

## USING MICROSOFT EXCEL FOR WINDOWS 97

In the following exercise you will learn some of the necessary steps to create a spreadsheet using Microsoft Excel for Windows 97. 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, and a variety of other things.

To begin, **load** the spreadsheet by **clicking twice** on the **Excel 97 Windows Icon** in the Windows Screen. If you do not see an Excel Icon, click-on **Start** in the lower left corner of the screen, move the cursor up to **Programs**, and then move down to **Microsoft Excel** and click-on it. Once you have Excel on the screen, type-in the following, in the corresponding cells:

**C1** (Your Name)'s Budget **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. Now move to D1 and type in the word **BONZO** and tap **Enter**. Notice how the right part of your original entry is now **COVERED** by Bonzo!! Now move back to cell C1. Look at the lower bar of the spreadsheet. Your name and the word budget are still there. Bonzo only **COVERED** the portion in cell D1. There are several ways to take care of this. For the moment move back to 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 making some entries. Move to the following cells and type-in the following.

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 a new entry and it will replace the old one.

Cell      Type-in

**A3**      **INCOME**

**B4**      **Parents**

**B5**      **Job**

**B6**      **Investments**

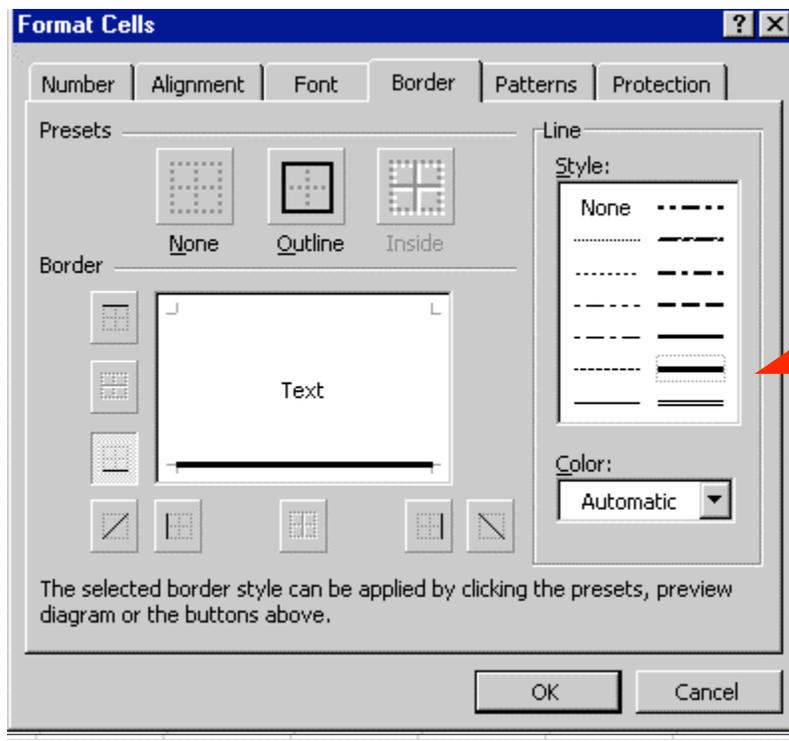
**B7**      **Total**

**A10 EXPENSES**  
  
**B11 Food**  
**B12 Beverages**  
**B13 Parties**  
**B14 Miscellaneous**  
**B15 TOTAL**

At this point you probably have noticed, the words "Investments" and "Miscellaneous" run over the highlighted spaces given in the blocks. Do not be concerned at this point. We will soon fix them. Now, type-in the following:

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

I would like to place an underline at the bottom of the three figures so that it will indicate a total below. Point to cell **C6** 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 **C6** tap the **right** mouse button. A sub-menu with a caption **Format Cells** shows-up. Select **Format Cells**, then select **Border**.



Look at the **Line Style** box. There are several types of lines that you can choose. Point to the **thick single line** in the **Styles 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 **bottom line box (lower left corner – see arrow)** and click the left mouse button. A **thick black line** shows-up in the Large **Text** box. If the line does not show-up at the bottom, click-again on the “bottom line box” and the line will “disappear”. Then click-on the bottom line box again and the line will appear. If, somehow, you make a mistake, simply click “on and off in the line boxes” until you get the line on the bottom or where you want it. We have just indicated that we want a single thick underline at the bottom of the cell C6. Point to **OK** and click the left mouse button. When you return to the spreadsheet click somewhere other than cell C6. You should now see that C6 is underlined. Sometimes the box highlight hides the lines. If you “messed-up”, try again.

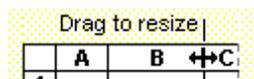
Now type in the numbers in the cells indicated.

**C11 30**  
**C12 50**  
**C13 150**  
**C14 70**

Now, **underline** cell **C14** like you did cell **C6**.

## **WIDENING COLUMNS**

You probably noticed, as you typed in the numbers, some of the words had the last few letters covered (just like Bonzo). 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). It will turn into an **arrow pointing right and left with a small vertical line in the middle**. **Hold down** the left mouse button and drag the line to the



right.

As soon as you start to drag a **dotted vertical line** will go down the spreadsheet and move as you hold down the left button and drag the mouse. Keep dragging 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 in the upper left corner of the screen, below File in the menu bar, and above the buttons, that as you hold down

and drag that it tells you that current width of the column.

This is one way to widen a column. Here is another way. 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 gray and the column turn black.).



Now, keeping the mouse somewhere in the “black” area, click the **Right Mouse Button**. Notice that a menu with **Column Width...** appears. Click-on Column Width... and type in **15**. This is another way to widen a column.

## INSERTING ROWS

Oops... a mistake (on purpose). I 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 **black and the 2 turns gray**. **Make sure the cursor arrow is either on the 2 or somewhere in the black row**.

	A	B	C	D	E	F	G
1			Janie's Budget				
2							
3							

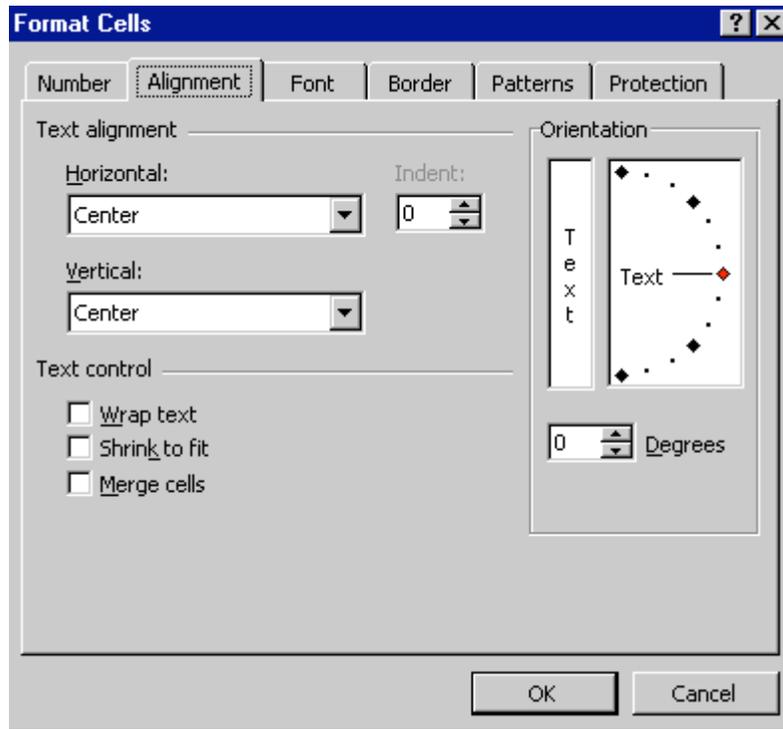
Click the **right** mouse button. Point to **Insert**. Click the left button. Notice how one row was inserted and how everything below moved down. Do this **again** to insert another row. Excel, and all spreadsheets, will remember where they moved your work and automatically adjust for these changes.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

