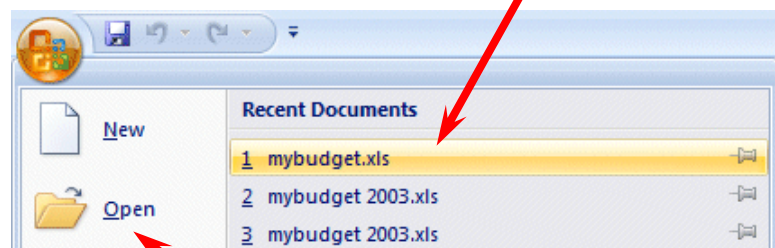
If you **do not see your spreadsheet**, **click** the **Open** button and follow the steps you used to save your spreadsheet (on Pages 9-11) – except **choose Open**.

Adding Numbers

Next we want to learn how to add numbers. There are several ways to do this. Each method has its advantages and disadvantages.

Begin by **moving** your cursor to cell **C9,** and **clicking**-on cell C9.

Always move to the cell where you want the answer to be located.

TYPE-IN METHOD

We want to **add** the three numbers in cells **C6, C7** and **C8**. To use this method **type-in** (**using the keys on the keyboard**) the following formula in cell **C9**:

$$= C6 + C7 + C8$$

Your spreadsheet should look like the image to the right as you are typing in this equation. **Note**: you **don't have to use capital (upper case) letters** – we only did this because they are easier to "see" in the tutorial.

4			
5	INCOME		
6		Parents	300
7		Job	50
8		Investments	150
9		Total	=C6+C7+C8
10			

Now – **tap** the **Enter** key. Then, **click** on cell **C9 again**. The **total** of these cells will now **appear** in **C9**.

4			
5	INCOME		
6		Parents	300
7		Job	50
8		Investments	150
9		Total	500
10			

f_x	=C6+C7+C8
C	D
Janie & Greg's Budget	

When you have completed typing your equation, you will **see** this **formula** in the area **below the menu bar**.

Change the number in cell **C6** to **500** (and **tap Enter**). See how the total **AUTOMATICALLY recalculates!!!**

THIS IS THE TRUE POWER OF THE SPEADSHEET !!!

Whenever a number is entered in a cell the entire spreadsheet will automatically recalculate.

Something happened here. **Notice**: **you typed** an (**equal sign**) = **before the cell location**. If you had typed in C6 + C7 + C8, Excel would have thought this entry was a **word (text)** and this entry would have shown as you typed it.

Try this if you want. Any time you "create" an error in Excel, you can simply re-type or edit the formula to correct the error.

The **Type in Method** is really easy if you have a **few numbers and can see their cell locations on the screen**. If you have a lot of cells in the formula, which are on several screens, this is not such a great method. The next method will work a lot better for numbers "all over the place."
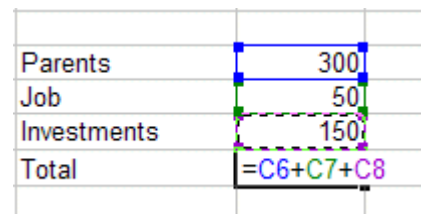
Subtraction, Multiplication, and Division

You can **type** a (**minus**) **-** **for subtraction**, (**asterisk**) ***** **for multiplication**, and (**slash**) **/** **for division**. As you become more skilled we'll, build some effective formulas – using these features.

Point Method

Move to cell **C9** again and **click-on it**. We'll now add the numbers a second way. **Tap** the **Delete key** on the **keyboard** to **delete** the **current formula**.

First, **tap** the **=** and then **POINT (move)** the **cursor** over cell **C6** and **tap** the **LEFT mouse button on cell C6** (you will see a marquee box go around the cell). Now **tap** a **+** and **move** cursor to **C7**, **tap** the **left mouse button,** and **tap** another **+** and **move** the cursor to **C8 and tap** the **left mouse button** (**notice** how as you **" + and point "** the addition **formula is being built in cell C9**), now **tap Enter**. The **same formula** can be **built** using the **arrow movement keys on the keyboard** (except that you don't have to click each cell as the cell is marked - when you move with the arrow keys). **Notice**, as you are **entering the cell addresses**, that as you place another **+** in the **formula**, that the **cursor** "**returns" to cell C9**. Also **notice**, as you **point** to each **cell** that it is **highlighted** by a "**marquee box**." This "**tells**" you what **cell** you've **pointed to**. Pretty neat!

Parents	300
Job	50
Investments	150
Total	=C6+C7+C8

This **method is good** when you need to move to **numbers that are spread out all over the place**. Some people like it best and use it all the time -- it's your choice.
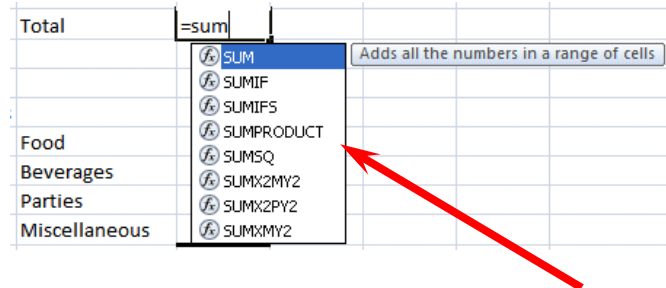
Function Method

Move again to **cell C9** and **Delete** the **formula** by **tapping** the **Delete key**.

Now **type in** the following:
=**SUM(**

[This **tells Excel** that we are going to
sum some **numbers** in a **RANGE**
which will follow the =SUM(]

Notice – a new feature in Excel 2007: As you are typing SUM in cell C9 that a **pop-up menu appears** under the cell. What you see are mathematical functions. One of these is SUM. As you become more comfortable with numbers in Excel, you can select the functions you need without typing in the entire function. We'll get into this a bit more later.

There are **two ways** to put in this range:

Arrow Key and Anchor Method: With the **keyboard arrow keys, move the cursor to cell C6**. As you move you will notice that the **cell** where the cursor is located **appears after** the =**SUM(.** When you get to **C6** tap the **. (Period) Key.** This is called an **ANCHOR** and **holds one end** of the **RANGE** in place. You will notice that a **C6:C6 appears** in the **formula area under the button bar**. This is a **one cell range**. Now **move, with the arrow keys, to cell C8**. See how cells **C6, C7 and C8 are highlighted**. This indicates the **Range is C6:C8**. Excel assumes, logically, that these are the numbers you want to add. Now **tap Enter**. The numbers still add, but now the formula reads =**SUM(C6:C8)** instead of =C6+C7+C8 like it did before.

Mouse Method: **Move** again to **cell C9**. **Delete** the **formula** in **cell C9** by **tapping** the **Delete** key. Type in   =**SUM(**   as you did before. **Point** to Cell **C6 –** with your **mouse cursor**. **Click and hold down the left mouse button** and **move/drag** the cursor down to Cell **C8** (Cells C6, C7 and C8 should be highlighted) – **take your finger off the left mouse button**. **Tap Enter**.

This =**SUM Function** is a **great way** to **add a lot of numbers, or a block/range of numbers**. By simply anchoring, and using page downs, or using the mouse, you can highlight lots and lots of numbers to add quickly. However, since it only <u>sums</u> you can't do subtraction, etc.

Point to cell **C9** again. **Tap** the **Delete** key to remove the formula currently in cell C9. **This is a really important DELETE**, since what we'll explain below won't work correctly if you do not delete the formula in cell C9.
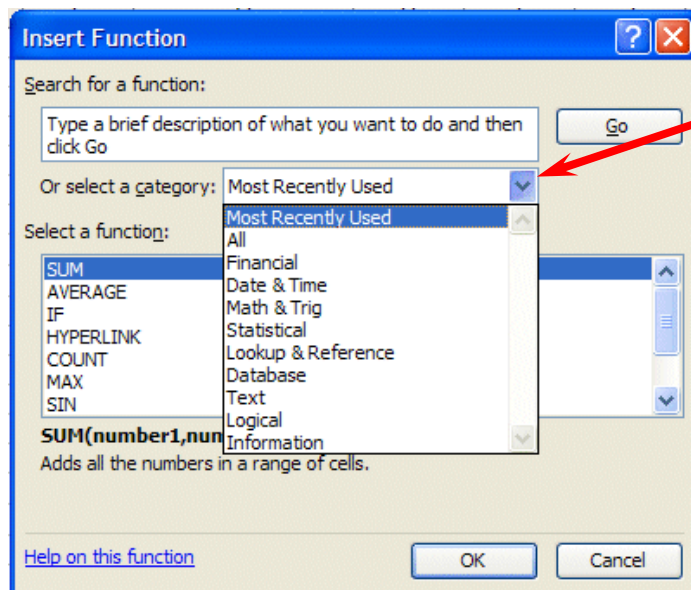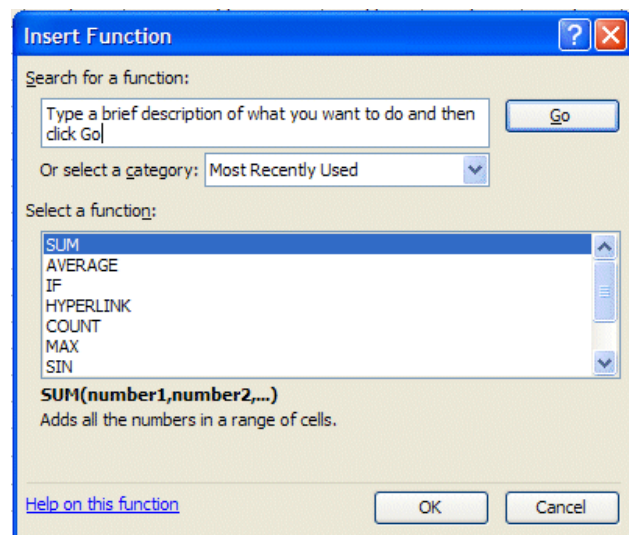
Functions

There are a number of **formulas built into Excel**, like **Sum**. These formulas are called **Functions**.

Another new feature of Excel 2007 – Tabs/Ribbons. Look at the **top** of your **Excel screen** and **click** on the **Formulas Tab**. The Formulas Ribbon will display.

On the left of the **Formulas Tab/Ribbon** is an I**nsert Function button. Click** the **Insert Function button**.
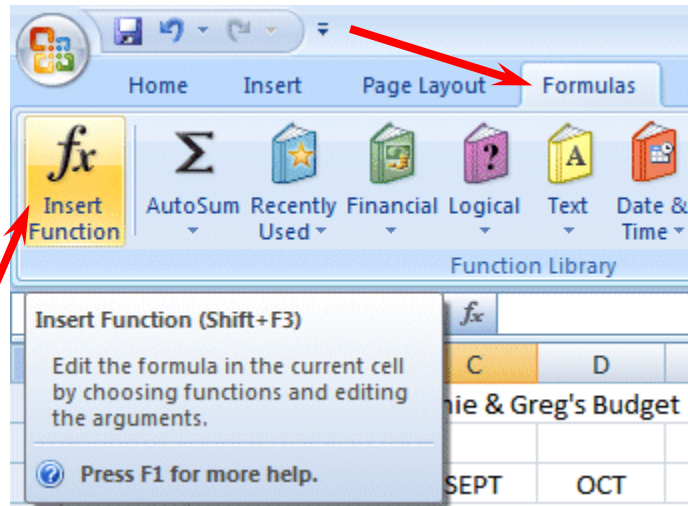
The **Insert Function menu screen** will **appear** (**image at right**).

Let's work with the **Insert Function** menu screen. **Click** the **small down arrow** to the **right** of **Or select a category:** (see **arrow** at **left**).

In the drop down menu that appears you can see that there are all kinds of formulas (functions) that come with Excel spreadsheet (e.g. statistical, mathematical, financial, etc.). Instead of having to go to math, financial, or statistical tables in a book, you can enter data from your spreadsheet into the formulas and receive answers.

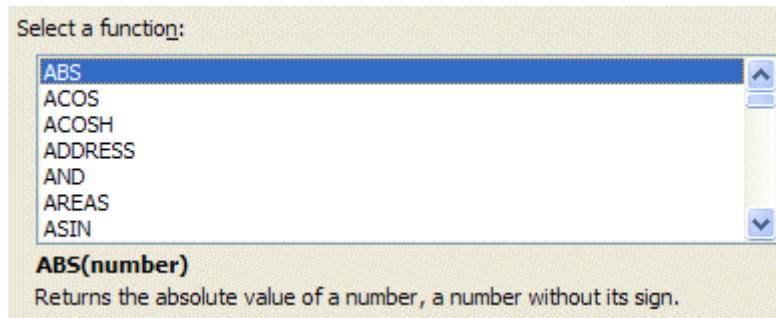This is a really great, timesaving feature. We'll now show you how to use the **Help features** of Excel 2007 to work with, and understand, these functions.
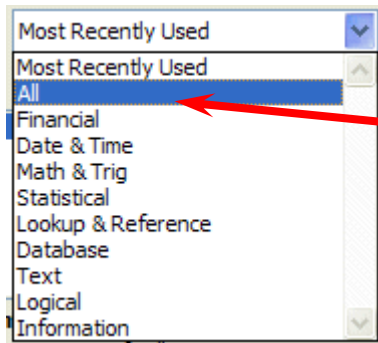
Click All in the **drop down menu**.

The **Select a function menu** will look like the **image below**.

Look at all the functions (formulas)! We'll just go through how to use the addition formula (SUM) in this tutorial. If you need these formulas in the future, you'll know they're here.

Use the **elevator bar** on the **right** side of the Select a function menu screen to **move down** the list until you see **SUM**. **Click SUM**.
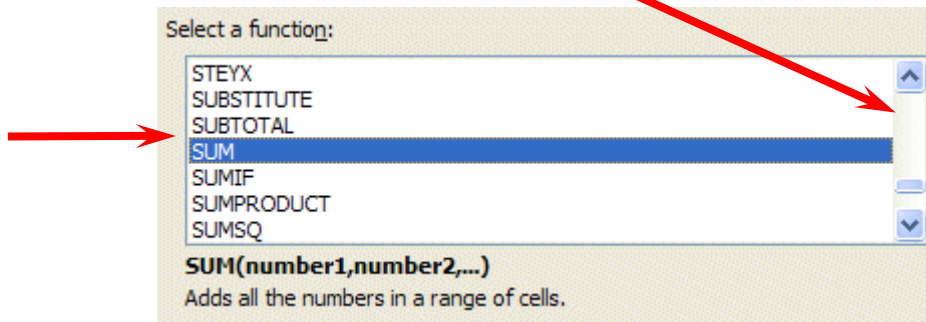
Then **click OK**.

