

**Getting Started**  
*with*  
**Microsoft Word and Excel 2000®**

*A Guide for the Beginning User*

**By**

**Samuel T. Scott**

Microsoft Office 2000 Professional® integrates the most commonly used and needed applications for business or home. Within the Windows® environment, the ability to cut and paste between applications using the Windows® clipboard significantly enhances the usability and functionality of programs such as word processing, spreadsheet, presentation graphics, and database management. Microsoft's Office 2000 Professional® takes full advantage of the capabilities of Windows® in its integration of Microsoft Word 2000®, Microsoft Excel 2000®, Microsoft PowerPoint 2000®, and Microsoft Access 2000®.

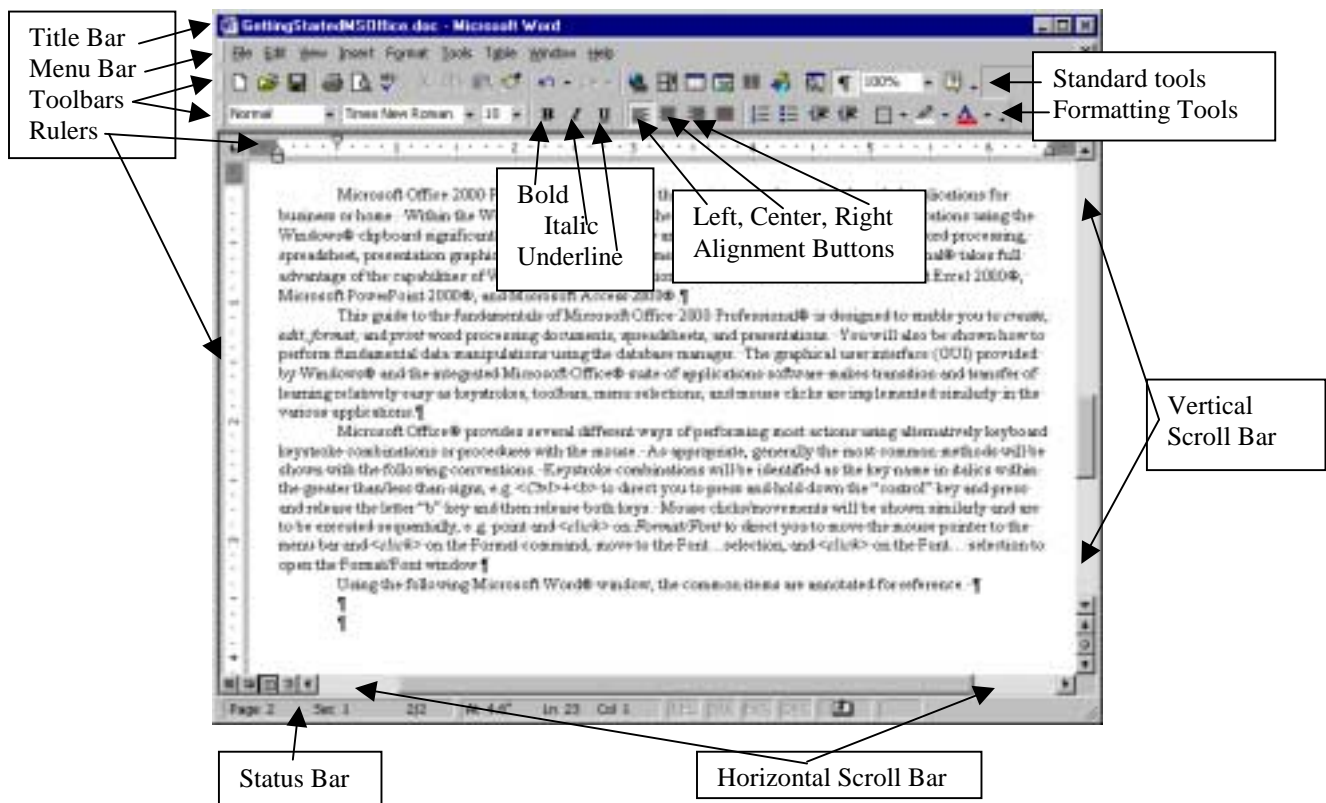
This guide to the fundamentals of Microsoft Office 2000 Word® and Excel® is designed to enable you to *create, edit, format, and print* word processing documents and spreadsheets. The graphical user interface (GUI) provided by Windows® and the integrated Microsoft Office® suite of applications software makes transition and transfer of learning relatively easy as keystrokes, toolbars, menu selections, and mouse clicks are implemented similarly in the various applications.