## ALIGNING CELLS

Now we'll type some more. Go to

### C3 SEPT (Type in and tap Enter)

Notice again how **SEPT** is automatically left aligned. If you want to **center** the word simply **click right** on cell C3. Then click on **Format Cells Menu -- Alignment -- Horizontal - center -- Vertical - center -- 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 in the cells indicated.

<b>D3</b>	<b>OCT</b>	
<b>E3</b>	<b>NOV</b>	
<b>F3</b>	<b>DEC</b>	
<b>G3</b>	<b>MONTHLY TOTALS</b>	(correct the width)

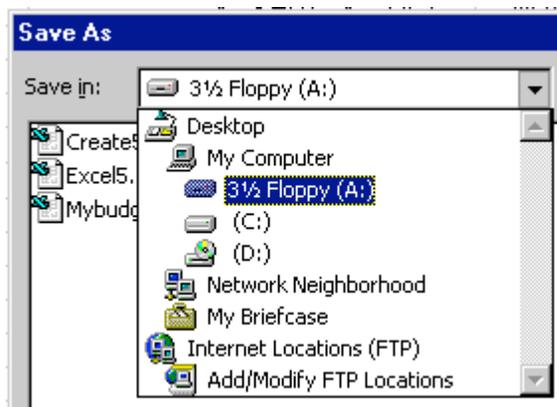
Next we'll highlight cells **D3 through G3**. To do this, point to **D3** and click the **Left Mouse** button. Then, **holding down** the left mouse button, **drag to the right through G3**. Then point to the group of cells and click the **right** mouse button to bring up the **Format Cells** menu. Click on **Alignment** and choose **Right, Left or Center**. Then point to **OK** and click the left mouse button. All of the cells will then be as you desire. Finish off by clicking on **Center**.

	A	B	C	D	E	F	G
1			Janie's Budget				
2							
3							
4			SEPT	OCT	NOV	DEC	MONTHLY TO
5	Income						

We want to underline cells **D8, E8, F8, and G8**. To accomplish this move to cell **D8**. Using the mouse point to cell **D8**, click and **hold down the left mouse button**, and **drag** the arrow to the right until cells **D8 through G8** are high-lighted. Now point to anywhere in the high-lighted area and click the right mouse button to bring up the **Format Cells** menu. Repeat what you did before to underline cell **C8**.

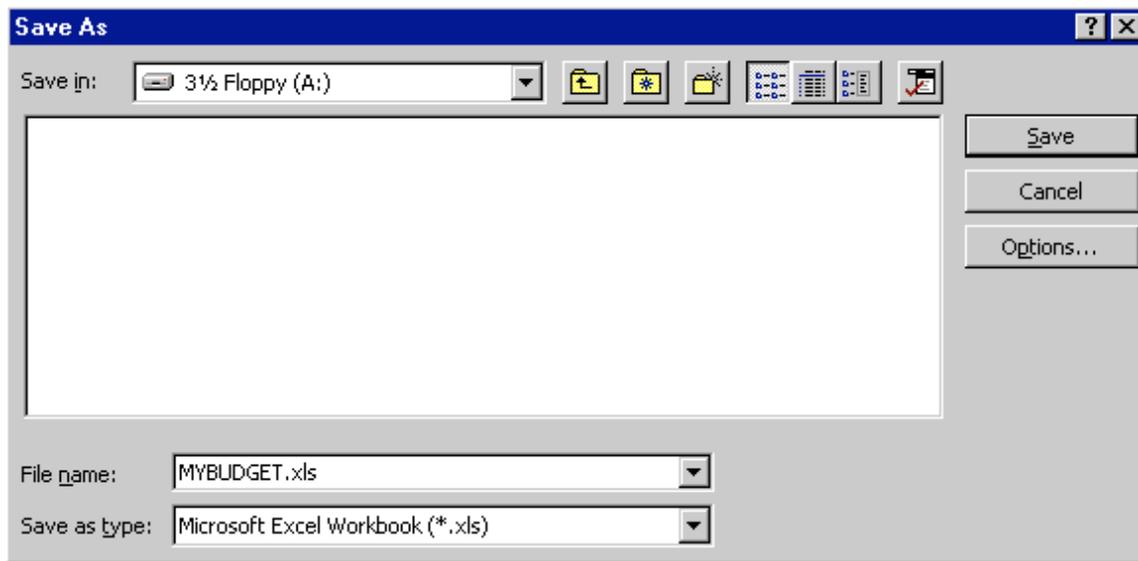
## SAVING SPREADSHEETS

We have done quite a bit of work so now is a good time to save. Point to the **File** menu at the top of the spreadsheet. Point to **Save As**. Click. A sub-menu box appears.



Notice in the upper left corner that there is a “box” to the right of **Save In:** with a down pointing **triangle** to the right. Click-on the **triangle**. This will show you all of the “drives” and “folders” where you may save your work. **Put a formatted 3 \_ diskette in the A Drive**, then click-on the **3 \_ Floppy (A:)**; this is where you will save your work.

You will also see:



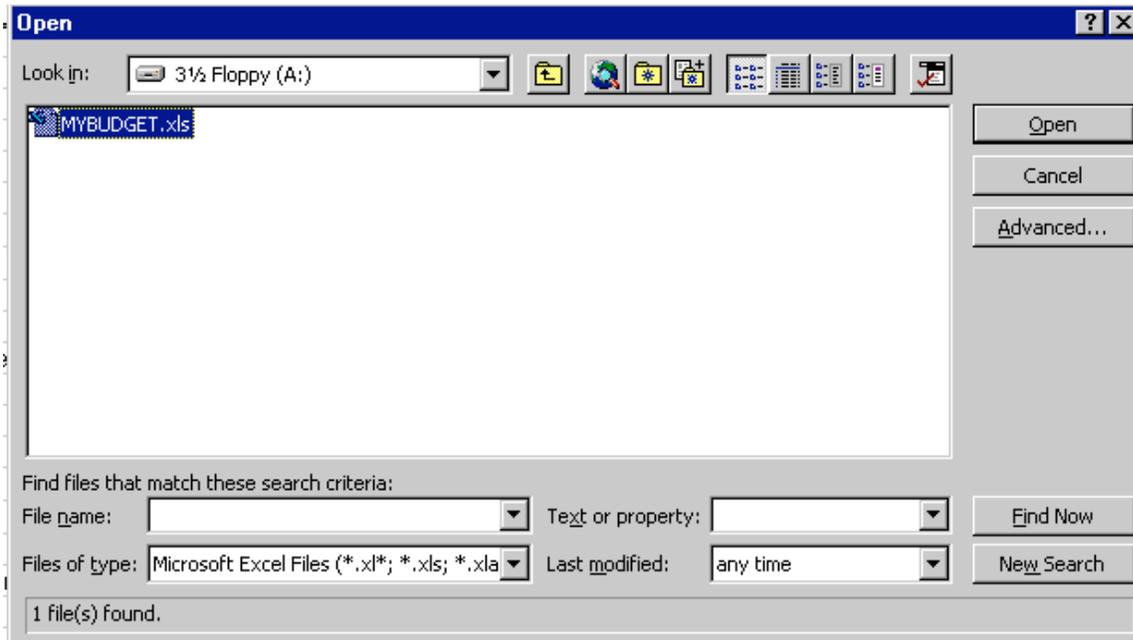
To the right of **File name:** **Delete** the information which is in the box, and **type in MYBUDGET**. This is the name under which you are saving your file. (In the future you will choose logical names for your spreadsheets as you save them.) Now point to **Save** and click the left mouse button.

## EXITING SPREADSHEETS

Anytime you need to leave your spreadsheet simply click on **File** in the menu bar, then click-on **Exit**. If you **have not saved** your spreadsheet, a reminder box will appear **asking you to do so**.

## RETRIEVING SPREADSHEETS

When you need to return to a spreadsheet you first load Excel, as you did originally. When Excel is on the screen, click-on **File** in the menu bar then click-on **Open**. The Open Menu will appear.



**Click** on the **down triangle** to the right of the **Look in:** box (Similar to the triangle in the Save in: box). Click-on the **3 \_ Floppy (A:)**. Files saved on the disk will appear in the box below. **Click-on** your file (**MYBUDGET**), then click-on **OK**. Your file will be opened. You could also double-click quickly on the file to open it.

Also, if you have not done so already, **move your cursor slowly over the "buttons" located below the menu bar**. You will notice a little box that tells you what these buttons do. Many of them will save you extra "clicks" by using them. Notice, that under File and Edit in the Menu bar, there are a small folder (Open) and a diskette (Save). Clicking-on them will take you directly to Open and Save.

## 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.

To do this, begin by **moving** your cursor to cell **C9**, and clicking-on it.

**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** the following in cell **C9**:

**= C6 + C7 + C8    Tap Enter**

The total of these cells will now appear in **C9**. When you have completed typing you will see this formula in the area below the menu bar.

Go **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 how you typed in an = **before the cell location**. If you had simply typed in C6 + C7 + C8, Excel would have thought this entry was a **word** and this entry would have shown as you typed it.

Try this if you want. Any time you “create” and 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, that are on several screens, this is not such a great method.

You can put in - **for subtraction**, \* **for multiplication**, and / **for division**. As you

become more capable we'll, build some nifty formulas.

## **Point Method**

Again move to cell **C9**. We'll now add the numbers a second way.

First, tap the = and **POINT** the cursor to cell **C6 using the arrow movement keys or mouse**, now tap another + and move cursor to **C7**, now tap another + and move the cursor to **C8** (**Notice** how as you " + and point " the addition **formula is being built**), now tap **Enter**. The same formula is built by this method.

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**.

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(.]

There are two ways to put in this range:

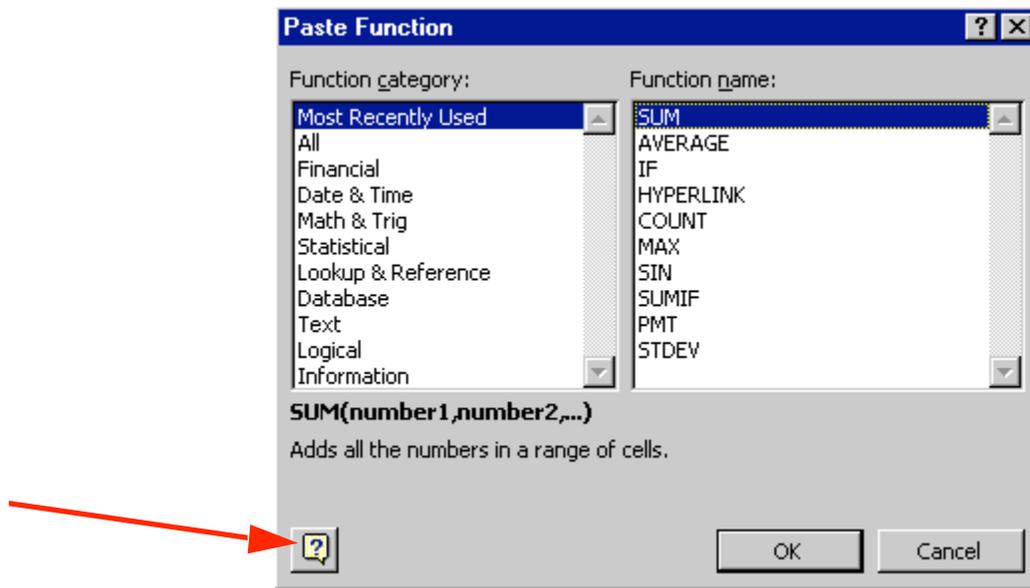
**Arrow Key and Anchor Method:** With the **arrow keys move the cursor to cell C6**. As you move you will notice that the cell where the cursor is located appears after the =SUM(. When you get to **C6** tap the . (**Period**) **Key**. This is called an **ANCHOR** and holds one end of the RANGE in place. You will notice that a **C6:C6 appears**. 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**. Type in =SUM( , as you did before. Now point to Cell **C6**. Hold down the left mouse button and **drag** the highlight down to cell **C8**. (Cells C6, C7 and C8 should be highlighted.) Now tap **Enter**.

This =SUM Function is a great way to **add a lot of numbers, or a block 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 sums you can't do subtraction, etc.

Point to cell C9 again. Tap the Delete key to remove the formula currently in cell C9.

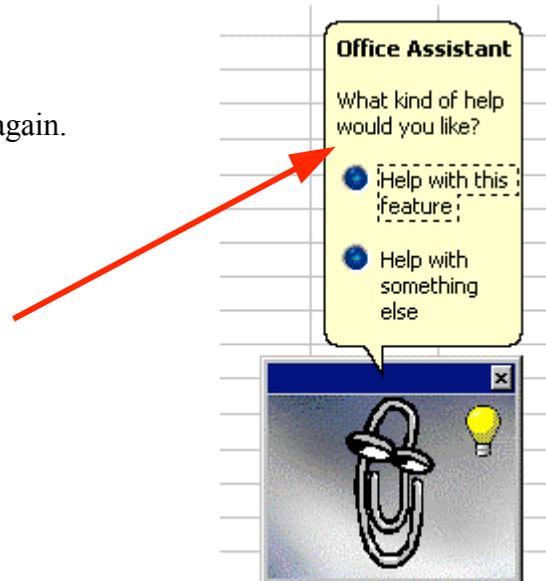
There are a number of **formulas** built into Excel, like Sum. These formulas are called **Functions**. Below the Menu Bar you will see an " $f_x$ ". **Click on it. Read the information.**



As you can see, there are all kinds of formulas that come with Excel (e.g. Statistical, Mathematical, Financial, etc.).