Remember, you **clicked**-on Cell **C9** – which was "**empty**" because you deleted the formula in that cell.

When you **clicked OK**, the **Function Arguments** menu screen (**above**) **appeared**. If you **look** at the **top of the screen** in the **SUM area**, you'll **see** that Excel 2007 has "**guessed**" that you desire to **add** the **nu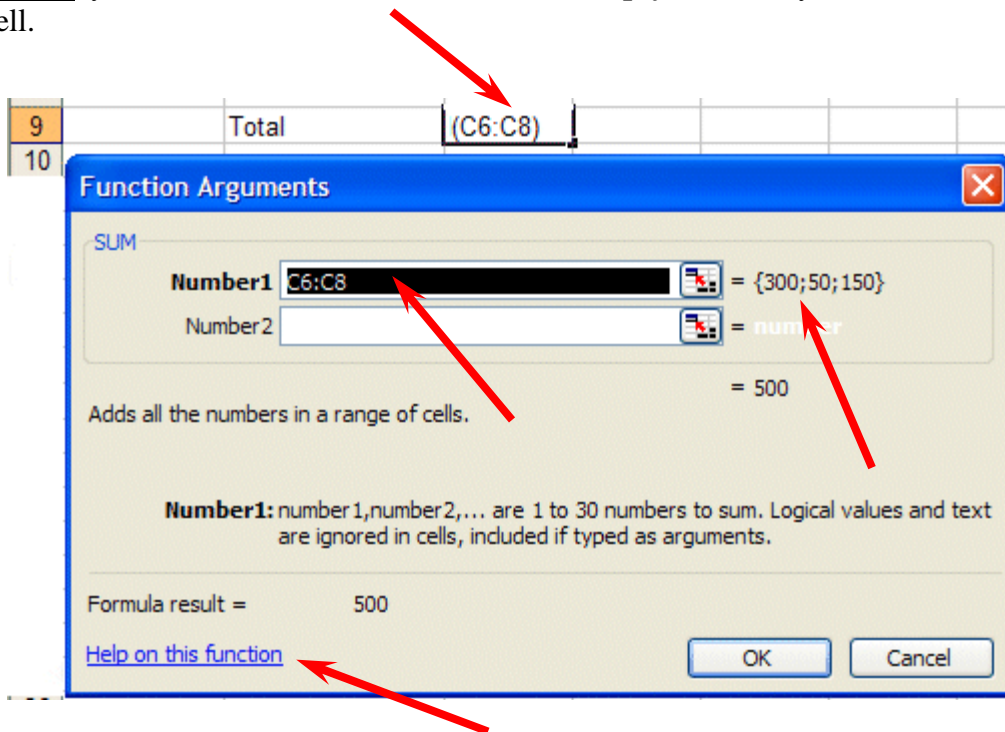mbers above cell C9** – where you clicked in your spreadsheet. Smart Excel! **Notice** that it indicates that **cells C6:C8** will be added (sum cells C6 through C8 – the colon (:) means "through." It also indicates the numbers in cells C6, C7 and C8 and gives you the sum {300;50;150} = 500 (right arrow above).

But it's a little unclear how Excel did this. The **Help on this Excel Function** is excellent. So, to see how this SUM equation works, we'll go to Help. To do this, **click Help on this function** in the lower left corner of the screen (**see lower left arrow above**).
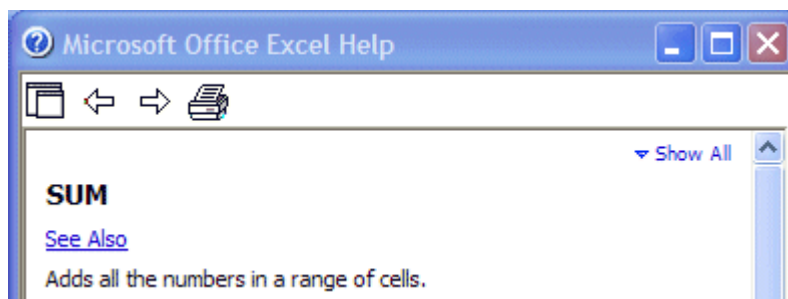
You will **see** a **Microsoft Office Excel Help window** appear (**similar** to the one **above**) that will show you **how to use** this **SUM function** (or any function).

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One of the really **neat** things about these Help windows is that there are **examples** for each function. We **moved down** the **SUM help screen** using the **elevator bar** on the **right** of the **help screen**. The **bottom** of the screen **looks like** the **image below**. Spend a few minutes looking at the SUM Help window and notice all of the features.

<table>
<tr><td colspan="2">**Example**</td></tr>
<tr><td colspan="2">The example may be easier to understand if you copy it to a blank worksheet.</td></tr>
<tr><td colspan="2">▶ How?</td></tr>
</table>

	A
1	Data
2	-5
3	15
4	30
5	'5
6	TRUE

Formula	Description (Result)
=SUM(3, 2)	Adds 3 and 2 (5)
=SUM("5", 15, TRUE)	Adds 5, 15 and 1, because the text values are translated into numbers, and the logical value TRUE is translated into the number 1 (21)
=SUM(A2:A4)	Adds the first three numbers in the column above (40)
=SUM(A2:A4, 15)	Adds the first three numbers in the column above, and 15 (55)
=SUM(A5,A6, 2)	Adds the values in the last two rows above, and 2. Because nonnumeric values in references are not translated, the values in the column above are ignored (2)

The **bottom** of the **SUM help screen looks like** the **image** on the **left**. **Notice** that it gives you **examples** from **a small spreadsheet** that has data in cells A1 through A6. It uses these numbers in the examples at the bottom of the help screen.

When you have reviewed all of the help you care to see, **carefully click** the **X** at the **upper right corner** of the **Microsoft Office Excel Help blue bar** to **close** the Microsoft Excel **Help window. If you accidentally close the spreadsheet, simply reply yes to Save, and then re-open the spreadsheet as you did on Page 13.**

The **Function Arguments** menu screen will still be on the screen.

9		Total	(C6:C8)		
10					

Function Arguments ☒

SUM

Number1 │C6:C8   │ 🔢 = {300;50;150}
Number2 │   │ 🔢 = number

= 500

Adds all the numbers in a range of cells.

Number1: number1,number2,... are 1 to 30 numbers to sum. Logical values and text are ignored in cells, included if typed as arguments.

Formula result =   500

Help on this function   [OK] [Cancel]
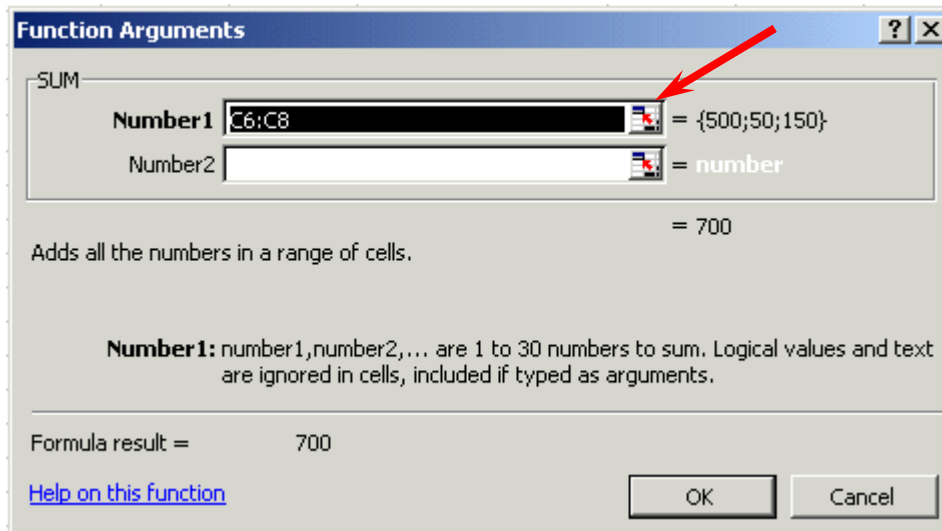
As you can see, in the area to the right of **Number 1**, the "Wizard" has **"guessed"** that you want to add the numbers in the range **C6 to C8 - (C6:C8)**. Now that you are becoming skilled with Excel, we'll try something special. **Carefully**, **point** to some **"plain part,"** in the **gray area above**. **Click** and **hold down** the **left** mouse button, and **drag** the above **SUM box "away"** so that you can **see** your **numbers** in **C column cells**. When you have done this, release the mouse button. Now **click**-on the "**small box**" on the **right edge** of the **Number 1 area (see arrow above)**. It has a little **red arrow** in it.

The **below Function Arguments** window will **appear**.
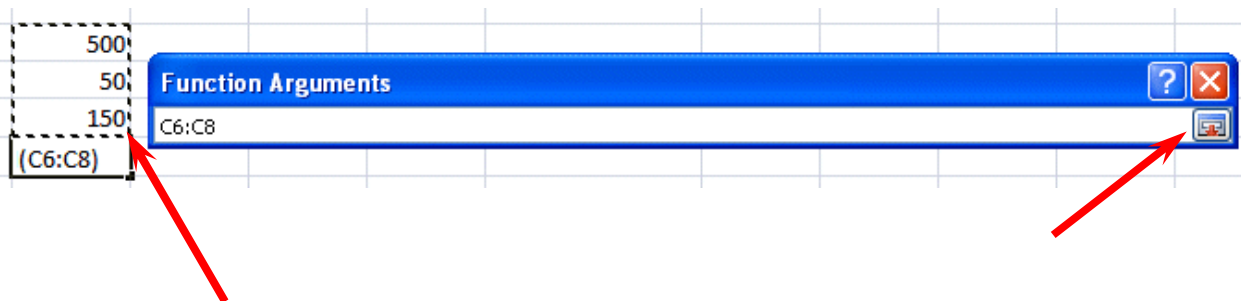
Highlight cells **C6 to C8** in the spreadsheet (**click-on C6, hold down the left mouse button, and drag until the three cells are highlighted**). A **"marquee"** will begin to **flash** around the cells, indicating they are highlighted (**left arrow above**). The **Function Arguments area will appear as above**. Now **click** the **small button** on the **right** of the **cell** (**see right arrow above**). The **numbers** will **show** in the area to the **right** of **Number 1**. **Click OK** at the **bottom of the Function Arguments menu screen**. You'll **see** that the **SUM formula [=SUM(C6:C8)] shows in the formula area at the top of the screen**. This is a really handy method to highlight a "group" of numbers you want to add.

AutoSum METHOD - ∑

Since we add numbers more than any other operation in spreadsheets, Excel spreadsheet has an additional feature - **Auto Sum**. Move to cell **C9 again** and tap the **Delete** key to **erase** your last formula.

You should still be on the **Formulas Tab/Ribbon**. Notice ∑ **Auto Sum button**. **Click the AutoSum button.**
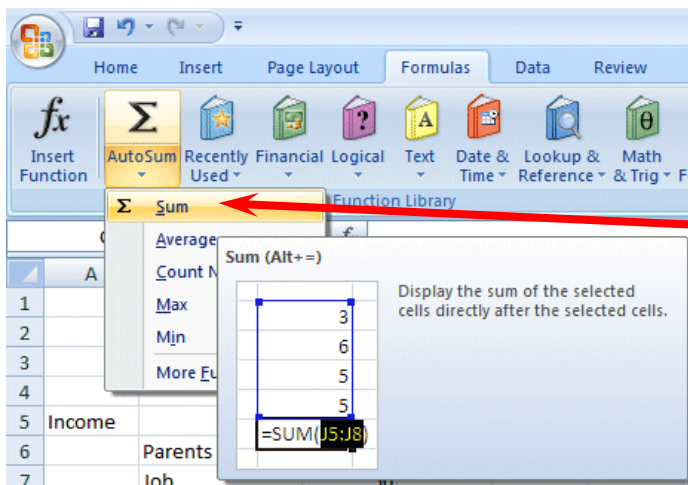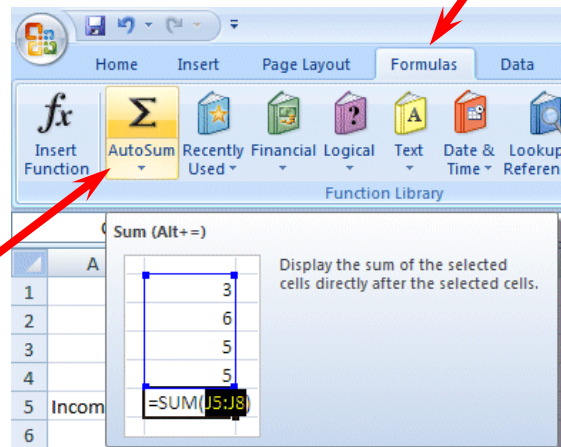
An image similar to the one on the left will appear.

Click ∑ Sum.

WOW !! Automatic addition!! Notice that the **cells**, you'd logically desire to add, have a **marquee around them** and that the **SUM** function is displayed in cell **C9**. You'll need to **confirm** that this is the **correct** formula. So, **tap** the **Enter key,** and the SUM function will now be set in cell **C9**. Any time you want to add using this method just click-on the cell where you desire the total to be and click ∑ **Sum.**
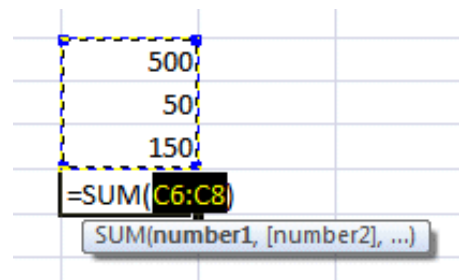
This would be a good time to save your work.

PERIODICALLY SAVE AND REPLACE YOUR WORK IN CASE YOU LOOSE POWER TO YOUR COMPUTER

Now move to cell C17 and add the total Expenses in cells C13 to C16 - using <u>each</u> of the four methods.

While you are **in** cell **C17**, go ahead and **place a line at the top of cell C17** using the format cells – border **method** that you learned on **Page 5.**

Subtraction

In cell **A19 type-in Net Income**. Next, **adjust the width of column A** (Page 6).

Click-on cell C19.

In cell **C19** we want to **subtract** (**-**) the amount in for **Expenses** in cell **C17** from the amount for **Income** in cell **C9**. This can be accomplished by using either the **Type-In** Method or **Point Method**. Go ahead and do this. Don't forget to **tap** the **Enter** key to **confirm** your **formula**.

The formula should look like =C9-C17

More Cell Formatting

We want our **numbers** to **look better**. To do this we'll include **dollar signs** and **decimal points** in our **numbers**. This is done by **using the mouse. Point** to cell **C6**, **hold down the left mouse button** and **drag (move) down slowly to highlight cells C6 through C19**. Your **screen** should **look like** the image **below**.