Microsoft Office® provides several different ways of performing most actions using alternatively keyboard keystroke combinations or procedures with the mouse. As appropriate, generally the most common methods will be shown with the following conventions. Keystroke combinations will be identified as the key name in italics within the greater than/less than signs, e.g. <Ctrl>+<b> to direct you to press and hold down the "control" key and press and release the letter "b" key and then release both keys. Mouse clicks/movements will be shown similarly and are to be executed sequentially, e.g. point and <click> on *Format/Font* to direct you to move the mouse pointer to the menu bar and <click> on the Format command, move to the Font...selection, and <click> on the Font... selection to open the Format/Font window.

Standard mouse actions of <click>, <double-click>, <drag>, and <rt-click> apply in all Windows® compliant applications. The actions <click>, <double-click>, and <drag> use the primary mouse button (usually the left button) and imply you have already "pointed" the mouse pointer at something. The <drag> action encompasses the act of pointing, clicking, holding, dragging, and then releasing the primary (usually left) mouse button. The secondary (usually right) mouse button is used for the <rt-click> action and has the sole purpose of causing a shortcut menu to appear with the most commonly needed actions for the item indicated by the mouse pointer.

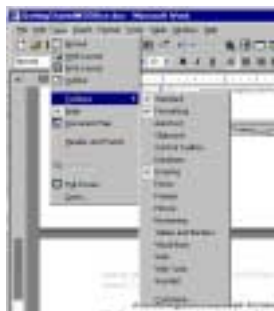
## Microsoft Word 2000®

Using the following Microsoft Word® window, the common items are annotated for reference.



After starting MS Word, a blank document will appear within the MS Word window. Depending on your “view”, you may or may not see the rulers. You control exactly what you have in “view” on the screen by using the *View* command from the menu bar. By <clicking> on the *View* command, a drop down menu appears giving you itemized options for “viewing” on your window.

The View menu command allows you to customize what you see on your desktop and enable various toolbars or views of your document. On any window in Windows®, a solid black triangle to the right of a command indicates additional menus items are available. An ellipsis, (the ... ) following commands indicates a window will open allowing you to make multiple changes. In this case the command sequence was: *<click> on View/Zoom.*



The Format menu command allows you to change the appearance of your document. Changing the appearance includes actions like changing font face, font style, font size, paragraph line spacing, indentations (i.e. first line, hanging), applying numbers or bullets, alignment (e.g. left, center, or right) or borders/shading to paragraphs depending on the specific drop down menu item selected.



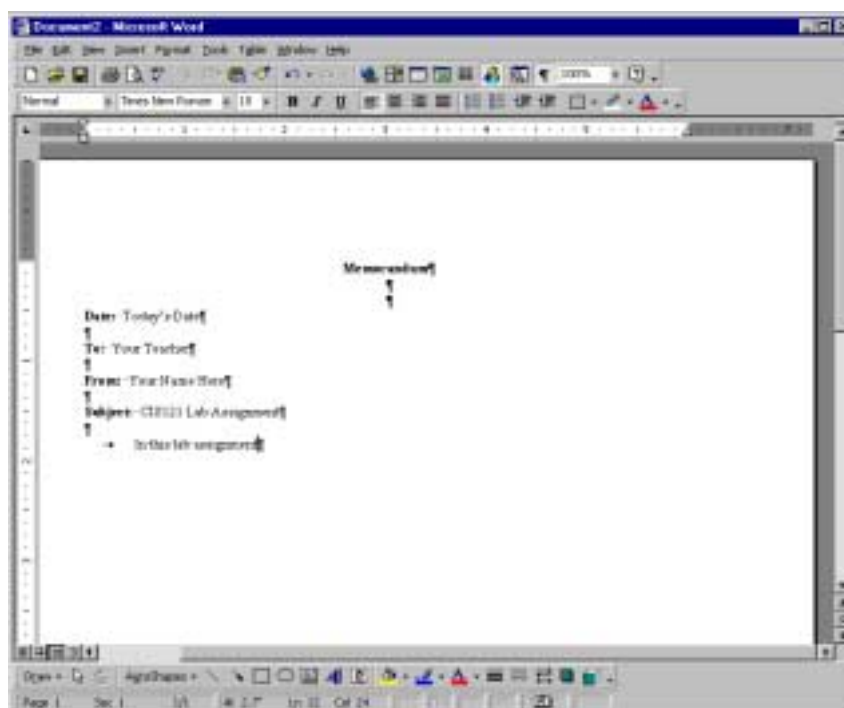
With this baseline information, its time to start working in MS Word on the blank document you have on screen. In general, you want to follow the paradigm of *create, edit, format, print*. Get your thoughts on recorded, i.e. *create*, the document, then *edit* it to make changes of content, i.e. changing words, rearranging sentences, adding/deleting thoughts, etc. After the content is correct, you want to insure the document is *formatted* the way you want it to appear, i.e. indents, fonts, bold, line spacing, alignment, etc. Many times as you are *creating* the document, you will know the *format* you want and can make those appearance adjustments as you are typing.