We're going to use one of these to add the numbers again.

Click-on the word **All** in the window under **Function Category**: On the right, under **Function Name** you will see a list of **all the functions** in Excel. Click-on the **down triangle** until you come to **SUM**, click-on it. Notice the small box with a ? in the lower left corner of the Paste Function window. Click-on it. The "**Office Assistant**" will appear and you can ask it questions.



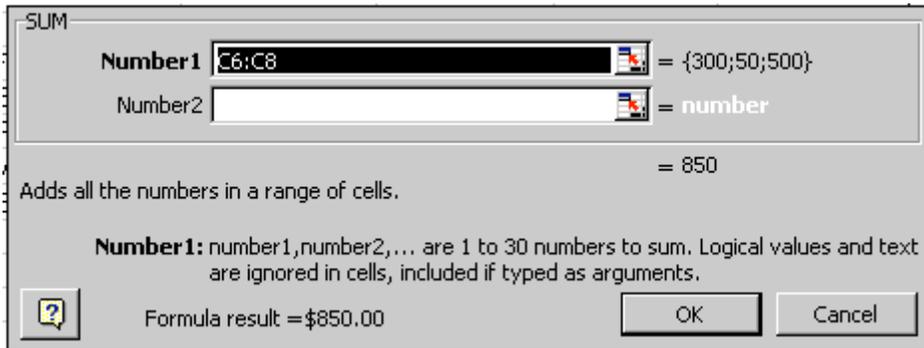
Click-on the **blue dot** to the left of; **Help with this feature**, and **follow the instructions**.

You will see various help windows that will show you how to use this, or any function. When you have reviewed all of the help you care to see, carefully click-on the **X** at the upper right end of the blue bar that says Microsoft Excel on the left. If you accidentally close the spreadsheet, simply reply yes to Save, and then re-open the spreadsheet as you did on page 8.



Now click-on the **X** in the upper right hand corner of the Office Assistant. This will put the Assistant away until we need it again.

Now click on **OK** in the Past Function Window. The following menu will appear.



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**. Now that you are becoming proficient 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. It has a little **red arrow** in it. The **below** window will appear. Delete anything that is in the window, and then, high-light cells C6 to C8 (Click-on C6, hold down the left mouse button, and drag until the three cells are high-lighted.). A “**marquee**” will begin to **flash** around the cells, indicating they are high-lighted. The cell will appear as **below**. Now tap the **Enter Key** and the numbers will show in the area to the right of Number 1. Now, click-on **OK**. You’ll see that the SUM formula is in Cell C9.



## **AutoSum METHOD**

**3 Method (Windows):** The last three methods work in all spreadsheets. Since we add numbers more than any other operation in spreadsheets, Excel spreadsheet has an additional feature. Move to cell **C9 again** and tap the **delete** key to erase your last formula. Now point to Cell **C6** and hold down the left mouse button and **drag down** until cells **C6 through C9** are high lighted. Now look at the upper area of the screen, just below the menu bar, for a **Σ** (summation) symbol. **Point to it and click with the left mouse button. WOW !! Automatic addition !!** Point to cell **C9** and click with the left mouse button. Notice in the cell area how an **@SUM function** was automatically calculated! Any time you want to add using this method just drag **one more cell past the numbers you want to as for the total area** and click-on the **Σ** .

**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 **D16** and **underline** cells **D16 through G16**, as you did before.

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

## SUBTRACTION

In cell **A19** type **Net Income**. Next, **adjust the width of column A**.

In **C19** we want to **subtract** the amount in for Expenses in cell **C17** from the amount for Income in **C9**. This can be accomplished by using either the **Type-In Method** or **Point Method**. Go ahead and do this.

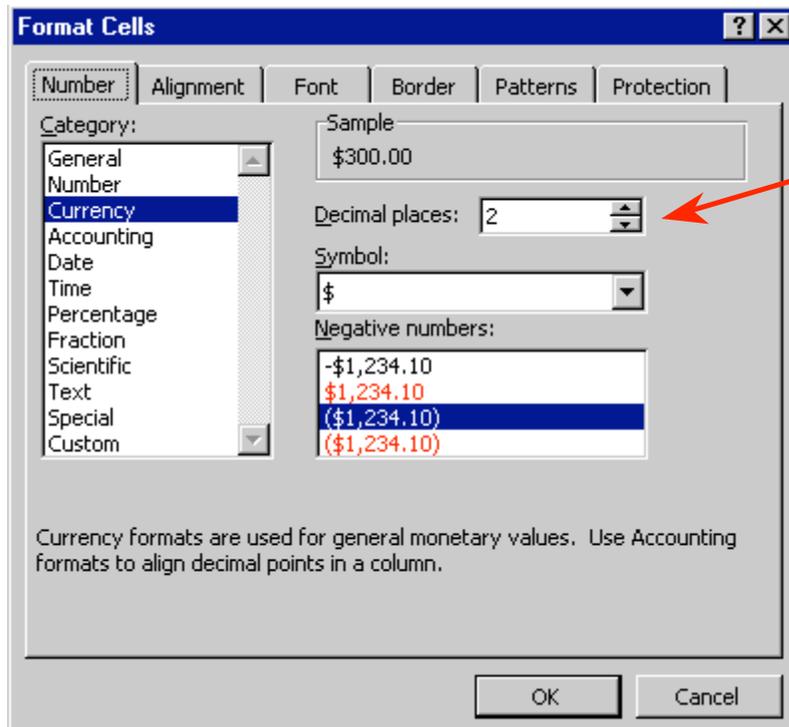
**[The formula should look like =C9-C17]**

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** down slowly to high light cells **C6 through C19**.

	A	B	C
1			Janie's Budget
2			
3			
4			SEPT
5	Income		
6		Parents	\$300.00
7		Job	\$50.00
8		Investments	\$500.00
9		Total	\$850.00
10			
11			
12	Expenses		
13		Food	\$30.00
14		Beverages	\$70.00
15		Parties	\$150.00
16		Miscellaneous	\$70.00
17		Total	\$320.00
18			
19	Net Income		\$530.00
20			

Now point anywhere in the high lighted area and click the **right** mouse button. The **Format Cells** menu will appear, click on it and then click-on the **Number** (this is what you want) "Tab" at the top of the window. Point to **Currency**.

Notice **several things**. The **right side** shows the **number of decimal places**. The **2** -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 what the number will appear**, depending on your choice. Accountants like brackets ( and ). We'll pretend we're accountants, so click on the number with brackets. When a negative number is calculated, it will appear with brackets. 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 you need to, go ahead and **widen** the columns as you did previously.