4			
5	INCOME		
6		Parents	500
7		Job	50
8		Investments	150
9		Total	700
10			
11			
12	EXPENSES		
13		Food	30
14		Beverages	50
15		Parties	150
16		Miscellaneous	70
17		Total	300
18			
19	Net Income		400
20			

Now **point anywhere** in the **highlighted area** and **click** the **RIGHT** mouse button. A pop-up menu will appear. **Click**-on **Format Cells** (like you have done before).

	Clear Contents
	Insert Comment
	Format Cells...
	Pick From Drop-down List...
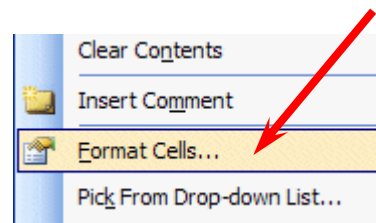
Your Format Cells menu screen will appear – similar to the image at the top of the next page.

Click-on the **Number** "**Tab**" at the top of the **Format Cells menu screen**. Point to **Currency** and **click**-on **Currency.**
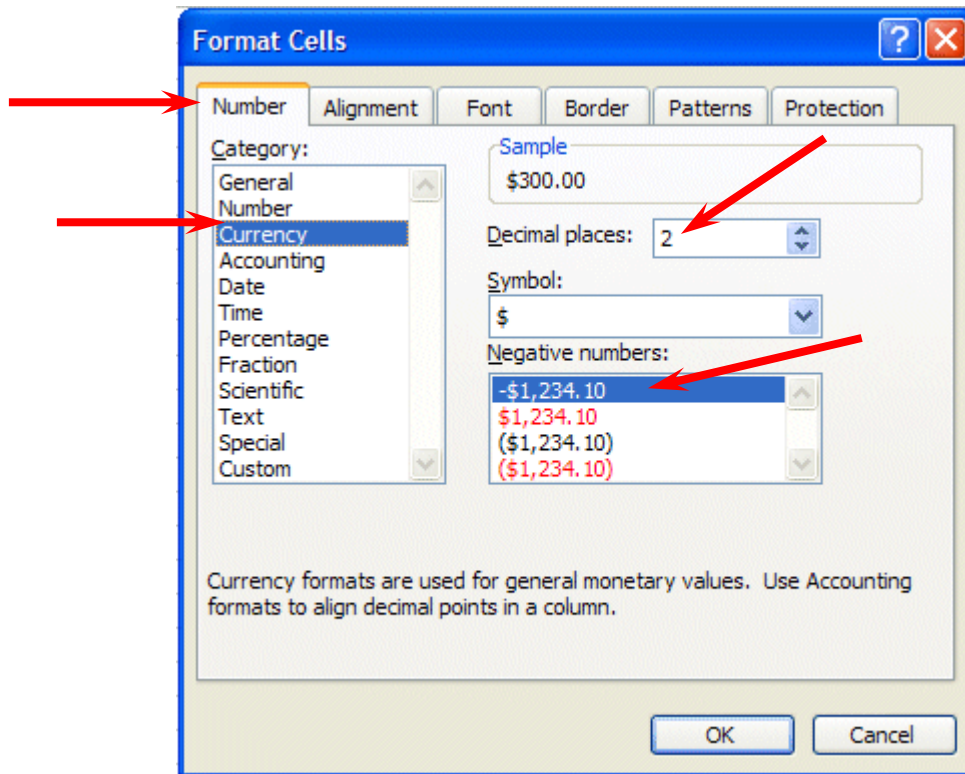
Notice **several things**. The **right side** shows the **number of decimal places. The 2** is the default for cents. **We'll use 2**. **Notice above** the **Decimal Places** that there is a **sample** of what our **number will look like**. At the lower right it **shows how negative numbers can appear,** depending on **your choice**. When a negative number is calculated, it will appear with your choice. Now **click**-on **OK**. All the numbers now have $. If you have large numbers that are **"too wide" for** the current **column** width **you will see** some **######## in** the **cells** where these numbers are located. If this occurs in your spreadsheet, go ahead and **widen** the columns as you did previously (**Page 6**).

4			
5	INCOME		
6		Parents	$500.00
7		Job	$50.00
8		Investments	$150.00
9		Total	$700.00
10			
11			
12	EXPENSES		
13		Food	$30.00
14		Beverages	$50.00
15		Parties	$150.00
16		Miscellaneous	$70.00
17		Total	$300.00
18			
19	Net Income		$400.00
20			

Your spreadsheet numbers should now look like the one on the left.

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Division

Now move to cell **A21** and type in the word **Percent.** We're going to calculate a fun percentage to show you how division works and give you some more practice with numbers.

Now move to cell **C21.** Using either the <u>**Type-In Method**</u> or the <u>**Point Method,**</u> divide (**/**) the amount for **Income** in cell **C9** by the amount for **Expenses** in cell **C17.**

[The formula should look like =C9/C17]

This will give you a horrid number so why not put a **percent symbol** with it. Now we'll **repeat** what we did **above to format our $$$$ (Currency).**

Percentages

Point to cell **C21** and click the **RIGHT** mouse button. **Point** to **Format Cells,** then **click** the **Number tab,** then **click-on Percentage. Select zero (O) Decimal Places. Click OK.** Ta Da !!!   A   **%**.

Your **spreadsheet** should **look similar** to the **image below**.

Copying

	A	B	C
1			Janie's & Gr
2			
3			SEPT
4			
5	INCOME		
6		Parents	$500.00
7		Job	$50.00
8		Investments	$150.00
9		Total	$700.00
10			
11			
12	EXPENSES		
13		Food	$30.00
14		Beverages	$50.00
15		Parties	$150.00
16		Miscellaneous	$70.00
17		Total	$300.00
18			
19	Net Income		$400.00
20			
21	Percent		233%

We could repeat what we did to this point and fill in the Income and Expenses for each of the remaining columns (months). There is a **simpler way** to do this. **Assuming** our income and expense **amounts** are about the **same,** throughout the months, we want to **copy** the **amounts** in **Column C** to **Columns D, E and F**. This will **require TWO "steps**."

First: Move your cursor to cell **C6**. We'll **highlight what we want to copy**; **second**, we'll tell the **spreadsheet where we want to place what we've copied**. So, point to **C6, hold down the left mouse button and drag (move) down the column until cells C6 through C21** are high-lighted. Your **highlighted area** should **look like** the one on the **left**.
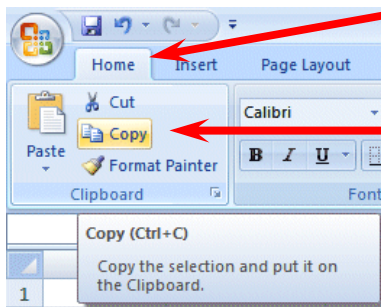
**Click** the **Home Tab** then **click** the **Copy** button.

You will **notice** that once again, when you **highlight** an area, a **marquee** of running lights moves **around** the **copy area**. So, you'll know you highlighted the correct area (**image** on **right**).

Now we'll tell Excel **where to copy** the data. Point to cell **D6, click and hold down the left mouse button and drag down and to the right to cell F21** (This will **highlight three columns** -- OCT, NOV, DEC -- to copy to.). When you have finished your highlighting, your screen should **look like** the **image below**.

Make sure you are still on the **Home Tab** and **click** the **Paste button**. Wow !' All those numbers and dollar signs and formulas - <u>EVERYTHING</u> - was copied in a flash!! That sure saved us a lot of time.
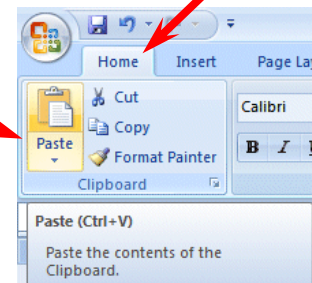
INCOME					
	Parents	$500.00	$500.00	$500.00	$500.00
	Job	$50.00	$50.00	$50.00	$50.00
	Investments	$150.00	$150.00	$150.00	$150.00
	Total	$700.00	$700.00	$700.00	$700.00
EXPENSES					
	Food	$30.00	$30.00	$30.00	$30.00
	Beverages	$50.00	$50.00	$50.00	$50.00
	Parties	$150.00	$150.00	$150.00	$150.00
	Miscellaneous	$70.00	$70.00	$70.00	$70.00
	Total	$300.00	$300.00	$300.00	$300.00
Net Income		$400.00	$400.00	$400.00	$400.00
Percent		233%	233%	233%	233%

Your spreadsheet should look similar to the image on the right.

Click on a **cell away from the area** where the **numbers are located. This will "turn-off"** the **highlight. Tap** the **Esc key** and the **marquee** will also **disappear.**

Change a **few numbers** in **each** of the **months** in **both** the **income** and **expense** areas to see **how the spreadsheet works**.

Notice how all of the formulas, totals, and percentages change – AUTOMATICALLY!!!   This is the POWER of a spreadsheet!!!!

(This will make the graphs we'll create more realistic when we create them later in the tutorial.)

Our spreadsheet now looks like the image on the right.

	A	B	C	D	E	F
1			Janie & Greg's Budget			
2						
3			SEPT	OCT	NOV	DEC
4						
5	Income					
6		Parents	$500.00	$500.00	$500.00	$1,000.00
7		Job	$50.00	$50.00	$50.00	$200.00
8		Investments	$150.00	$20.00	$150.00	$150.00
9		Total	$700.00	$570.00	$700.00	$1,350.00
10						
11						
12	Expenses					
13		Food	$30.00	$100.00	$30.00	$200.00
14		Beverages	$50.00	$100.00	$50.00	$200.00
15		Parties	$150.00	$150.00	$150.00	$500.00
16		Miscellaneous	$70.00	$70.00	$70.00	$70.00
17		Total	$300.00	$420.00	$300.00	$970.00
18						
19	Net Income		$400.00	$150.00	$400.00	$380.00
20						
21	Percent		233%	136%	233%	139%

This would be a great time to Save again.

Now for something to do on your own.

Entering formulas in the Monthly Totals Column

Click cell **G6** (under the title **Monthly Totals**). **Choose one of the formulas you learned earlier to add the four monthly amounts** in the **Parents** row. **Use any of the four methods you desire**. Your spreadsheet should look similar to the image below:

	A	B	C	D	E	F	G	H
3			SEPT	OCT	NOV	DEC	MONTHLY TOTALS	
4								
5	Income							
6		Parents	$500.00	$500.00	$500.00	$1,000.00	=SUM(C6:F6)	
7		Job	$50.00	$50.00	$50.00	$200.00	SUM(number1, [number2], ...)	

After you have **added** the four **columns** in **cell G6**, you'll **copy** the formula in **cell G6** to cells **G7 through G19**. **Click** on cell **G6** and follow the **Copy process** you did on **Page 26**.

F	G
DEC	MONTHLY TOTALS
$300.00	$1,200.00
$50.00	
$150.00	
$500.00	
$30.00	
$50.00	
$150.00	
$70.00	
$300.00	
$200.00	

Next, **click** on **cell G7**, **hold down the left mouse button**, and **drag down through cell G19**. Your spreadsheet should look like the one to the right.

Now follow the **Paste process** you used **on Page 26** to paste the formula from cell G6 to cells G7 through G19.

MONTHLY TOTALS
$1,200.00
$200.00
$600.00
$2,000.00
$0.00
$0.00
$0.00
$120.00
$200.00
$600.00
$280.00
$1,200.00
$0.00
$800.00

After you Paste your formula, you will see some **"stuff (zeroes)"** in cells **G10, 11, 12, and 18**. This is because there was "**nothing there**" to **add**. So, go in and "**clean-up**" these cells by **deleting** the **zeros** in these cells.

Go to cells **G9** and **G17** and **underline** like you did on **Page 5**.

Copying the Percentage Formula

Notice that **we didn't copy** the **percentage** formula when we did the last copying process. If we had copied a SUM formula, it would have <u>added the four percentages</u>. We don't want the sum of the percentages. We **want** a **percentage** of **only applies to the overall Monthly Totals**. So, we need to **copy the percentage formula separately**. **Click** on **cell F21**, **copy** the **percentag**e formula in cell **F21** to cell **G21**. This is the average percentage that Income is greater than Expenses.

Now put a **$** in cells **G6 through G19** (like you did on Pages 23 and 24) , and a **%** in **G21** (Page 25). Your **spreadsheet column G** should **look something like** the image on the **right**

This would be a great time to Save again.

MONTHLY TOTALS
$1,500.00
$200.00
$750.00
$2,450.00
$380.00
$200.00
$655.00
$310.00
$1,545.00
$905.00
159%

Absoluting (and multiplication)

There are times, when we are working with a spreadsheet, that we **do not want** a cell to **"roll" to the next column** when we **use** the **copy** feature of the spreadsheet – like it did in our last copying exercise. To **stop** the **cells** from "**rolling**" we utilize something called **absoluting**. The following is an illustration of absoluting.

Go to cell **A23** and type-in **Number**. Go to cell **A25** and type-in **Result**.

Go to cell **C23** and type in the number **2** – then **tap** the **Enter key**.

We'll now **create a formula** to multiply our **number** times **Net Income**. You may use either the **Type-in** or **Point** method. Go to cell **C25,** and type-in a formula to **multiply cell C23 times cell C19**.

The formula should look like: **=C23*C19**

The result in **C25** should be **two times the net income in cell C19**.

Now **copy** the formula in cell **C25** to cells **D25, E25, F25 and G25**. Your row 25 should look similar to the one below.

23	Number		2				
24							
25	Result		$800.00	$0.00	$0.00	$0.00	$0.00

Uh Oh!!!   Where did all of those "0's" come from?

Point to each of the cells **D25, E25, F25 and G25**. **Notice, as you click on each cell, and look at the screen, how C23** (the cell with the 2) **"rolled" and became D23, E23, F23 and G23** (**which are blank** - this caused the **"0's"**). A **blank times** a number is a "0."**We want the 2 to be in each formula and not to "roll".**

To do this we utilize something called **Absoluting** or **Anchoring**.

Go back to cell C25. Now we'll **enter the formula again**, but a **little differently** (**to anchor the 2**).

Type-in a **=C23** (or you could type = and point to C23). **NOW, tap the F4 function key**. **Notice**, in cell **C25** and the **Edit bar** at the **top of the screen**, that the **=C23 changes to: $C$23**. (This tells you that cell **C23** is **absoluted** or **anchored**. The **"$'s" indicate** the **absoluting**.) Now **finish the formula** by typing in or pointing *C17 as before. Tap **Enter**.