As you learn MS Word® and all other Microsoft applications, if you are unsure of the function of a toolbar button, simply point to the toolbar button and within about 2 seconds the function of the button will appear in a small pop up window.

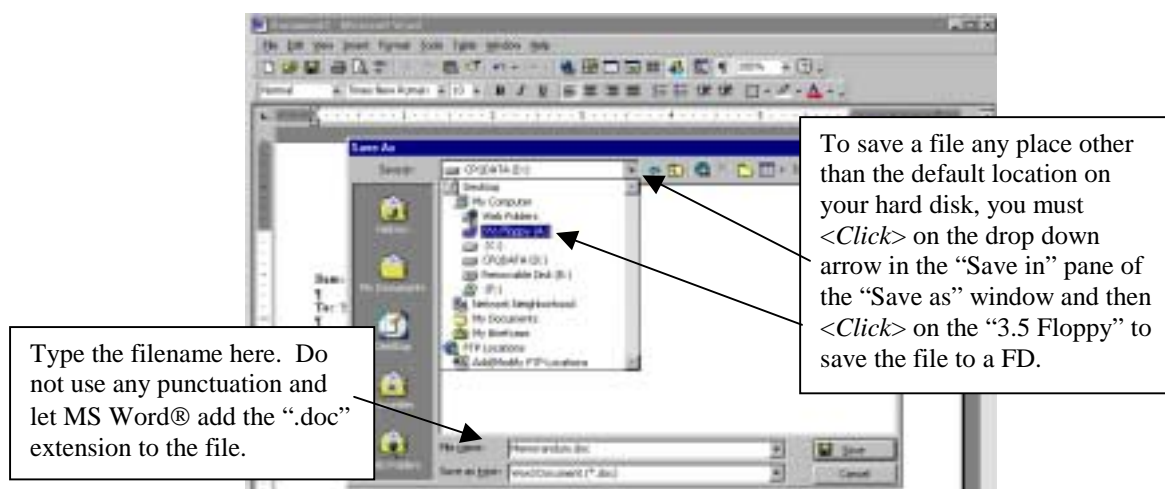
Let's start by creating a one-page memorandum. Since we already "know" the format and you have a guide to follow in the course syllabus, you can begin applying some formatting to the document as you create it. If you have a "new" document window, essentially a blank page, you may start typing or set some formatting parameters and then start typing. <Click> on the "Bold" button on the formatting toolbar. <Click> on the "Center" button on the formatting toolbar. You will notice once the buttons are "clicked" they depress to indicate they have been selected. You should also see the insertion point (the vertical flashing bar sometimes called the cursor) move to the center of the first line.

Type **Memorandum** and press <Enter> 2-3 times. Notice how the insertion point returns to the center of the next line after you press <Enter>. In MS Word®, the formatting parameters of a paragraph are continued to each succeeding paragraph when you press the <Enter> key. <Click> on the “Align Left” button on the formatting toolbar. The insertion point moves to the left margin and now the “Align Left” button appears pressed.

The next four paragraphs are the date, to, from, subject lines for the memorandum. Sometimes as you are typing, you can implement basic formatting parameters quickly with the keyboard. Press <Ctrl>+<b>. Notice the “bold” button on the formatting toolbar appears pressed. Type **Date:** and press <Ctrl>+<b> again. Notice the “bold” button is no longer “pressed”. Using keyboard shortcuts, you can toggle the bold, italics, and underlining formatting functions on and off as you type.