## DIVISION

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

Now move to cell **C21** and using either the **Type-In Method** or the **Point Method** divide (/) the amount for Income in cell **C9** by the amount for Expenses in cell **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~~. Point to **C21** and click the **right** mouse button. **Format Cells - Number -Percent. No ( 0 ) Decimal Places. OK.** Ta Da !!! a %.

[The formula should look like =C9/C17]

## COPYING

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. To do this, first **move** your cursor to C6. Then we'll **high-light** what we want to **copy**, next 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 down the column** until cells C6 through C21 are high-lighted.

	A	B	C
1			Janie's Bud
2			
3			
4			SEPT
5	Income		
6		Parents	\$300.00
7		Job	\$50.00
8		Investments	\$500.00
9		Total	\$850.00
10			
11			
12	Expenses		
13		Food	\$30.00
14		Beverages	\$70.00
15		Parties	\$150.00
16		Miscellaneous	\$70.00
17		Total	\$320.00
18			
19	Net Income		\$530.00
20			
21	Percent		266%

Point to **Edit** in the top menu. Click the **left** button. Point to **Copy** in the menu that appears. Click the **left** button. The menu disappears.

Now we'll tell the program **where to copy** the information. Point to cell **D6**, **click and hold down the left mouse button and drag down and to the right to cell F21** (This will **high light three columns** -- OCT, NOV, DEC -- to copy to.).

	A	B	C	D	E	F
1			Janie's Budget			
2						
3						
4			SEPT	OCT	NOV	DEC
5	Income					
6		Parents	\$300.00			
7		Job	\$50.00			
8		Investment	\$500.00			
9		Total	\$850.00			
10						
11						
12	Expenses					
13		Food	\$30.00			
14		Beverages	\$70.00			
15		Parties	\$150.00			
16		Miscellane	\$70.00			
17		Total	\$320.00			
18						
19	Net Income		\$530.00			
20						
21	Percent		266%			
22						

Now point to **Edit** in the Menu Bar **again** and click the **left** button. Point to **Paste**. Click **left** button. **Wow !' All those numbers and dollar signs and formulas and EVERYTHING was copied in a flash !! That sure saved us a lot of time.**

**Note:** You can also utilize the copy and paste buttons in the button bar to do this if you desire.

**Change** a few numbers in each of the months in **both** the **income** and **expense** areas to see **how the spreadsheet works**. (This will be viewed in the graphs later.)

**This would be a great time to Save again.**

Now for something to do on your own.

Move to cell **G6** under the title Monthly Totals. **Make-up a formula to add** each of the amounts in Parents for the four months. **Use any of the four methods**. After you have completed your formula **copy** it to each of the cells **G7 to G19**. You will see some **"stuff"** 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**. Go to **G8 and G16** and **underline** like you've done before. Now **copy** the **percentage** formula in cell **F21** to cell **G21**. Now put a **\$** in cells **G6 through G19** if you need to, and a **%** in **G21**.

Now would be a good time to **Save** again.

## **Absoluting**

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 utilize the copy feature of the spreadsheet. To do this 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 a **2**.

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**.

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

**Point** to each of the cells **D25, E25, F25 and G25**. Notice how **C23** (the cell with the 2) **"rolled"** and became **D23, E23, F23 and G23** (which are blank - and caused the "0's"). **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 = Point to C23). **NOW, tap the F4 key**. Notice, in the Edit bar at the top of the screen, that the **=C23 changes to: \$C\$23**. (This tells you that cell C23 is absolated or anchored. The **"\$'s"** indicate the absoluting.) Now **finish the formula** by typing in or pointing the **\*C17** as before. Tap **Enter**.

The formula should look like: **=\$C\$23\*C19**

Now **copy** the formula in cell **C25** to cells **D25, E25, F25 and G25** again.

The numbers should be **correct**. Point to cells **D25, E25, F25 and G25** like you did before. Now you will notice the **"\$'s"** have **copied** the **=\$C\$23** to **each cell** and the Net Income figures have rolled a 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.

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

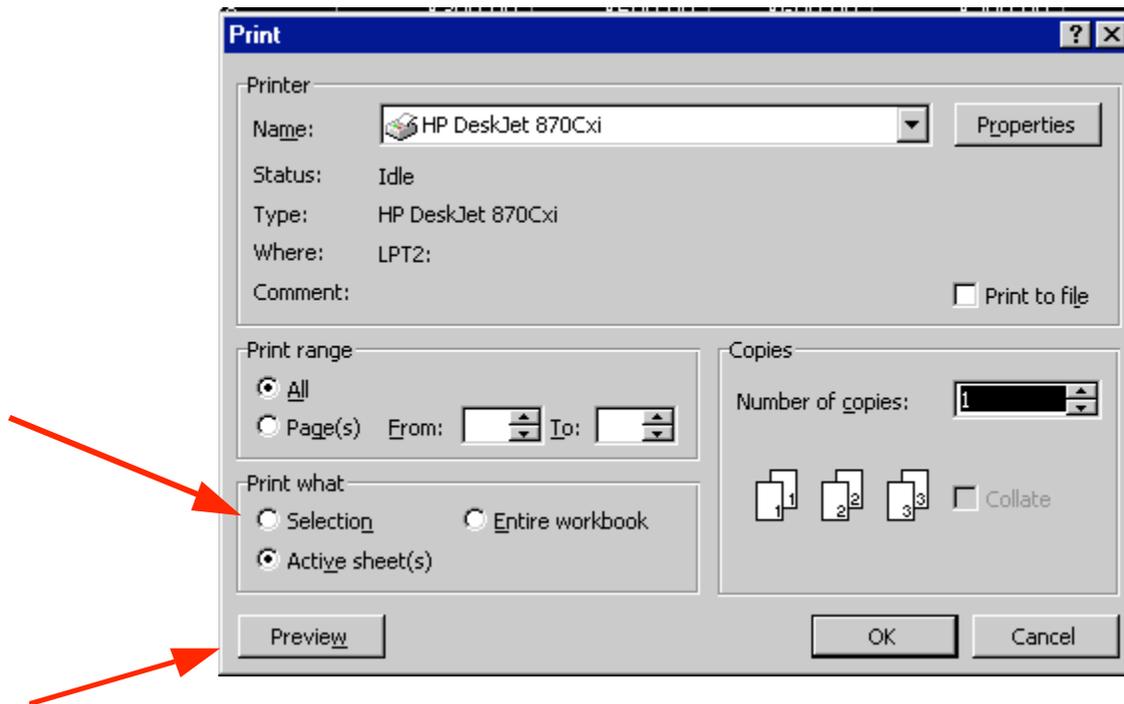
## **Printing**

First move to cell **A1**.