<p align="center">The formula in cell C25 should look like: **=$C$23*C19**</p>

Now **copy** the **formula** in cell **C25** to cells **D25, E25, F25 and G25** again. Your row 25 should look similar to the image below.

23	Number		2				
24							
25	Result		$800.00	$0.00	$0.00	$0.00	$0.00

The numbers should now be **correct**. Point to cells **D25, E25, F25 and G25** (like you did before). You will notice the **"$'s" have copied** the **=$C$23** to **each cell (absoluting)** and the **Net Income** figures (**Cells D19, E19, F19 and G19** have "**rolled**" as they should. Absoluting is something you should know and understand.

> **Pause and reflect** -- Look at all you have accomplished. If you want go in and change some more numbers or change the income and expense titles to something you feel is more fun or appropriate, please do so.

This would be a great time to Save again.

The next important lesson is to learn how to **print.** This done with a few easy steps.

Printing

First, **click cell A1**.

All of the Windows **spreadsheets try to figure out what you want to print**. Sometimes they're **right**, sometimes they're **wrong**. So........

The most important thing with printing is to tell the printer what to print.

Unlike a word processor, you **may need** to **highlight** what you want to print. For the moment, we'll assume that Excel 2007 will "guess" correctly, and that you have not "clicked" somewhere that will cause a problem. If you do have problems, which we'll know in a second, we'll show you how to take care of the problem - a bit later.

It's usually a good idea to **see** what our **printout will look like – before you print it**. First, we'll use a **Print Preview** to "**see**" what our spreadsheet looks like.

Click the **Microsoft Office Button**.

When the menu screen appears, **move** your **cursor** over **Print** and then **click** the **Print Preview** choice.
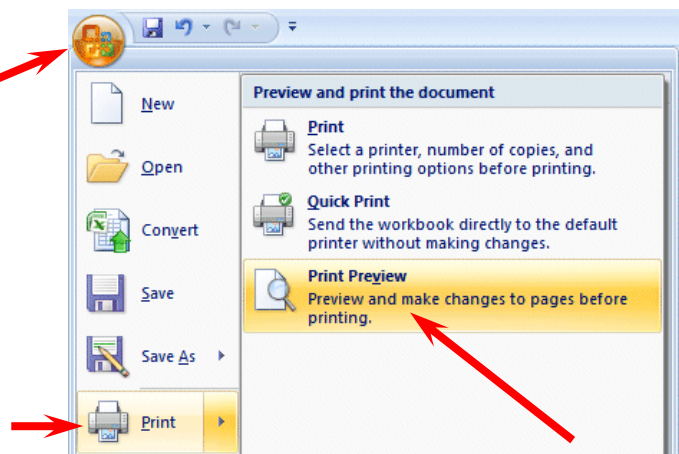
At the **top** of the **Print Preview screen** you will **see** the **Print Preview Tab**.

We'll these buttons to assist us with our printing.
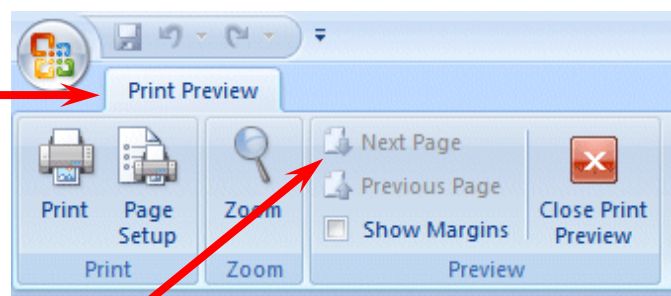
Notice: the **Next** and **Previous** buttons are **not highlighted** – they are just gray. This **means** that the buttons are **not "active."** This **indicates** that we are **OK** with our spreadsheet – it is **all on one page**. If we saw that the Next button was active, this would mean that there are other pages to our spreadsheet. If you'll **look** at the **lower left corner** of the **Print Preview screen** you'll **see: Preview: Page 1 of 1.** This **confirms** that our spreadsheet is **on one page**. **If you <u>do</u> not see this "combination," we'll show you how to take care of it later.**

If you do see this combination, **click** the **Print button**. Then, **Click**-on **OK** in the **Print menu screen** that appears.
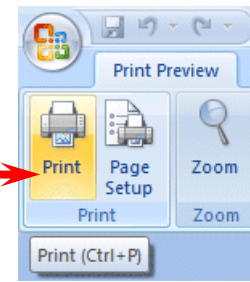
Label (write on) **this printout**: **Default Spreadsheet Printout**.

A **picture,** of what the **printout will look like**, **appears below**.

Janie & Greg's Budget

		SEPT	OCT	NOV	DEC	MONTHLY TOTALS
Income						
	Parents	$500.00	$500.00	$500.00	$1,000.00	$2,500.00
	Job	$50.00	$50.00	$50.00	$200.00	$350.00
	Investments	$150.00	$20.00	$150.00	$150.00	$470.00
	Total	$700.00	$570.00	$700.00	$1,350.00	$3,320.00
Expenses						
	Food	$30.00	$100.00	$30.00	$200.00	$360.00
	Beverages	$50.00	$100.00	$50.00	$200.00	$400.00
	Parties	$150.00	$150.00	$150.00	$500.00	$950.00
	Miscellaneous	$70.00	$70.00	$70.00	$70.00	$280.00
	Total	$300.00	$420.00	$300.00	$970.00	$1,990.00
Net Income		$400.00	$150.00	$400.00	$380.00	$1,330.00
Percent		233%	136%	233%	139%	167%
Number		2				
Result		$800.00	$300.00	$800.00	$760.00	$2,660.00

The "**image**" **above** should also look similar to **your spreadsheet.**

If you **move your cursor over the spreadsheet**, you'll **notice** that the **cursor changes** from an **arrow** to a **tiny magnifying glass**. If you **click** the **left mouse button**, your **magnifying glass will "zoom-in" on the exact spot where the magnifying glass is located**. If you **click-again**, it will **zoom-out**. Try this a couple of time. It is a really handy feature.

Now **click** the **Page Setup button** on the **Print Preview Tab**.
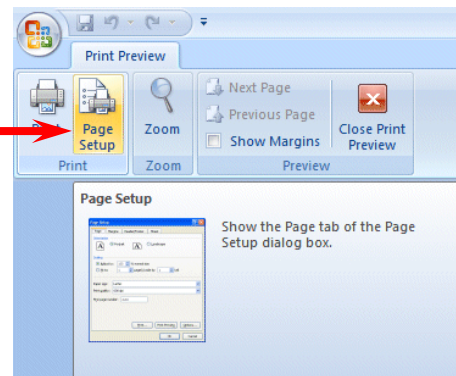
The **Page Setup menu screen** at the **top** of the **next page** will **appear**.
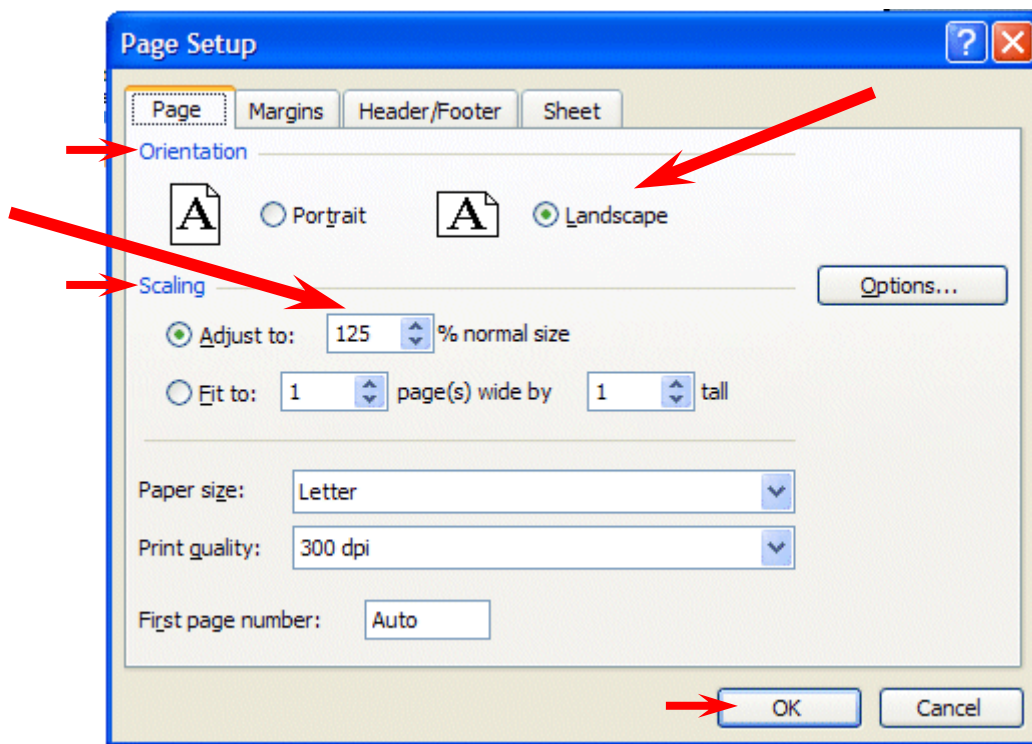
Notice that the **Page Setup** menu screen **indicates** that you are in **Portrait** view. Now we'll **enhance** the spreadsheet to make it a bit more presentable. In the **Orientation** area **click**-in the **small circle** to the left of **Landscape (see arrow above)**. The spreadsheet will now print on the page as indicated. Next, in the **Scaling** area, **click**-in **the box to the left of % normal size**. Using either the "**up/down" arrows**, or **by typing** in the information, change the size to **125**. Then click **OK**.

Your spreadsheet will now be larger and fill the paper more appropriately. **Click**-on **Print** and when this spreadsheet comes out of the printer label it: **Landscape – enlarged to 125 %**.

Go ahead and **adjust** the "size" of your spreadsheet so that it becomes **too large** to fit on a single page. Set the **Scaling** to **200** and **click OK**. When you **return** to the **Preview** screen, the **Next** and **Previous** buttons at the top left will now be **active**, and you'll see **1 of 3 or 4 pages** in the **lower left corner** of the screen. Go ahead and **click** the **Next** and **Previous buttons** to get a "feel" for the "size" of your spreadsheet. If you click-on Print (please don't do it), you'll get these 3 or 4 pages. If you made a mistake when you created the spreadsheet, you might see that you have 58 (or some big number of) pages in your spreadsheet!

Now, **click**-in the **small circle** to the **left** of **Fit to 1 page(s) wide by 1 tall** in the **Scaling** area and make sure that **1 page** is set. Excel 2007 will now **return** your spreadsheet to **one** page. Try other things here. Work with the **Margins, Header/ Footer, and Sheet** tabs at the top of the Page Setup menu screen. Any time you desire to print, go ahead and do so. This will give you a feel for how the spreadsheets will print. When you are finished, simply click **OK** or **Cancel** and you will return to your spreadsheet.

Many people ask how to **center a spreadsheet on the page**. This feature is located on the **Margins Tab** at the **bottom left** of the **Margins screen**.

Many users also ask how to place **gridlines** and **show the row and column headings** (A, B, C and 1, 2, 3) in their spreadsheet printouts. This feature is located on the **Sheet tab** in the Page Setup menu screen.

When you are **finished** working with Print Preview, **click** the **Close Print Preview button**. When you return to your spreadsheet you will see "dashed lines" around your data. Print Preview added these to assist you in knowing where the "edges" of your printed data will be on paper. We'll show you a nice new feature that assists even more in a minute.

Cure for the problem – if you have too many spreadsheet pages.

Click cell A1 and **highlight** your spreadsheet down **through cell G25**.

After you've highlighted A1 through G25, click the **Microsoft Office Button** and then **click Print**. In the **Preview and print the document** area (on the **right**) **click Print**
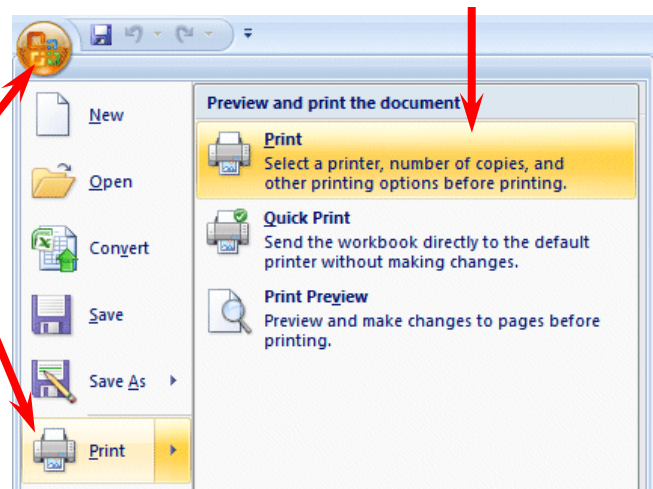
A **Print menu** screen will **appear**.

In the **lower left corner** of the **Print menu** screen you will **see** an **area** that **looks like the image on the right**. **Click**-in the **small circle to the left of Selection**. This indicates to Excel that **you only want to print the area you've highlighted**. **Click OK**. Only the section that you've highlighted will print. **You can still modify your spreadsheet if you desire**. Once you've **clicked Selection**, you may **click**-on the **Preview** button to see a preview of your highlighted area. Follow the instructions above to modify as you desire.
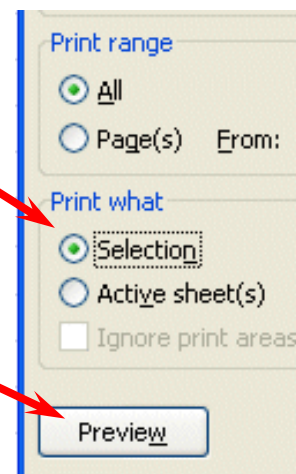
Page Layout View

Now that you have a "feel" for printing your spreadsheets, we'll look at a neat **new feature** in **Excel 2007 – Page Layout View**. In the **lower right corner** of your **Excel screen** you'll see the **Excel 2007 Toolbar**.

The **Excel View Toolbar** looks similar to the image on the right.