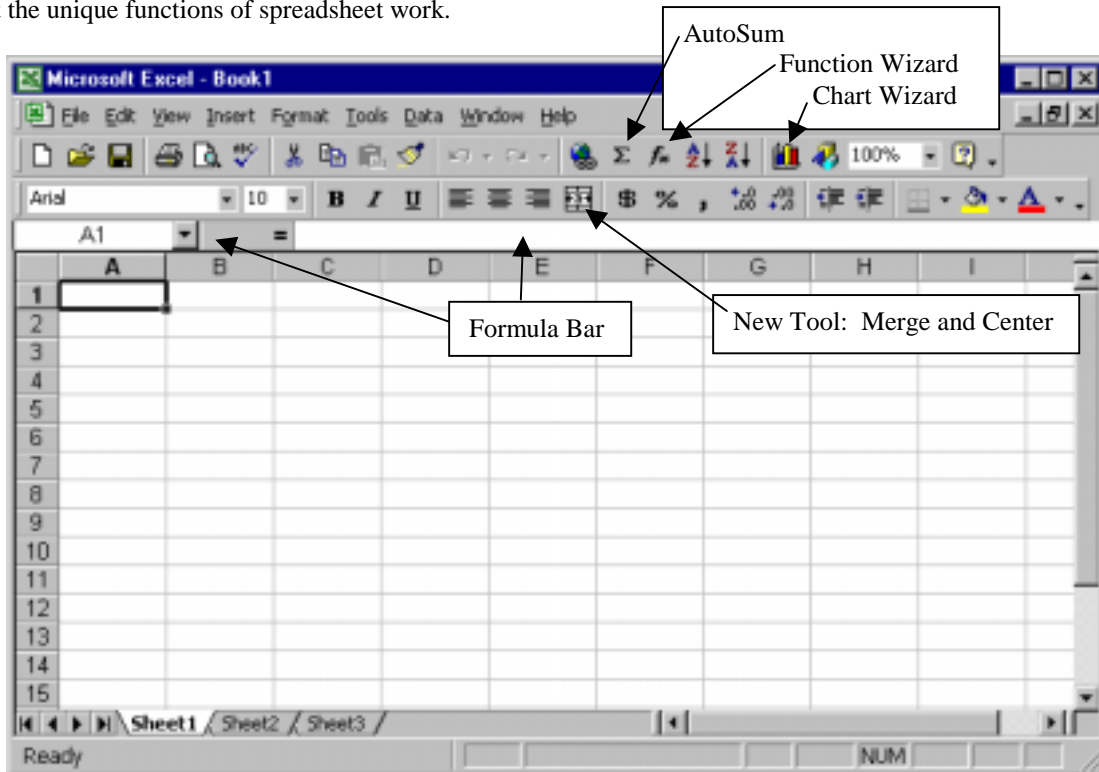
Following the example in your syllabus or posted on the WebCT course page in the Course Information area, finish the memorandum implementing formatting functions similar to the ones in the example. When you are finished, <Click> on *File/Save As* to save the file with the following filename: {your last name} word asgmt. You have the choice of printing the document and mailing/delivering the document for credit or attaching the file to an email to me. Be sure you remember the location of the file on your hard drive or simply save it to a floppy.



## Microsoft Excel 2000®

The tools and techniques you learned and used in your Microsoft Word® exercise are transferable and applicable to work in Microsoft Excel®. Most of the standard and formatting tools are identical though some new tools are added to the toolbars since the nature of spreadsheets is tables of data in columns and rows. The columns and rows are uniquely lettered/numbered allowing you to precisely locate an cell and its address as the intersection of a “lettered” column and “numbered” row. In its essence, only two “things” are put into cells in a spreadsheet, *labels* (words, letters/number combinations) and *numbers* (either discreetly or as formulas). You navigate around the spreadsheet by pointing and <clicking> or using the arrow (cursor control) keys on the keyboard.

As you can see, the Microsoft Excel® window and its arrangement of menu bar, toolbars, etc., look remarkably similar to Microsoft Word®. One significant addition is the Formula Bar. The Formula Bar shows you the address of the active cell, in this case A1, and in the blank pane after the “=” sign the contents, whether label, number, or formula will be displayed. While many of the tools on the Standard and Formatting toolbars are the same as the toolbars in Microsoft Word®, some of the tools on the right half of the toolbars have been changed to reflect the unique functions of spreadsheet work.



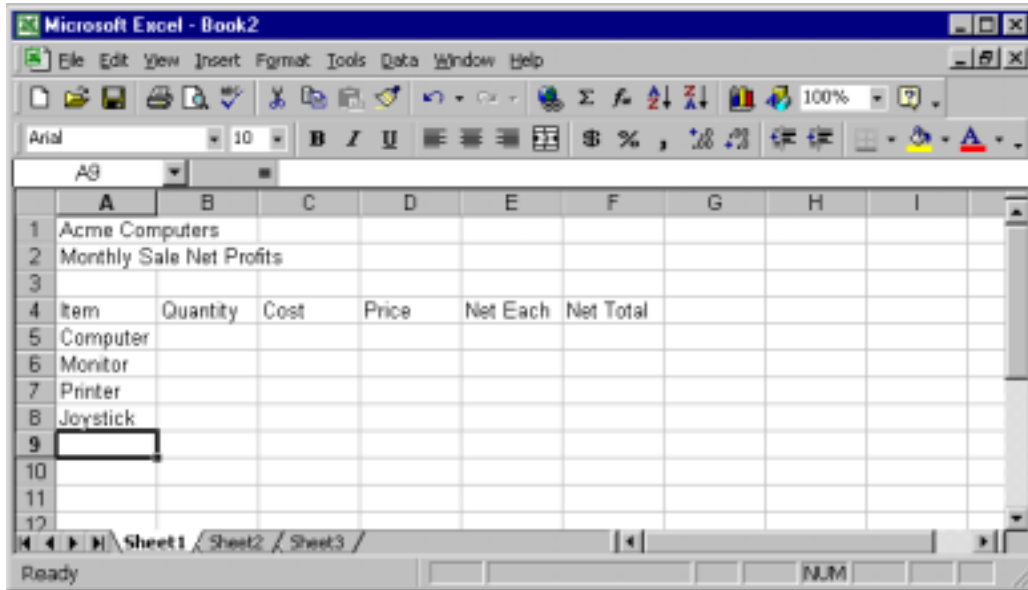
To undertake use of a computer application, you need a problem to solve. Spreadsheet applications, like Microsoft Excel®, are well suited to solving tabular number/formula problems. Labels (text) and numbers are typed into cells much like you would write the text and numbers on a sheet of paper. Formulas are easily constructed much like you write them on paper.