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

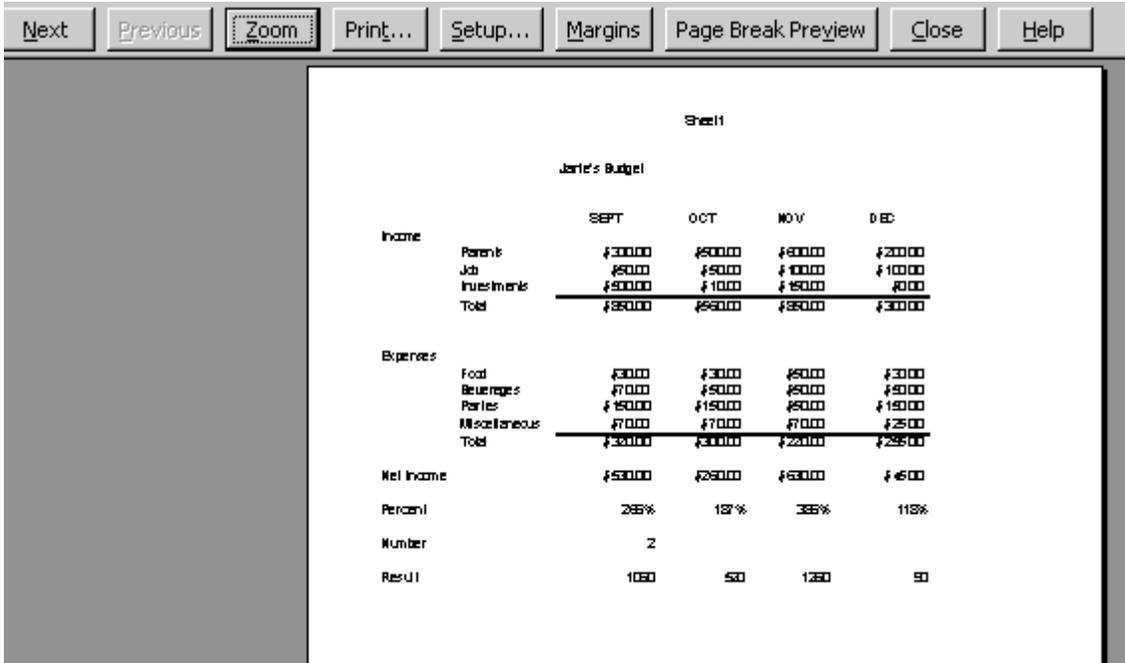
**The most important thing with printing is to tell the printer what to print.**

Unlike a word processor, you may need to High-light what you want to print. So, Point to cell **A1**, hold down the left mouse button and **drag** down and to the right to cell **G25**. You've **high-lighted the entire spreadsheet**. Now Point to **File** in the top menu. Click the left button. Point to **Print** in the menu. Click the left button. The following window should appear:



If we're **really sure** of what we've done, then **Active sheets(s)** is **OK**. However, if you **make a mistake** somewhere in the spreadsheet, you might end up printing a lot of extra pages. Notice in the "box" that indicates **Print what** that there are three selections: **Selection, Active sheet(s) and Entire Workbook**. So, as indicated above, point to the "circle" in front of **Selection** and click the left mouse button.

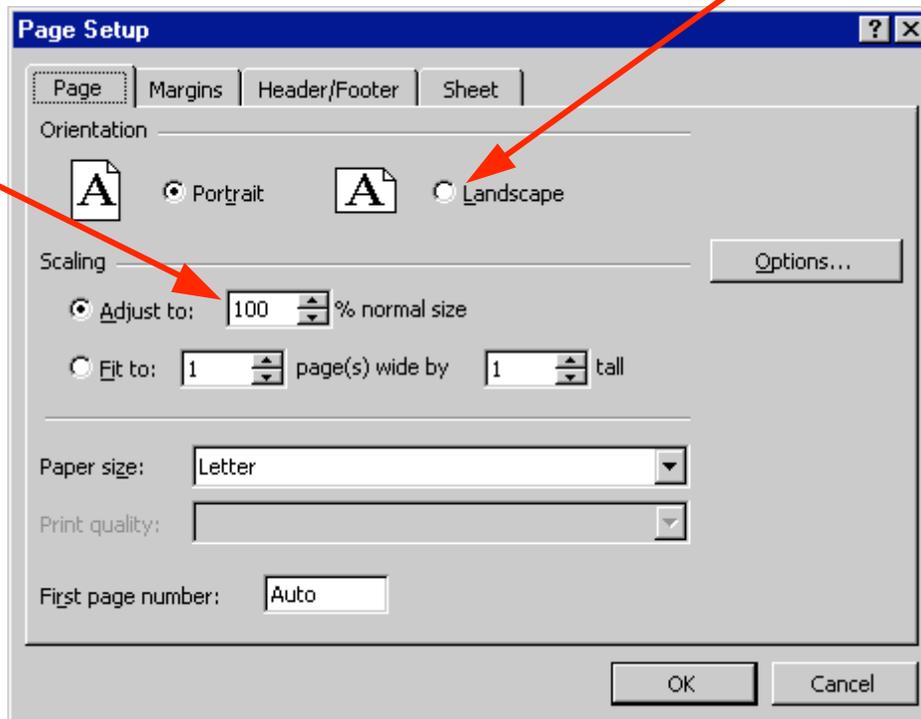
It's usually a good idea to see what our printout will look like. So, point to **Preview**. Click the left button. A picture of what our printout will look like appears.



First notice that an “image” of your spreadsheet appears. In the top left corner of the screen you will see the words **Next** and **Previous**. In this case they are not active. If our spreadsheet had been **larger than one page**, then you would see these “activated” and a “page count”. So, this spreadsheet will print on one page in “portrait”. Go ahead and click-on **Print**. When the printer completes the print, label this printout “portrait default”.

Now click-on **Setup** in the top button Bar.





Notice that the Page Setup 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 in front of **Landscape**. 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**. With either the **“up/down” triangles, or by typing** in the information, change the size to **125**. Then click-on **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. Then click-in the **small circle to the left of fit to in the Scaling** and make sure that **1 page** is set. Excel will now return your spreadsheet to one page. Try other things here. Work with margins, etc. 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-on **Close** and you will return to your spreadsheet.

Now we'll call it a day and get out of Excel for Windows. First, let's **save** our work one more time. If you **forget**, Excel will **remind** you **to do it**. What a nice program!!

Point to the **Edit** menu and click the left button. Point to **Exit**. Click the left button. That's it for now.

When we return, we'll retrieve our work and do some really neat graphics.

## 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 in business to display and explain your work.

There are a couple of ways to do this. One is to click-on Insert in the menu bar then, Chart, then On this Sheet. Or, by clicking on the Chart Wizard button that is below Window in the menu bar. The button has a picture of a bar graph and a magic wand.

Before we do this there are a couple of essential steps. First we have to **tell the "Wizard" what we want to 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 **B17** for the same reason.