Page Layout View

Zoom

Normal View

Page Break View
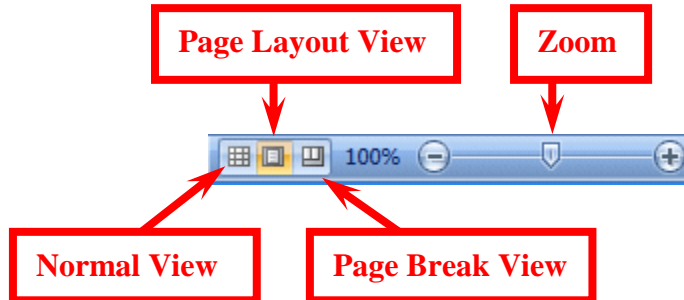
You are **currently in Normal View**. Look at your screen and then **click** the **Page Layout button** (as shown above) on the **Excel View Toolbar**. Your Excel screen should look similar to the image below. Wow! Your screen now has all the settings you entered in Print Preview. Notice the Rulers at the top and on the left – just like Microsoft Word! So you now have a very accurate Print Preview as you are working.

		SEPT	OCT	NOV	DEC	MONTHLY TOTALS
	Janie & Greg's Budget					
Income						
	Parents	$500.00	$500.00	$500.00	$1,000.00	$2,500.00
	Job	$50.00	$50.00	$50.00	$200.00	$350.00
	Investments	$150.00	$20.00	$150.00	$150.00	$470.00
	Total	$700.00	$570.00	$700.00	$1,350.00	$3,320.00
Expenses						
	Food	$30.00	$100.00	$30.00	$200.00	$360.00
	Beverages	$50.00	$100.00	$50.00	$200.00	$400.00
	Parties	$150.00	$150.00	$150.00	$500.00	$950.00
	Miscellaneous	$70.00	$70.00	$70.00	$70.00	$280.00
	Total	$300.00	$420.00	$300.00	$970.00	$1,990.00
Net Income		$400.00	$150.00	$400.00	$380.00	$1,330.00
Percent		233%	136%	233%	139%	167%
Number		2				
Result		$800.00	$300.00	$800.00	$760.00	$2,660.00

Spend a few minutes using the **Elevator Bars** on the **Right** side and **Bottom** of your Excel spreadsheet to move up and down and left to right. As you move you'll **see** the **Page Breaks** and **Pages as they'll Print**!

Headers and Footers

Look at the **top** of your spreadsheet and you'll also **see an area** which indicates: **Click to add header**.
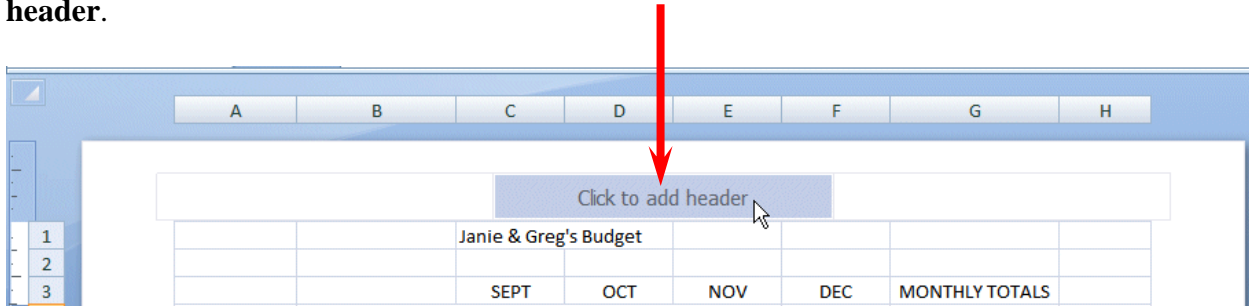
If you desire a **Header** (or **Footer**) on **each spreadsheet page**, you can now create them in this view! **Notice** (**above**) we've moved our **cursor over** the **center Header area** (the Footer area is at the bottom of the page). When we did it **turned light blue**. If you move your cursor over the left and right Header areas, you will see that they'll turn blue as well. If you then **click** on one of these areas you'll **see** a **Header & Footer Tools Tab** – with a **Design Tab below**. In the **Design Ribbon** you'll see that this Tab/Ribbon is "tailored" to work with creating your Headers and Footers. This is one of the great new features in 2007 Office and Excel.
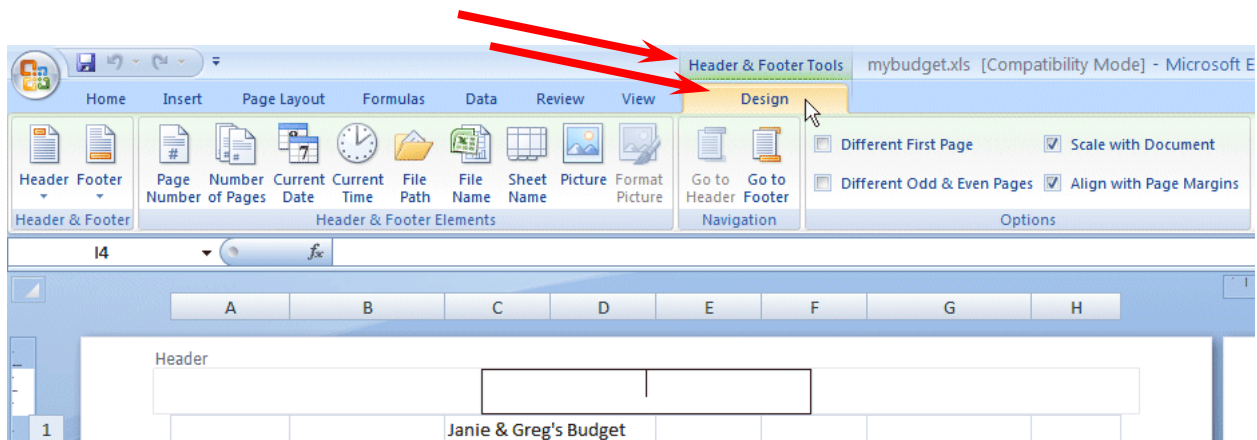
Go ahead and experiment as you desire. This new feature really makes working with Headers and Footers really easy.

Print Preview Button in Quick Access Toolbar

Since you'll be **using the Print Preview feature frequently**, it would be nice to have a **button** in the **Excel Quick Access Toolbar**, so you won't have to do all that "clicking."

To **add** a **Print Preview button click** the **Microsoft Office Button -** like we did to open our Print Preview..

When the menu screen appears, **move** your **cursor** over **Print** and then **move the cursor over** the **Print Preview** choice.
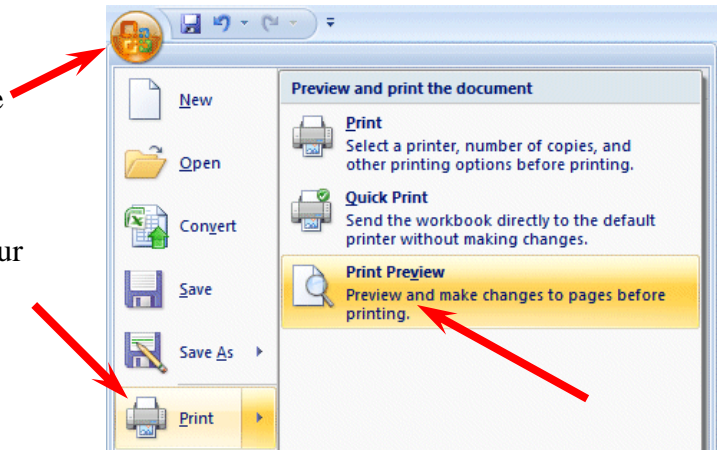
When the **Print Preview** selection "**turns orange**," **click** the **RIGHT** **mouse button** and a pop-up menu will appear.
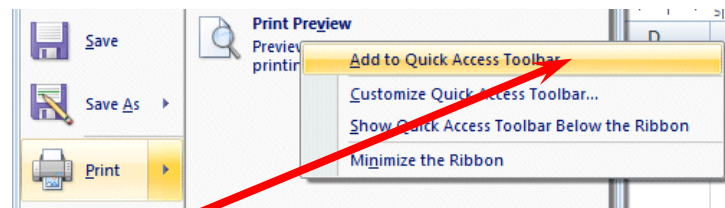
Move your **cursor over** the **Add to Quick Access Toolbar** selection and **click** the **left** mouse button.

As soon as you "click" you'll see your Print Preview button added to the Excel Quick Access Toolbar! Now anytime you desire to Print Preview your spreadsheet, you'll have to do is click the Quick Access Print Preview button.
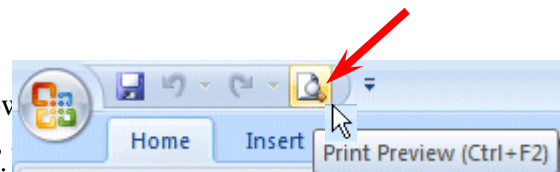
As you see other buttons you would like to add to your Excel Quick Access Toolbar, simply follow the instructions above.

Graphics

This will be a lot of **fun**. We are now going to turn your spreadsheet numbers into graphics - bar charts, pie charts, etc. This will greatly assist you when you display and explain your work. A new – really awesome – feature in Excel 2007 is Conditional Formatting. We'll begin with Conditional Formatting and them move to full page Charts.

Conditional Formatting

Conditional Formatting will let you **show graphics in your spreadsheets!**
The best way to describe this amazing new feature is to show you how it's
done.

First, you'll **need to highlight some of the data on your spreadsheet**. We
highlighted the **Income** and **Expense** numbers for the month of **December**
for our image. Our Conditional Formatting graphics will appear in this
column.

Now, look at the **Tabs** at the **top** of your **Excel screen** and make sure you are **on** the **Home Tab**.
Under each Tab is a **Ribbon** made up of **Groups** (Clipboard, Font, Alignment, etc.). Over to
the **right** is a **Conditional Formatting** selection in the **Styles Group**.
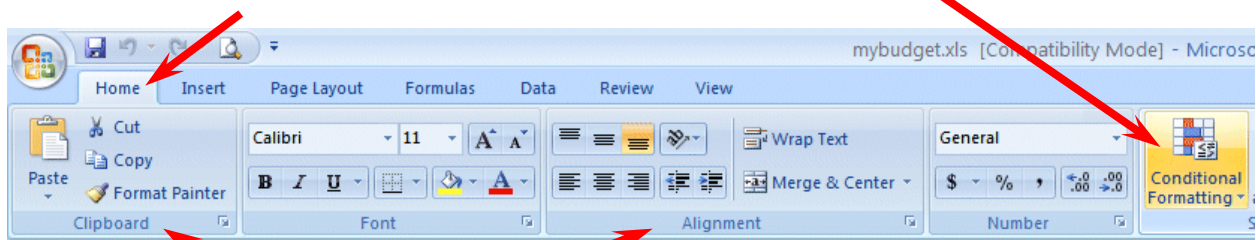
Groups

When you move your cursor over the
Conditional Formatting button, an image
similar to the one on the right will appear.
 We've enlarged the image so you can get
an idea of how this feature will work.
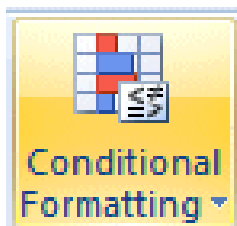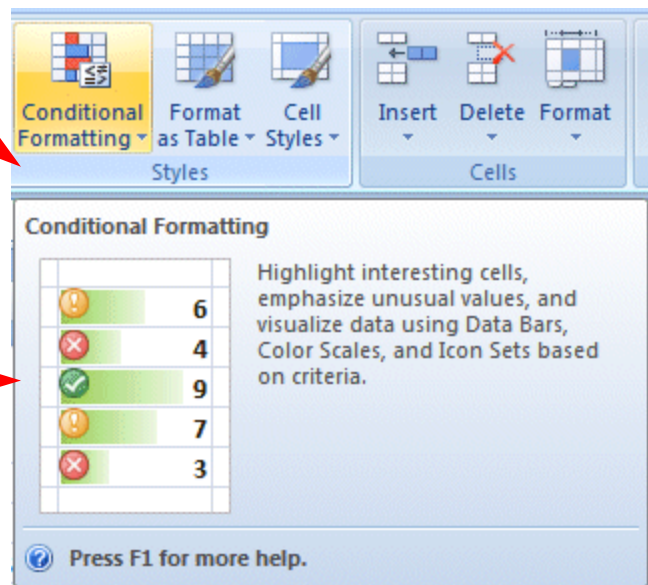
In the **lower right corner** of the **Conditional Formatting button**
is a **small down arrow**. **Click** on this **arrow**.

When you click the down arrow the **image** on the **right** will **appear**. **Notice** the **Data Bars, Color Scales and Icon Sets choices**.

As you move your cursor over these selections you will see that a number of choices are available with each option.
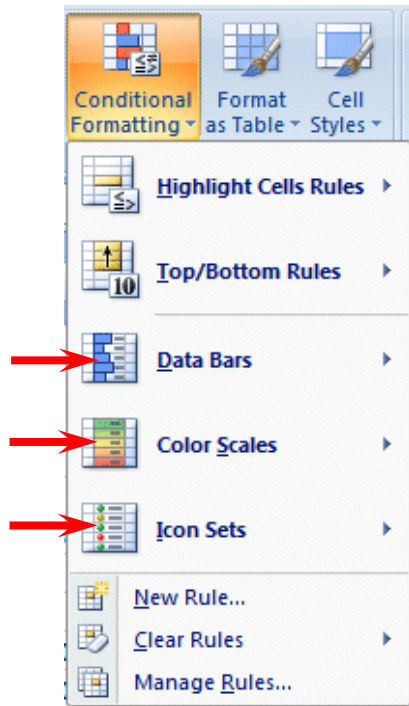
To show you how this works we **moved** our **cursor** over **Data Bars**.
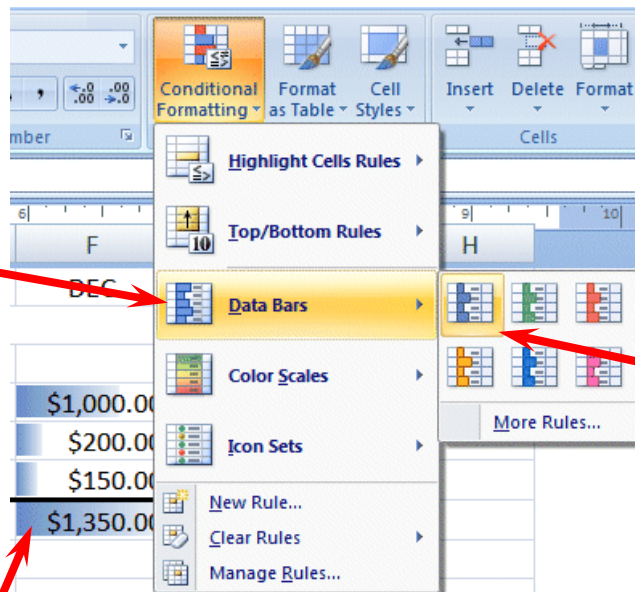
Then, we **moved** our **cursor over** the **Blue selection** on the **right**.