Consider the situation of someone running a small business who needs to calculate the business’s monthly profit margin. To keep things simple, we’ll have only four items for sale: computers, monitors, printers, joysticks. Our company’s name is “Acme Computers”, and we’ll run the numbers for the current month.

Before you can solve any problem with a computer, you must be able to solve without a computer. In the case of calculating our “profit” for the month, a few items of data and formulas are required. You must know the individual cost of items, their sale price, and the quantity sold. With these numbers you can calculate the profit margin for each item and the net profit for each like category of item sold. Once the individual category net profits are calculated, summing the net profits gives the overall net profit.

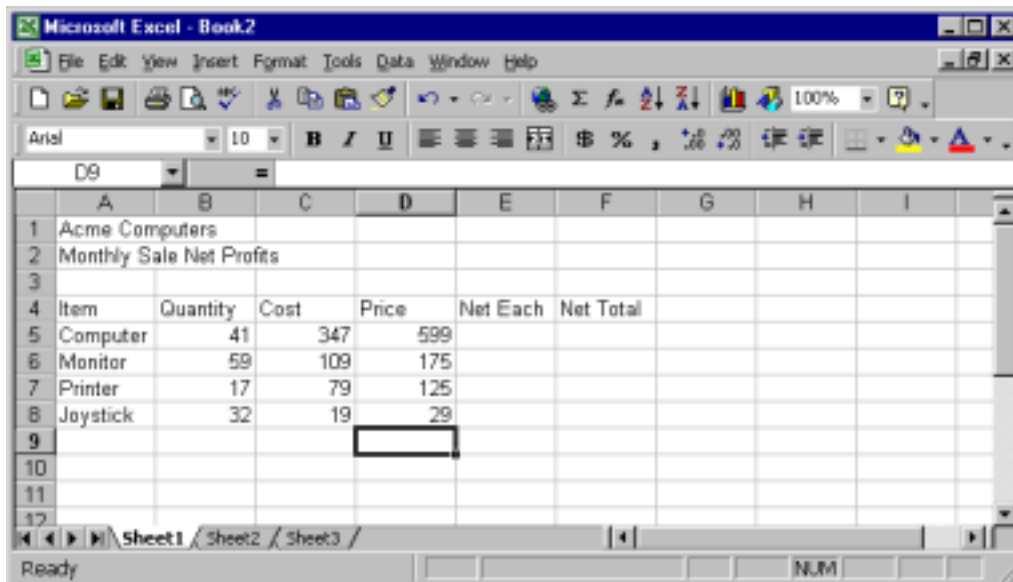
Once the data is entered and formulas created, it is relatively easy to include a chart or graph to depict graphically what the tabular data represents. This charting/graphing capability is useful in facilitating the rapid assimilation of critical data.

Make cell A1 the active cell by using either the arrow (cursor control) keys or <Clicking> in the cell with the mouse. The formula bar should show A1 as the current, active cell. Type *Acme Computers* and press <Enter>. The active cell should move to cell A2. Type *Monthly Sales Net Profits* and press <Enter>. Make cell A4 the active cell by using either the down arrow key or <Clicking> with the mouse. Type *Item* and press <Tab> or the right arrow key to move the active cell to B4. Type *Quantity* and press <Tab>. Enter *Cost*, *Price*, *Net Each*, and *Net Total* in cells C4 through F4. In cell A5 through A8, enter *Computer*, *Monitor*, *Printer*, *Joystick*.



In cell B5 type *41*. In cell C5 type *347*. In cell D5 type *599*. Enter into the worksheet into the appropriate cells the data in the following table for the various items and their quantity, cost, and price.