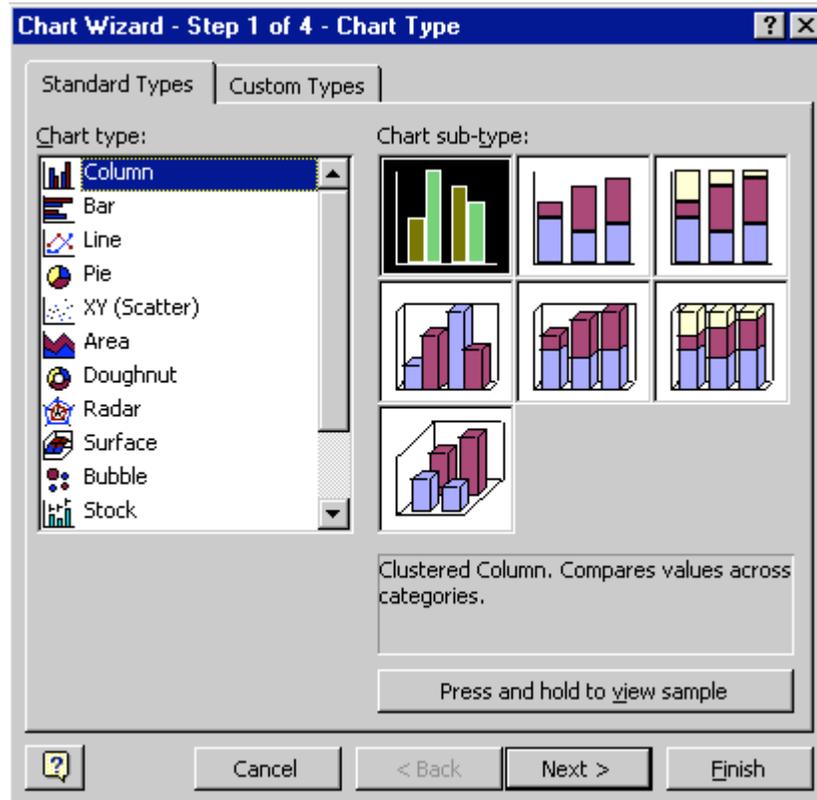
### VERY IMPORTANT.....

Now....Something New.... Hold down the left mouse button and **highlight cells B3 to F3**. Next **HOLD DOWN** the **Ctrl** key at the **bottom of the keyboard**, and **while you are holding it down, highlight B9 through F9**. You will now see two "ranges" highlighted. **Hold down the Ctrl again, and highlight B17 through F17**. These three ranges will make up your chart. The x-axis will be made up of B4 - F4. And, the two sets of bars (series) will make-up the Income and Expense.

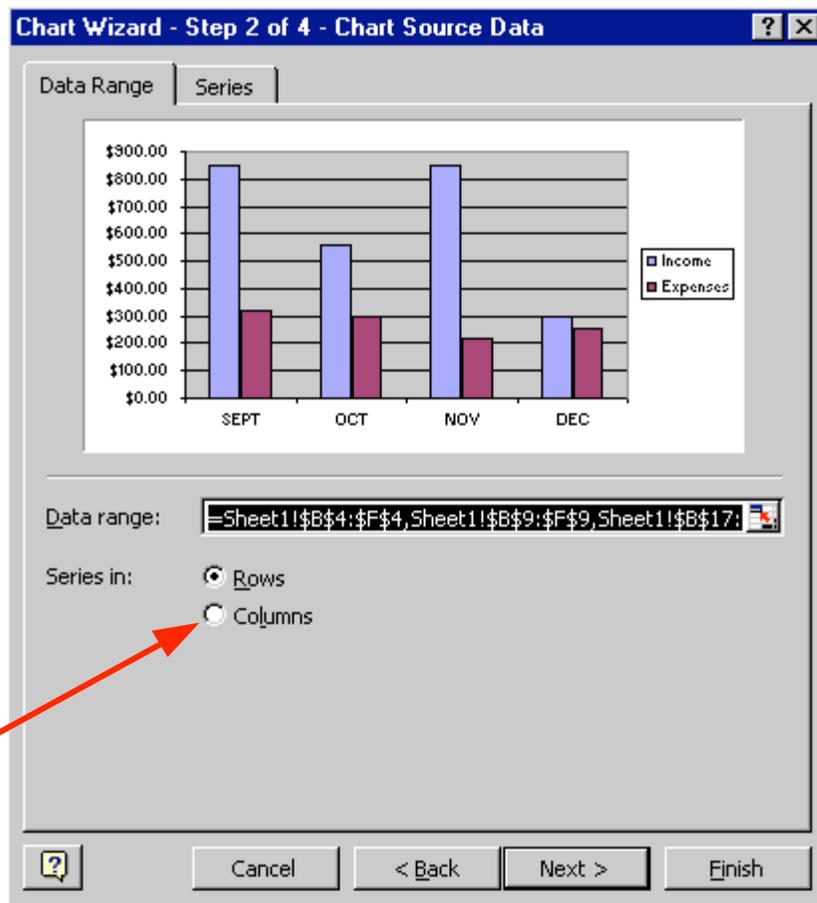
	A	B	C	D	E	F
1			Janie's Budget			
2						
3						
4			SEPT	OCT	NOV	DEC
5	Income					
6		Parents	\$300.00	\$500.00	\$600.00	\$200.00
7		Job	\$50.00	\$50.00	\$100.00	\$100.00
8		Investments	\$500.00	\$10.00	\$150.00	\$0.00
9		<b>Income</b>	<b>\$850.00</b>	<b>\$560.00</b>	<b>\$850.00</b>	<b>\$300.00</b>
10						
11						
12	Expenses					
13		Food	\$30.00	\$30.00	\$50.00	\$30.00
14		Beverages	\$70.00	\$50.00	\$50.00	\$50.00
15		Parties	\$150.00	\$150.00	\$50.00	\$150.00
16		Miscellaneous	\$70.00	\$70.00	\$70.00	\$25.00
17		<b>Expenses</b>	<b>\$320.00</b>	<b>\$300.00</b>	<b>\$220.00</b>	<b>\$255.00</b>
18						

We'll use the easiest method for our first chart (graph).

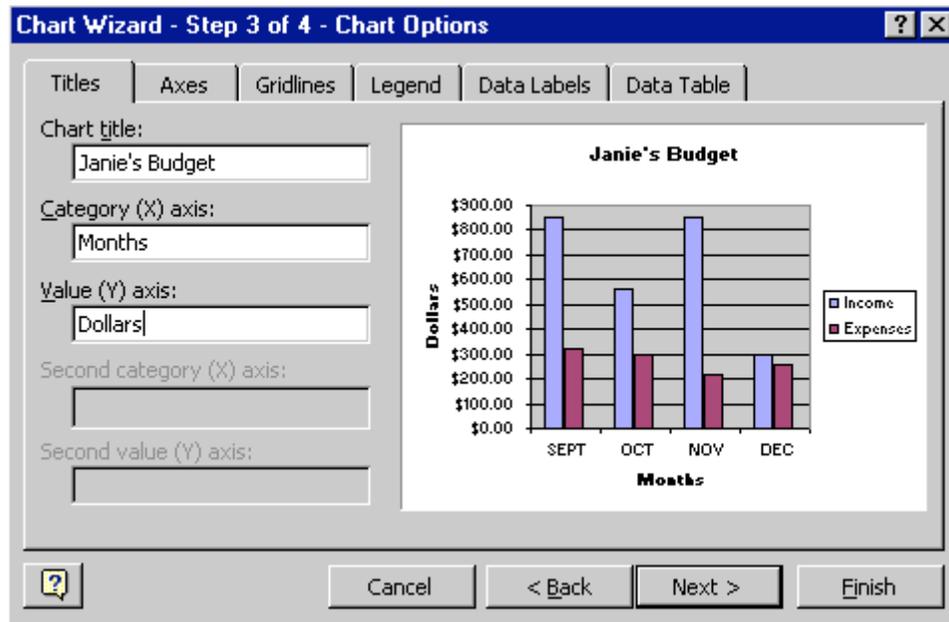
In the **Menu Bar** click-on to **Insert**, then in the menu that appears, click on **Chart**. The following window appears.