Notice, our December Column data is now highlighted in blue.

Also **notice** that the **larger numbers** have a **longer blue bar highlight** with them.

This is really a neat new feature. Go ahead and look at **Color Scales** and **Icon Sets** as well. Experiment as you like. If you click a selection it will show that graphic on your spreadsheet. If you go to Print Preview, you will see that effect. Now you can print spreadsheets that have not only data numbers, but a graphic to show their size!

If you don't like the Conditional Formatting effects, you can use the Undo Arrow (in the Quick Access Toolbar) to remove them.

Charts

Before we work with Charts, there are a couple of **ESSENTIAL** steps we have to do. First, we have to **tell** Excel 2007 **what we want to see in our chart** and then **were** we want the chart to go.

First: in cell **B9** *type-in* **Income** (to **replace** the word **Total**). Next, *type-in* **Expenses** in cell **B17** for the same reason. You'll see why we do this when you see your chart.

VERY IMPORTANT………. But Tricky!

Something new.... **Hold down the left mouse button** and **highlight** cells **B3** to **F3**. Next, **HOLD DOWN** a **Ctrl** key at the **bottom of the keyboard** and, **while you are holding Ctrl down**, **highlight** cells **B9** through **F9**. You will now **see two "ranges" highlighted**. **Hold down the Ctrl again,** and **highlight** cells **B17** through **F17**. These three ranges will make up your chart. The **x-axis** will be made up of cells **B3** through **F3**. And, the two sets of bars – Series - will show Income and Expense. When you complete the above instructions, your screen should look like the image below.

Click to add header

|			SEPT	OCT	NOV	DEC	MONTHLY TOTALS
1			Janie & Greg's Budget				
2							
3			SEPT	OCT	NOV	DEC	MONTHLY TOTALS
4							
5	Income						
6		Parents	$500.00	$500.00	$500.00	$1,000.00	$2,500.00
7		Job	$50.00	$50.00	$50.00	$200.00	$350.00
8		Investments	$150.00	$20.00	$150.00	$150.00	$470.00
9		Income	$700.00	$570.00	$700.00	$1,350.00	$3,320.00
10							
11							
12	Expenses						
13		Food	$30.00	$100.00	$30.00	$200.00	$360.00
14		Beverages	$50.00	$100.00	$50.00	$200.00	$400.00
15		Parties	$150.00	$150.00	$150.00	$500.00	$950.00
16		Miscellaneous	$70.00	$70.00	$70.00	$70.00	$280.00
17		Expenses	$300.00	$420.00	$300.00	$970.00	$1,990.00

If your spreadsheet **does not look** **exactly** **like the one above**, please **try again**. This is a bit tricky and it often takes (even experienced spreadsheet users) a couple of "tries" to get the highlighting just right.

What we are about to do is **entirely new in Excel 2007**. So, if you have used previous versions of Excel – hang on – this is awesome!

Click the **Insert Tab** at the **top** of the **Excel screen**. When you do you'll see that one of the **Groups** in the **Insert Tab/Ribbon** is **Charts**.
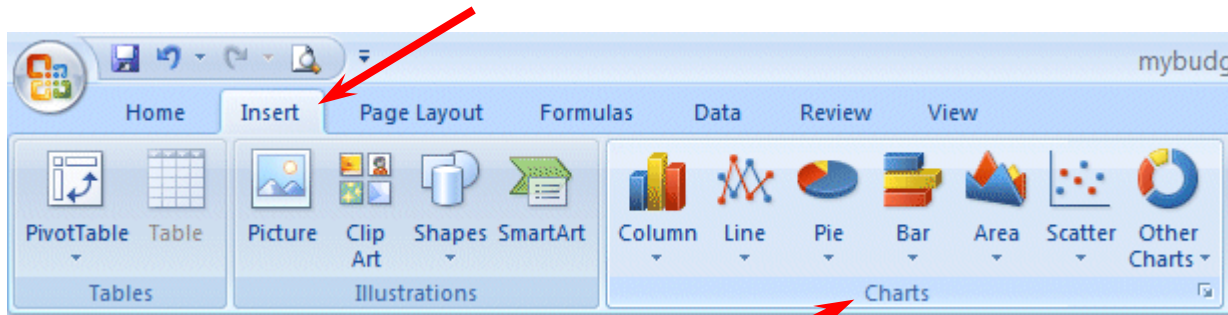
For our first chart, **we'll use a Column Chart**. Move your cursor over Column and an image like the one on the right will appear.
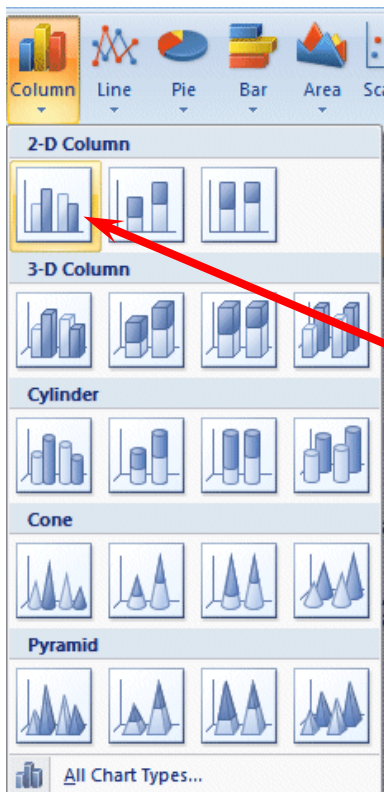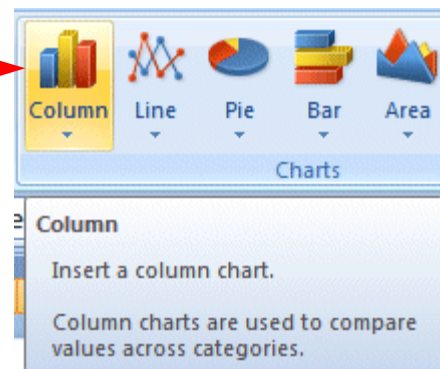
Click the **Column button** and you'll see an image like the one on the left. As you can see there all kinds of Column Charts. We'll begin with a simple two dimension **2-D Column** chart. You'll be able to change this later, if you desire – to another Column Chart of one of the other selections.

Click on the **2-D Column** chart indicated by the **arrow** on the **left**.

As soon as you click, because you highlighted your data, an **image** similar to the one **below** will appear. **Don't worry that the Chart is covering your data** – we'll take care of that in a minute.

Notice that when we **highlighted** cells **B3 to F3** this **created the X-Axis labels** (SEPT, etc.). When we **highlighted** cells **B9 to F9** and **B17 to F17** this created the two **Income** and **Expense** bars for each month. And, when you **typed Income** into **B9** and **Expenses** into **F9** this created a **Legend** on the **right side of your chart**.
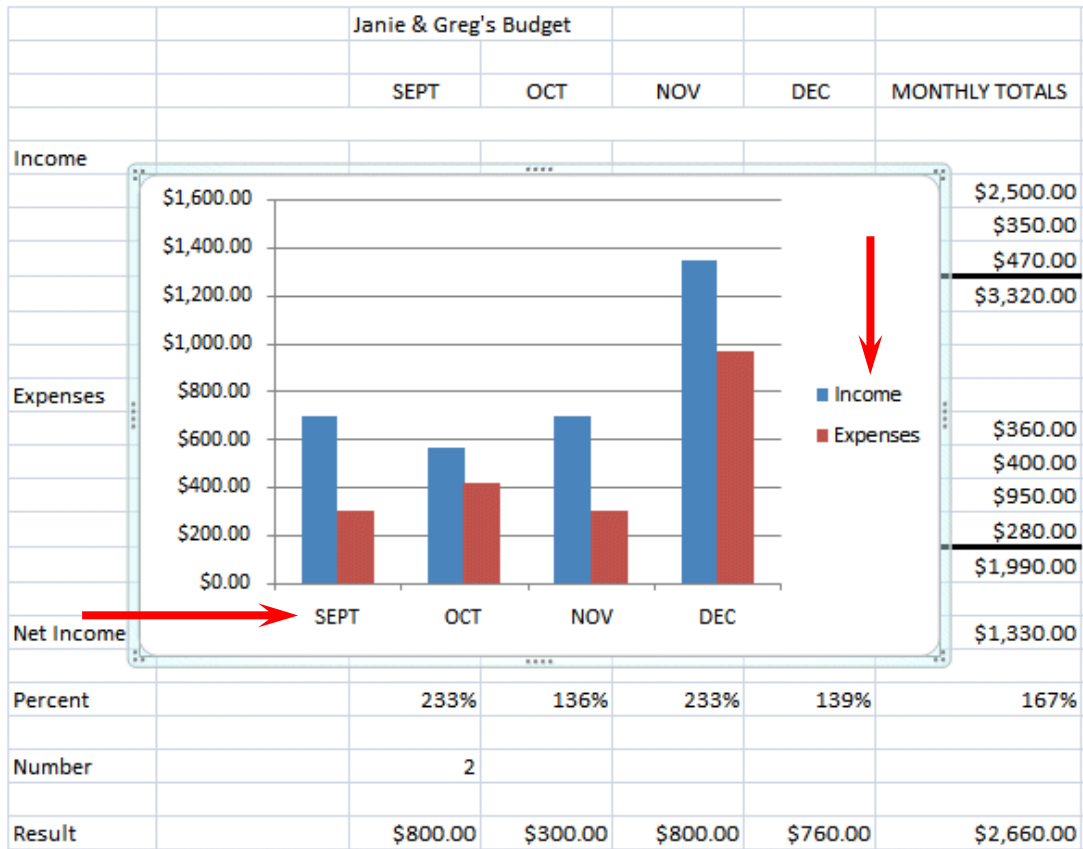
Now, let's **move our chart to a page of its own** – so it will be easier to work with and not cover our data. **Click anywhere on your chart** and you will **notice** that a new **Tab appears** at the **top** of your **Excel screen** – **Chart Tools**. **Click** the **Chart tools Tab** and the **Chart Tools Tab/Ribbon** will **appear** like the image below.
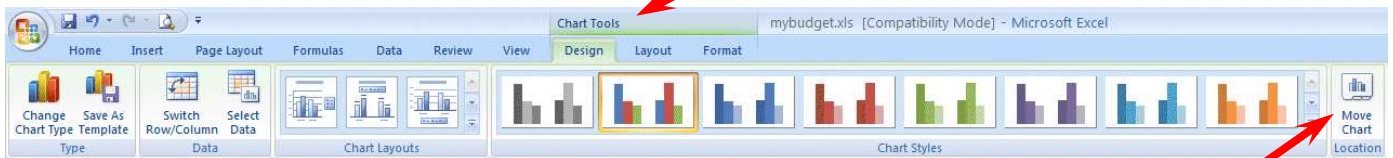
Notice, on **the right end** of the **Chart Tools Tab/Ribbon** is a **Move Chart Location button**. **Click** the **Move Chart Location button**.
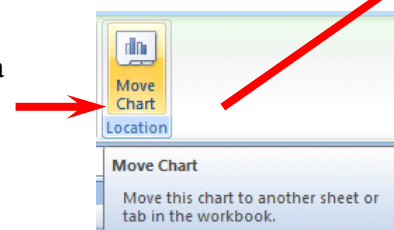
When you **click** the **Move Chart Location button** a **Move Chart menu screen** will **appear** (like the image below).
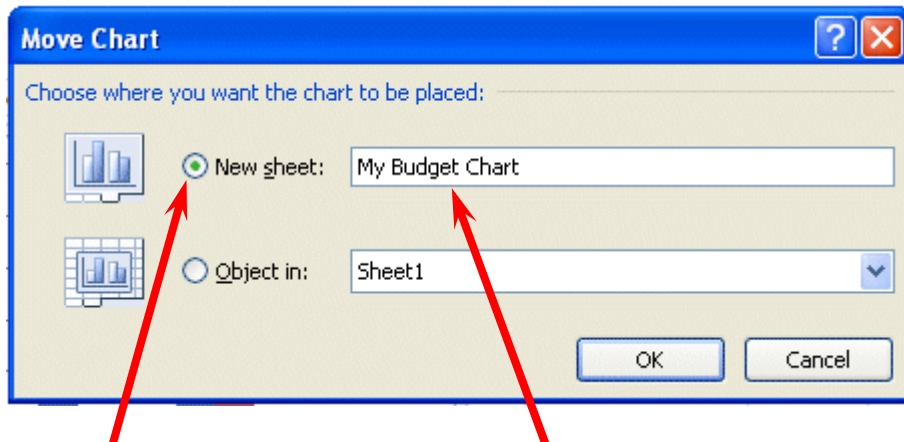
Click on the **small circle** to the **left** of **New Sheet** and **change** Chart 1 to **My Budget Chart** – as indicated above. Then **click** the **OK** button.

Look at the **bottom left** of your **Excel screen**. You will **see** a **new Tab** – **My Budget Chart**! Your data is on Sheet 1. We'll rename it when we have finished working with our chart.