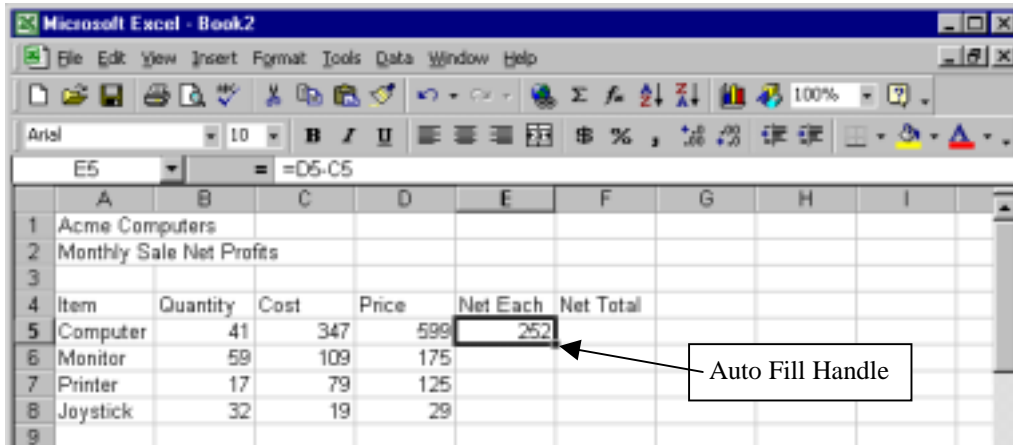
Monitor	59	109	175
Printer	17	79	125
Joystick	32	19	29



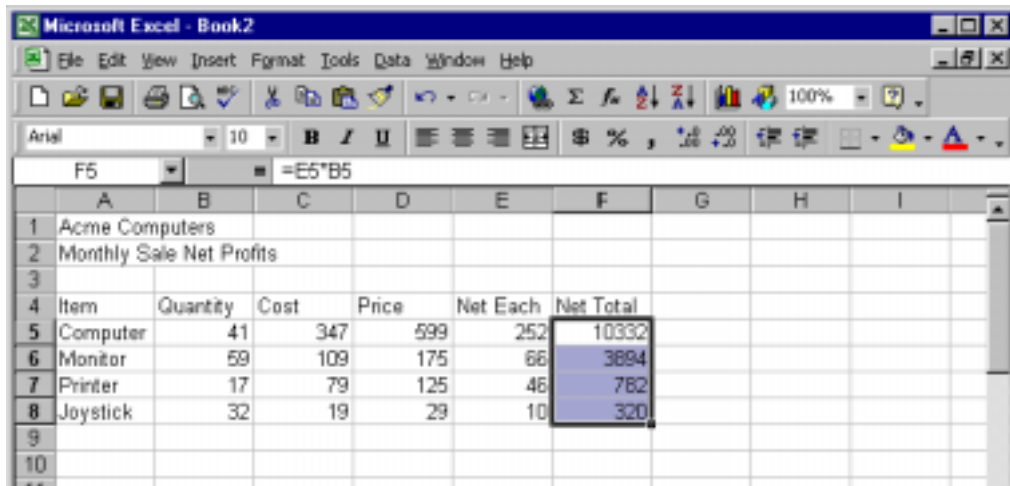
Thus far, all we have done is type in data. To fully utilize the system, we need it to calculate the various net profits by line and then sum the net totals.



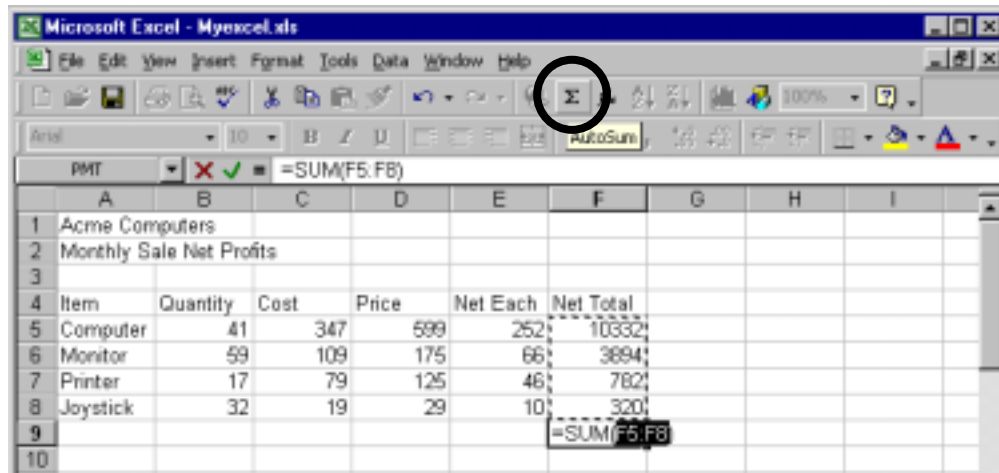
Now that the data is in the worksheet, we need to create the appropriate formulas to provide the various sums and totals. In Excel®, all formulas begin with the = (equals) sign. You start your formula by selecting the active cell to the right or below the data. This will prevent circular math error problems. Make cell E5 the active cell and begin your formula by pressing the “equals” key on the keyboard. Now, <Click> on cell D5, press the “minus” key and then <Click> on cell C5. <Click> on the green checkmark on the formula bar to complete the action and leave cell E5 as the active cell. Notice the contents of cell E5 has the answer to the formula while the formula itself is displayed on the formula bar.