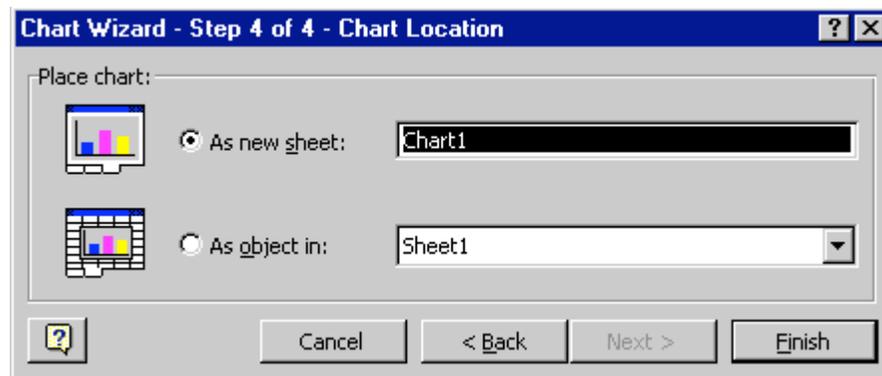
**Chart Wizard now appears.** The various types of charts show in **Chart type:** on the left. Examples of the selected chart type show on the right under **Chart sub-type.** We'll stay with Column and the chart selected for now. Click on **Next.**



Wizard now shows you **what your chart will look like**. The “ranges” you selected originally are shown in the Data range: area. **If you did not highlight as indicated it wont "look right"** (like the example above). If you click-on the Series tab at the top of the Wizard screen, you’ll see a new Wizard screen that shows you where the Income and Expenses series came from. Click-back on the Data range tab at the top. Now click-in the little circle in front of Columns. The Wizard will indicate that the chart has been “rotated” 90 degrees and thus the axis have changed. Click-back in the small circle in front of Rows. Click **Next** again.



Now the final step: **Titles**. Click-in the blank area under **Chart Title**. A flashing cursor will appear. **Type in your name with an apostrophe (') s and the word Budget (ex. Janie's Budget)**. Now, click-in the area under **Category (X) axis:** and type in **Months**. Next, click-in the area under **Value (Y) axis:** and type in **Dollars**. You probably noticed that as you entered these titles, the chart in the area on the right of the Wizard changed to give you an “instant” view of your final chart. You will also notice that there are several tabs at the top of the Wizard. Click-on each of the tabs and see what “they do”. Notice how some change axis and put in grid lines. The legend is the small box on the right, which indicates what the colors of the “bars” indicate; income and expense. Data labels appear at the top of each bar to indicate its “value”. Now click-on **Next**.



This is the final Wizard. You'll notice that it asks you where you want to put your chart. Since this is your first chart, it is best if you select **As a new sheet:**. This will put your chart on a new tab called **Chart 1**. Now click-on **Finish**, You'll see that you chart has a tab of its own at the bottom of the screen.

**WOW!!!!** There's your chart. Again, notice that Excel created a **new tab** at the bottom of the spreadsheet that says **Chart 1**. Any time you want to change the way your chart looks, when the numbers change, simply click-on the Sheet 1 tab. This will take you back to your spreadsheet. After you make your changes, click on the **Chart 1** Tab and you'll see how the chart has changed.

Now it would be a good time to **Save** again. In Excel when you save your **spreadsheet** you also save your **graph**. Your graph is saved where ever you are working.

**Note:** We are about to do some things which could mess-up your graph. **If you do get "messed-up"** in the graph - **don't save again**. Simply **Close** the worksheet and **DON'T SAVE**. **Open** the worksheet again and you will be in a nice neat graph where you can experiment some more.

Let's really get **"Snazzzyyy"**.

**Click on the Chart 1 tab.**



**Click-once on your title** at the top. A “box” with little squares on the corners will appear. These are “sizing grabbers”. When you move the cursor over them you will notice that the cursor changes to small, directional arrows. If you click, hold down the left mouse button, and drag when you see these arrows, you will notice that the Title Box gets larger or smaller as you drag. Next, click-on the **name of your budget** until you get a **flashing cursor** somewhere in the title. With the arrow movement keys, or mouse, move to the **end of the title**, to the right of the "t" in Budget, and tap **Enter**. Now type in **Fall 1998**. Now click at the beginning of your name, hold down the left mouse button, and drag to **highlight the first line of the budget title with your name in it**. Keeping the cursor on the dark area, click the **right mouse button**. Click on **Format Chart Title**. Change the Font to **Times New Roman** (by moving up and down with the arrows). As you change things you will see the results in Preview on the lower right. Change the **size to 28**. Change the color if you want. Click **OK**. Next Highlight **Fall 1996**. Repeat the above and **choose a font you like** and change the size to **20**. Your title is now large and has "**descended**" into the graph area.

Click-on the **upper right hand corner of your gray graph area**. You will see **little squares** now appear at the four corners and sides of the graph area. Point to the **upper right corner square** and move the cursor until you see an **arrow with two heads**  $\leftrightarrow$ . Hold down the left mouse button and **drag down and to the left** then let go. Your graph will get **smaller**. Now point somewhere in an **open gray area** of the graph (not on one of the bars) and click again. Hold down the left mouse button and **drag** the graph area so it looks more "appropriate". Click-on the **Legend** on the right. Then **click right** in the **Legend area**. Click **Format Legend**. Click on **Placement**. Click in the white circle to the left of **Bottom**. **OK**. Now, doing the same thing you did with the graph, make the **legend larger** and make the **Income and Expense fonts larger**.

Now let's look at your graph and then print it. Go to **File - Print Preview**. If you like what you see go ahead and print the graph. If not, close Preview and make some more graph changes.

Whenever your graph is visible, you can point to any area of the graph, click on it, click right on it, and edit that particular area. You can also click-**right** in the chart itself. In the menu that appears, click-on **chart type** and then change the to a different type of chart. **TA DA!**

**Note:** No matter what type of printer you have, graphs take awhile to print. In your room the printer will go slowly line by line as it draws the graph. In the lab the computer will "send" the entire graph picture to the laser printer. Be patient.

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

If you have any questions or comments please contact:

**Murray.t@lynchburg.edu**