You should be on you're My Budget Chart Tab. If not, click this tab. Your chart should now fill the Excel screen. **Click** in **one of the outside corners of your chart**.
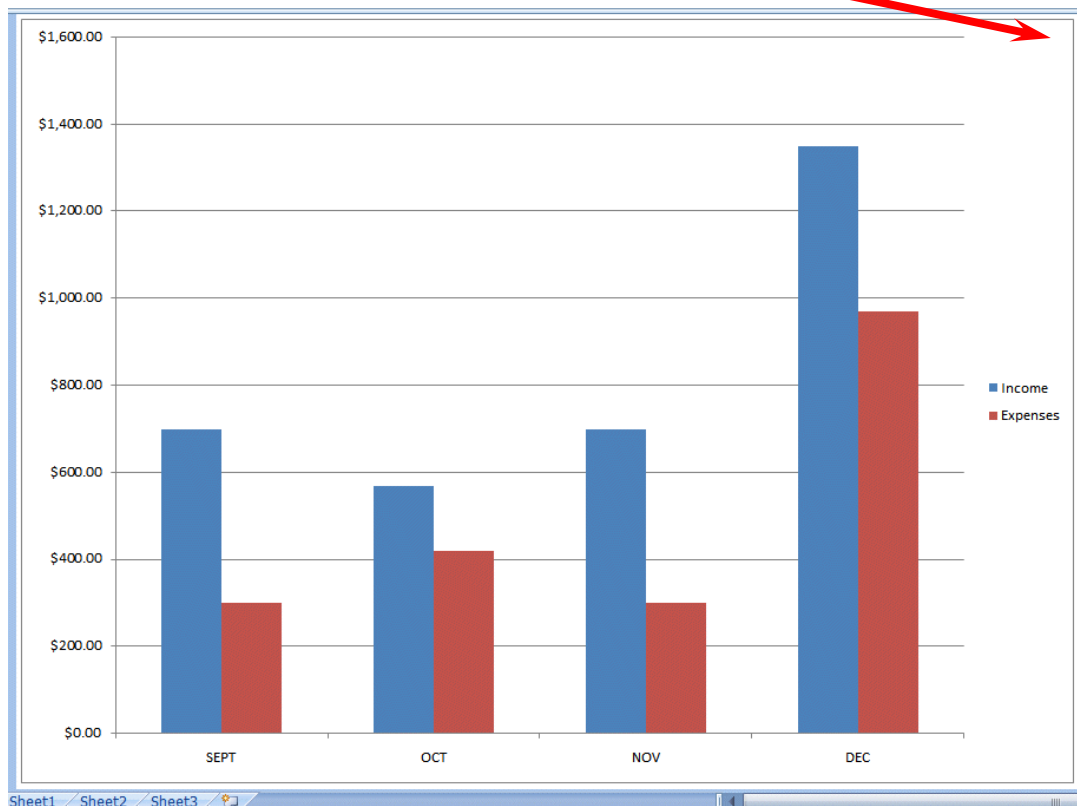
Chart Tools

Make sure that you can still **see** the **Chart Tools Tab/Ribbon**. If not, click the Chart Tools Tab.
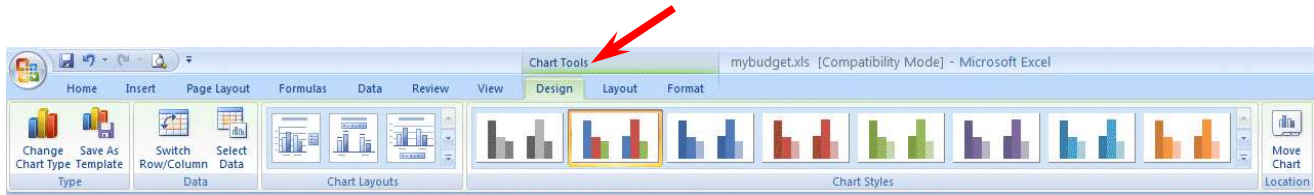
Notice that there is a **Chart Layouts Group** in the Chart Tools Ribbon. There are many different Layouts you can choose to enhance your chart.

Click the **More down arrow** in the **lower right corner** of the **Chart Layouts Group**.
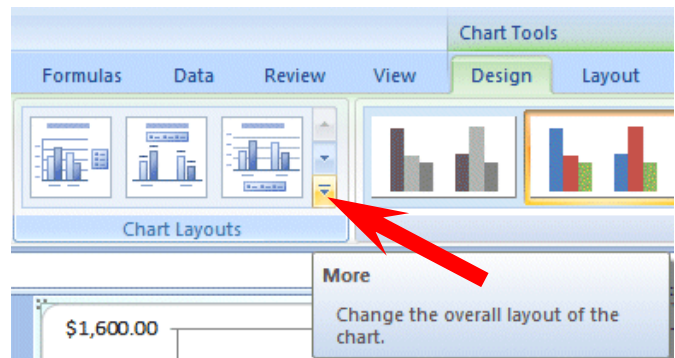
When you click the More arrow an **image** similar to the one on the **right** will appear. **We'll choose** the **Layout** in the **upper left corner**. We'll **click** on **this choice**

As you become more experienced with Charts, you choose the Layout that will best display your data.

You can also enhance the colors of your chart bars and backgrounds in a similar manner. **To the right of** the **Chart Layouts Group** is the **Chart Styles Group**. To **see** these **styles**, **click** the **More down arrow** on the **lower right of the Chart Styles Group**.
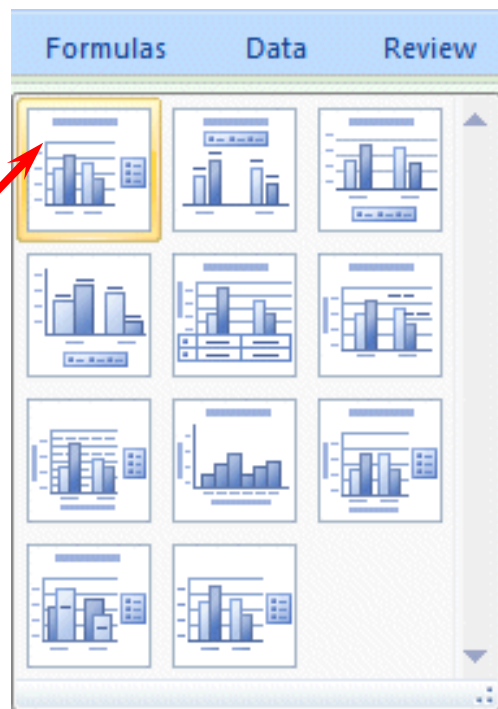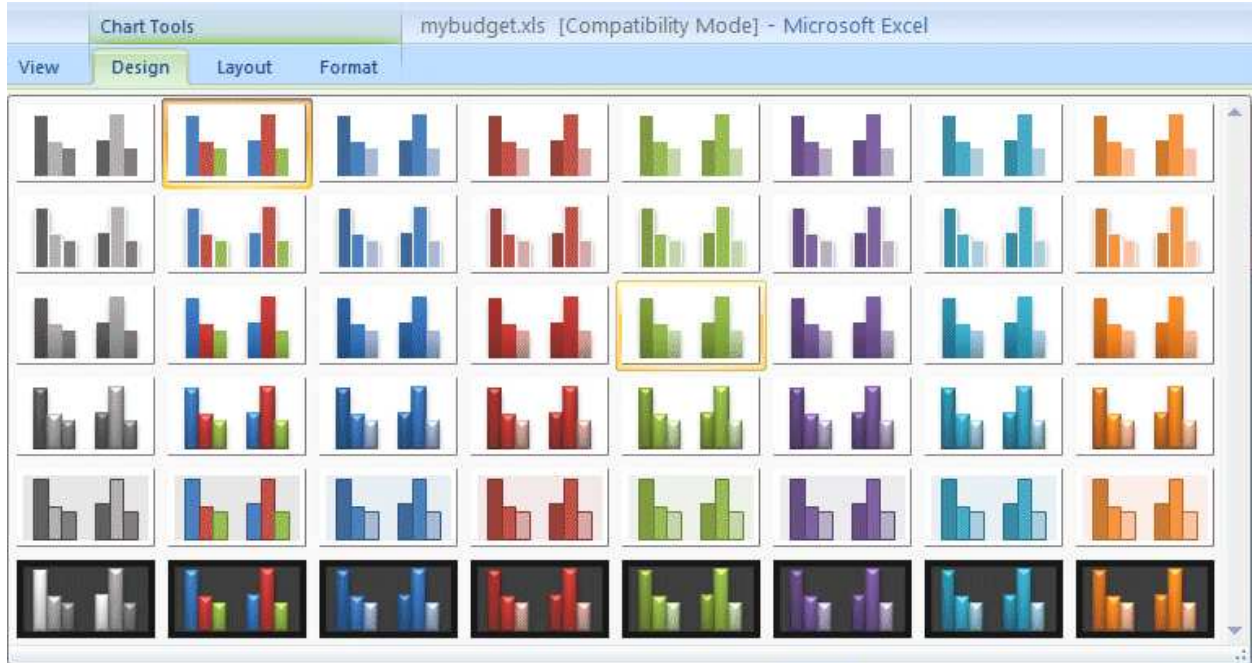

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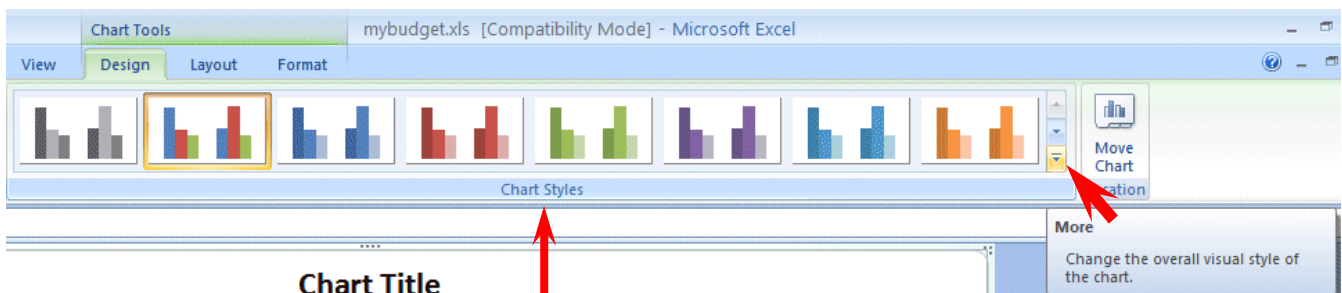
Chart Styles

A **Chart Styles menu screen** (similar to the one **below**) will **appear**. You can **click** the various choices as you desire. Each time you click, you're My Budget Chart will change to the Style you chose.

If you don't like the Chart Styles, you can use the **Undo Arrow** (in the **Quick Access Toolbar**) to remove them.
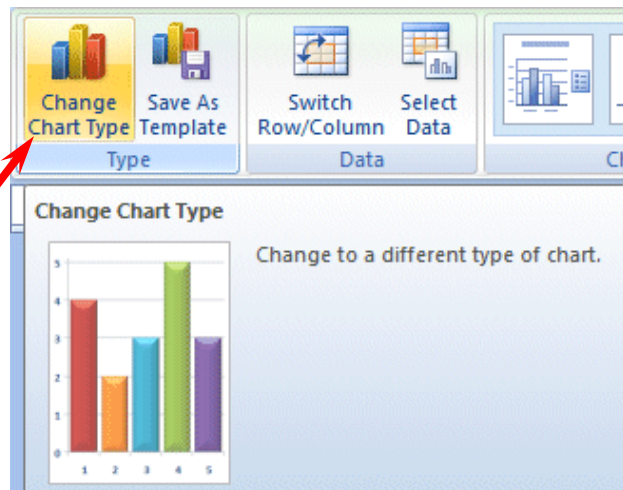
**A note** – as you choose different Chart Types, you will see the Chart Styles menu (above) change to that new Chart Type.

We'll show you another way to enhance the colors of your bars in a moment.

If you would like to **change your Chart Type** – look in the **upper left corner** of the **Chart Tools Ribbon**. You'll see a **Change Chart Type button**.
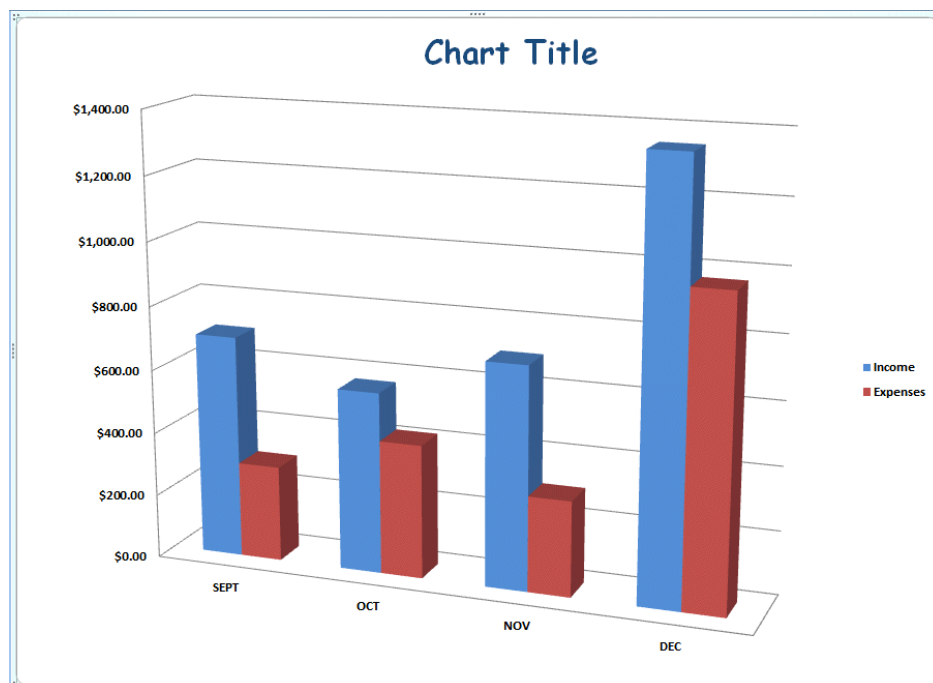
Click the **Change Chart Type button**.

A **Change Chart Type** menu screen (**below**) will **appear**. Currently it is "on" our 2-D Column Chart. We'll **change it** to a **3-D Clustered Column chart** next.
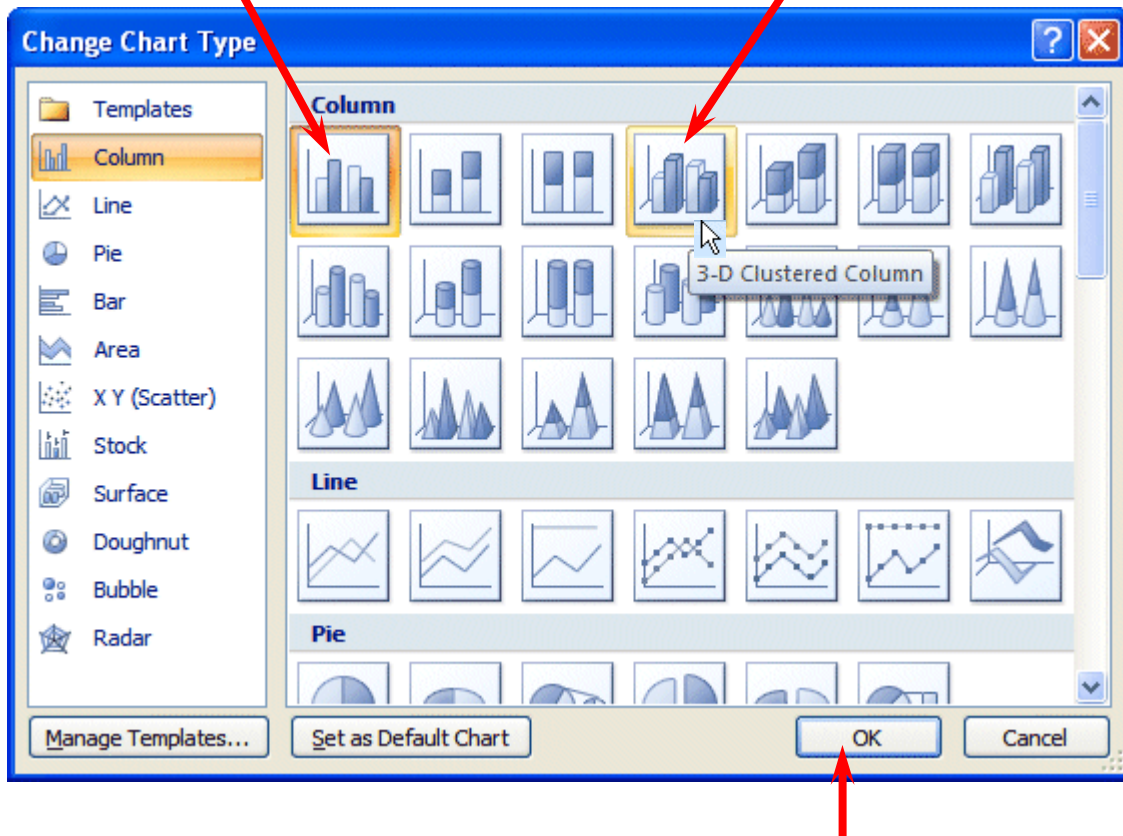

We'll **click** the **3-D Clustered Column** choice and then **click** the **OK button**. As soon as we click the OK button our entire **chart changes to a 3-D Chart**.