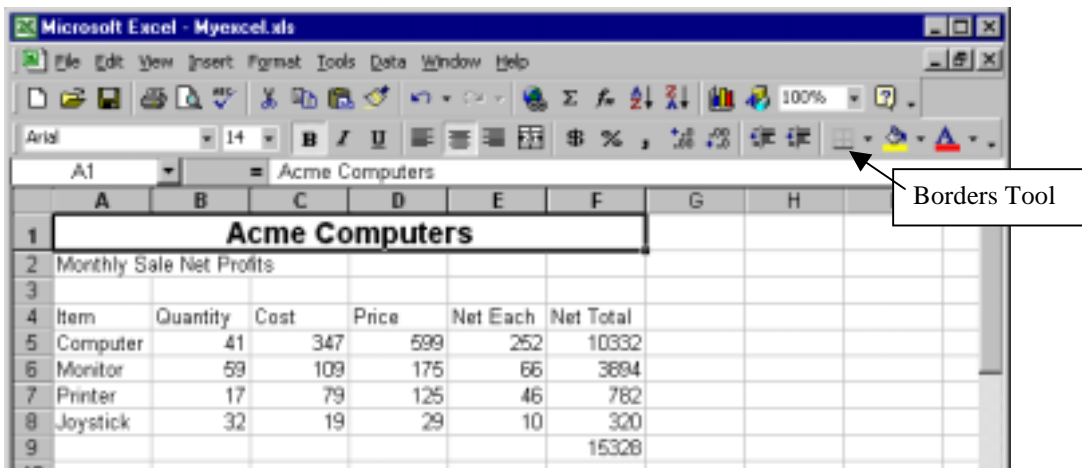
In the lower right corner of the bold border identifying the active cell, E5 in this case, is a small black square. This small black square is called the auto fill handle. Place your mouse pointer on the auto fill handle and then <Drag> and highlight the range of cells from E5 through E8 and then release the mouse button. Notice, as soon as you released the mouse button, the formula from cell E5 was copied to all the cells in the range you highlighted with the auto fill handle tool. Calculate the Net Total for each line item using the same tools and techniques you used when calculating the Net Each. When you set up the formula to multiply the Net Each value in each row with the Quantity value, use the Asterisk key (it's <shift>+<8> on the keyboard or the <\*> key on your numeric keypad, instead of the traditional “x” for multiplication. The computer cannot discriminate between the traditional multiplication sign (the “x”) and the letter “x”, so we substitute the asterisk for the multiplication sign on computers.



To complete our task of determining our bottom line for the month, we need to have Excel® calculate the sum of the Net Total profits. To perform this function we'll use the AutoSum feature built in to Excel®. On your worksheet, make the cell F9 the active cell. On the standard toolbar, find the AutoSum tool button (looks like a Greek "sigma") and <Click>. Notice how Excel® automatically inserts the formula "=SUM(F5:F8)" into cell F9 and places a dashed flashing marquee line around the range of cells F5:F8. If this is the correct range of cells for the sum, then simply press <Enter> or <Click> on the green checkmark on the formula bar.



At this point make the cell E9 the active cell and type *TOTAL* to identify the cell F9 as the total net for the month. Now that the worksheet is completed, the data, labels, and formulas correctly placed and executed, it is time to "format" it into a more visually appealing product. Place your mouse pointer in the center of cell A1 and <Drag> it to cell F1 to select the range A1:F1. The range should be "highlighted" in reverse video. Using the tools on the Formatting toolbar, <Click> on the "Merge and Center" button. <Click> on the "bold" button and <Click> on the drop down arrow in the font size pane and select a larger font size, like 14 or 16. Notice how these selected changes affect row 1 of the worksheet. Make other formatting changes as you desire. Remember you must first "select" or highlight the cells you want to change before a formatting change can be executed. Experiment with the "borders" tool to place various type of underlining or border around cells and ranges of cells.





Select the range of cell C5:F8. Holding down the <Ctrl> key, <Click> in the cell F9. You should now have the range of cell C5:F8 and cell F9 selected. On the Formatting toolbar, <Click> on the “dollar sign” tool. Notice how it transforms your monetary data numbers into a dollar sign with 2 decimal place format and automatically changes the column widths of the columns.