Another way to change chart colors

On Pages 44 & 45 you saw how you could change the colors of the bars in your chart (**Chart Styles**). Here is the second way to change colors that we promised.

Move your cursor over one of the bars in **your chart** and **click** the **RIGHT** mouse button. When the **pop-up menu** appears, **click** the **Format Data Series…** selection.
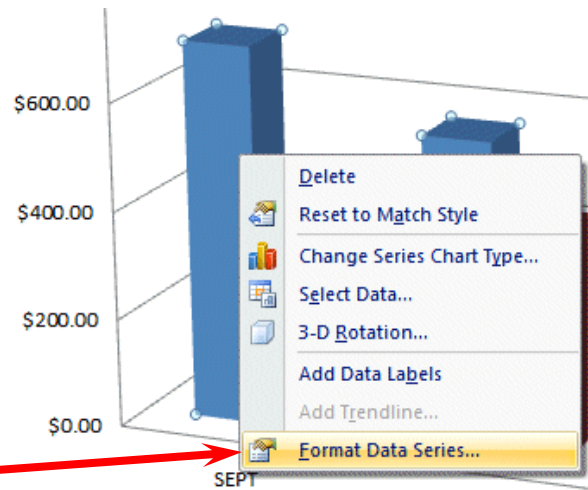
A **Format Data Series menu screen** (like the one below) will **appear** "over" your chart. In our original chart the Income bars were blue. We think green would be a better color for our Income bars. So, we **clicked** the **Fill choice** on the left. When the Fill menu appeared on the right, we **clicked** the **small circle** to the **left of Solid fill** and then **clicked** the **down arrow** on the **right side** of the **Color button**. Then we **clicked** the **green color** choice (if you would like to see a lot more colors you can click More Colors…). **As soon as we clicked** our **Income bars** changed to **green**.

Notice the **other choices** in the **Fill menu** area. Experiment with the other choices as you desire. You can really get some neat effects with **Gradient** and **Picture or texture** fill.

When you are **finished**, click the **Close** button.
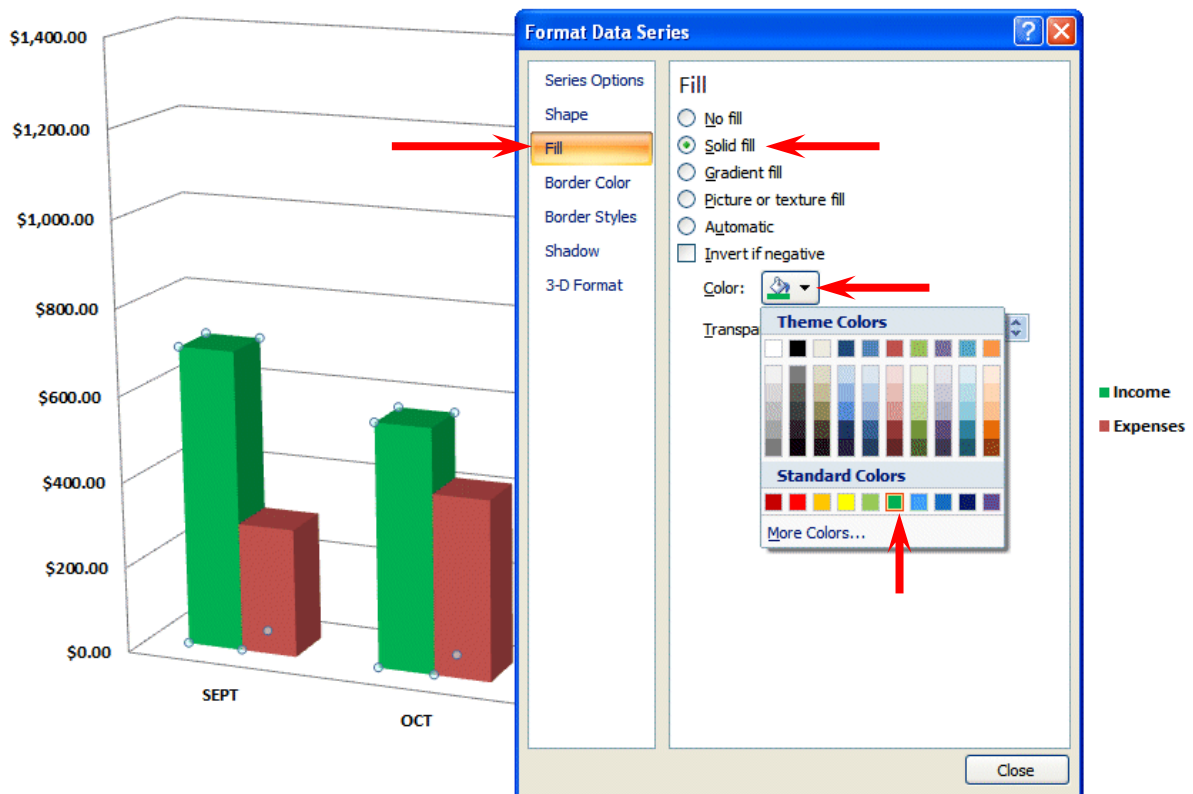
Changing Text

To **change text** in Excel 2007 you need to **click** on the **text**, the **Legend**, or the **axis** on which the text is located.

We **RIGHT** **clicked** on our **Chart Title** and two menus appeared. The **upper menu** is another new, great feature in Excel 2007. It's called the **Mini Toolbar**. The lower menu is the standard menu that appeared previously.
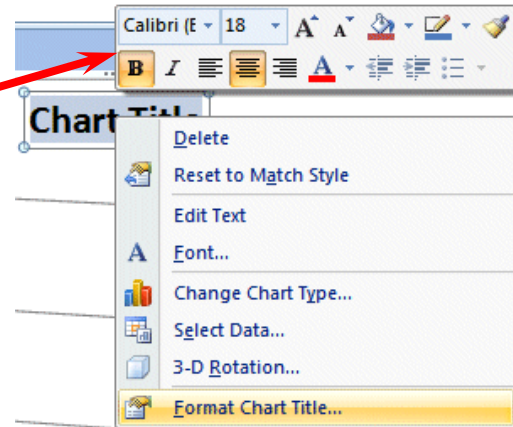
We **clicked** the **down arrow** to the **right** of **Calibri** and a **drop down** menu of font choices **appeared**. We moved down the list and clicked-on Comic Sans MS. You move down the menu and **choose a font you like**.
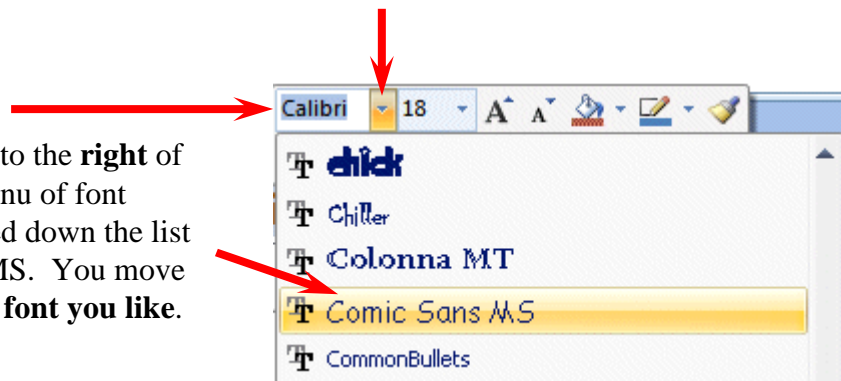
As soon as we clicked our font choice, our Chart Title changed to that font.

You can also change the Font size, Bold, Color, and more using the other Mini Toolbar selections. Experiment as you desire
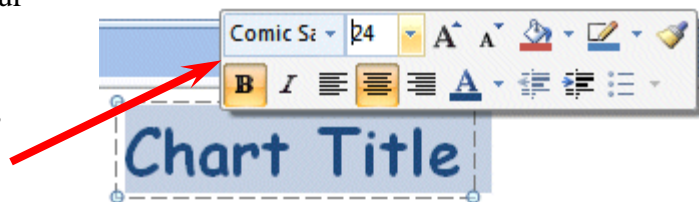
Now we'll **change** our **Chart Title** to something more meaningful. Move your **cursor over Chart Title** and **click** the **left mouse button three times quickly**. This will **highlight all** of the **title** – just like Microsoft Word. **Or**, you can **click and drag** your cursor of the title to highlight Chart Title.

Type in a **title** for your budget. We typed in the title you see below. When you have **finished** typing your title, **click** the **left mouse button** in an **"open" area** of your chart (**to turn-off and confirm the title**)

If you desire to enhance your text some more, RIGHT click on the title and the Format Chart Title menu screen will appear. You can use this menu to augment your text.
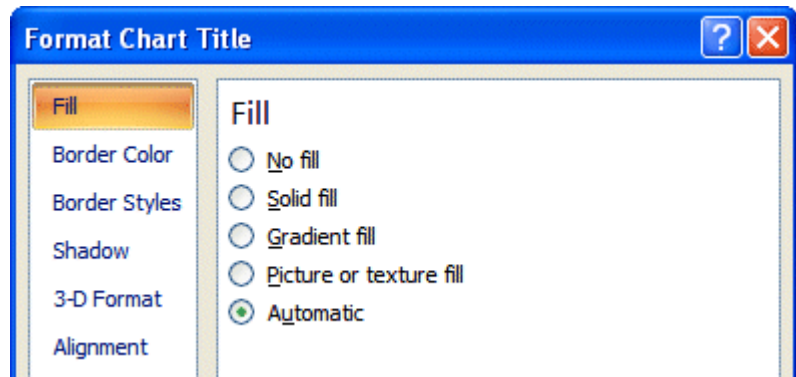
Now it would be a good time to Save again.

In **Excel 2007**, when you save your **spreadsheet,** you also save your **graph.** Your graph is saved wherever you are working in the graph.

Changing (Renaming) Excel 2007 Tabs

If you would like to have **logical names** for your **Excel 2007 spreadsheet tabs** – rather than Sheet 1 and Chart 1, we'll show you how to do this.

At the **bottom** of your **spreadsheet** you will see you **tabs** (like the **image** on the **below**). To **change the name** of one of the **tabs**, **place your cursor over a tab** and **click** the **RIGHT** mouse button.

We'll **change** the name of **Sheet 1** first.

RIGHT click on **Sheet 1**and the drop down menu screen to the right will appear. **Choose Rename**.

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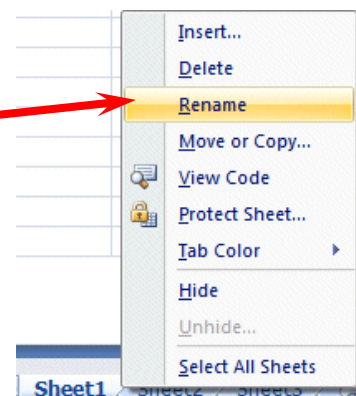
When you choose **Rename**, the **Sheet 1 tab** will "**turn black**" – like the **image** on the **right**. **As soon as you see this, type in the name you want for your chart**. We **typed** in **Budget Data**.

As soon as we began typing, the tab name changed. When we finished, the Tabs for our Chart and Data looked like the image on the below.
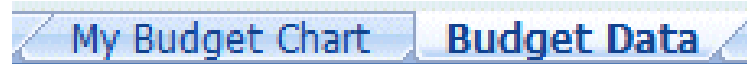
So, anytime you need to change Tab names, all you have to do is Right Click and Rename.

Some additional Charting

Sizing your Graph Area - Click-on the **upper right corner of your chart area**. You will see **little circles** now appear at the four corners and sides of the graph area. Point to the **upper right corner circle** and move the cursor until you see an **arrow with two heads ↔**. **Click** and **hold down the left mouse button** and **drag down and to the left** then let go. Your graph will get **smaller**. You can make the graph area of your chart smaller or larger as you desire.

Legend Area - Click-on the **Legend** on the **right** (box with Income and Expenses). When you see the corner "grabbers," make the Legend box a bit larger. Then **click right** in the **Legend** area. When the **Quick Toolbar appears,** make the **font bold** and **size 14**.

Printing Charts - Now let's look at your graph and then print it. **Click** the **Print Preview button** you placed in the **Quick Access Toolbar**. If you like what you see go ahead and **print** the graph. If not, close Preview and make some more graph changes. If you have a color printer, your graph will print in color.

Whenever your **graph** is **visible**, you can **point** to **any area** of the graph, and **click** the **right mouse button** on the area, and **edit** that particular area. You can also **click**-**right** in the **chart** itself.

You can really go "wild" at this point. If you make a **mistake**, simply click the **undo button** at the top of the menu screen and try again.

Note: No matter what type of printer you have, graphs take awhile to print. Be patient.

Well that's it Excel 2007 fans! Go for it!

Microsoft Office Tutorials

In addition to this tutorial, other Office tutorials are available at:

http://www.officetutorials.com

This site is updated frequently with tutorial revisions as well as tutorials from a number of collegiate institutions. Please feel free to visit and down load as you desire.

This has been an introduction into the basics of Excel 2007. If you have any questions about Excel 2007, or comments on this tutorial, please contact:

murray.t@lynchburg.edu

Thank you for your patience and good luck.