Item	Quantity	Cost	Price	Net Each	Net Total
Computer	41	\$ 347.00	\$ 599.00	\$ 252.00	\$10,332.00
Monitor	59	\$ 109.00	\$ 175.00	\$ 66.00	\$ 3,894.00
Printer	17	\$ 79.00	\$ 125.00	\$ 46.00	\$ 782.00
Joystick	32	\$ 19.00	\$ 29.00	\$ 10.00	\$ 320.00
Total					\$15,328.00

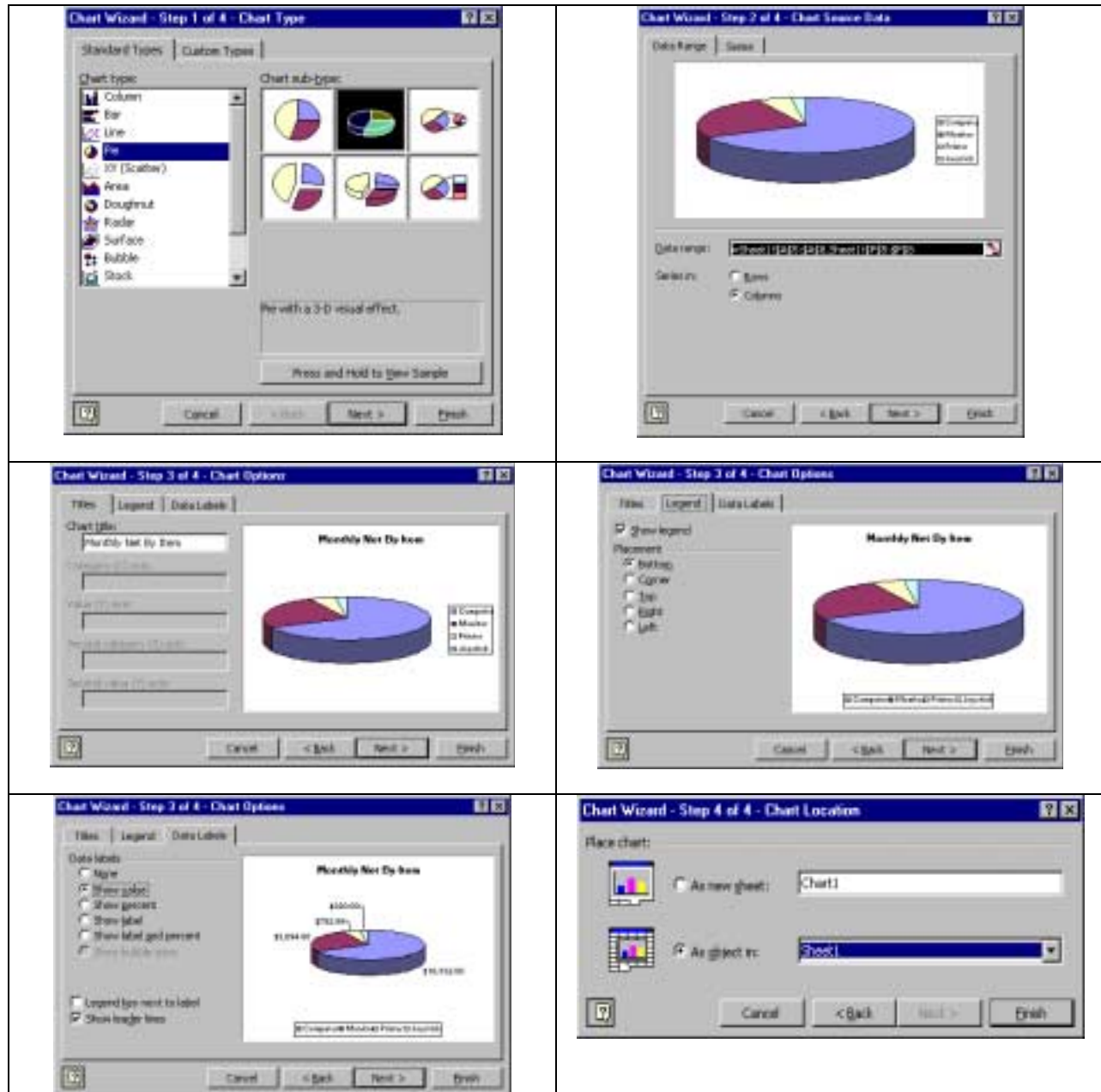
A powerful yet easily used feature of Excel® is its ability to transform tabular data and information into graphical data and information with charts. Microsoft® has included a Chart Wizard to facilitate your ability to produce charts based on labels and values contained in cells you select on the worksheet. In conventional Windows® fashion, before you can create the chart, you must identify, or select, the range of cells you want portrayed in a chart.

On the worksheet you have created, let's chart the Net Total of each of the Items sold. This chart will have one range of cells selected for the data labels and another range of cells for the data to be charted. Since we want to portray the contribution of each of the items to the whole picture, a “pie” chart is a good vehicle. Please note, in order to use a pie chart, you must have only one set of data to chart. If you have multiple sets of data to portray, then other types of charts, like bar, line, or scatter charts would be appropriate.

Move your mouse pointer to the center of cell A5 and <Drag> it from A5 to A8 to select the range A5:A8. Holding down the <Ctrl> key, move the mouse pointer to the center of cell F5 and <Drag> it from F5 to F8 to select the range F5:F8. Release the <Ctrl> key. You have selected a range of labels and a range of values using standard Windows® mouse control techniques.

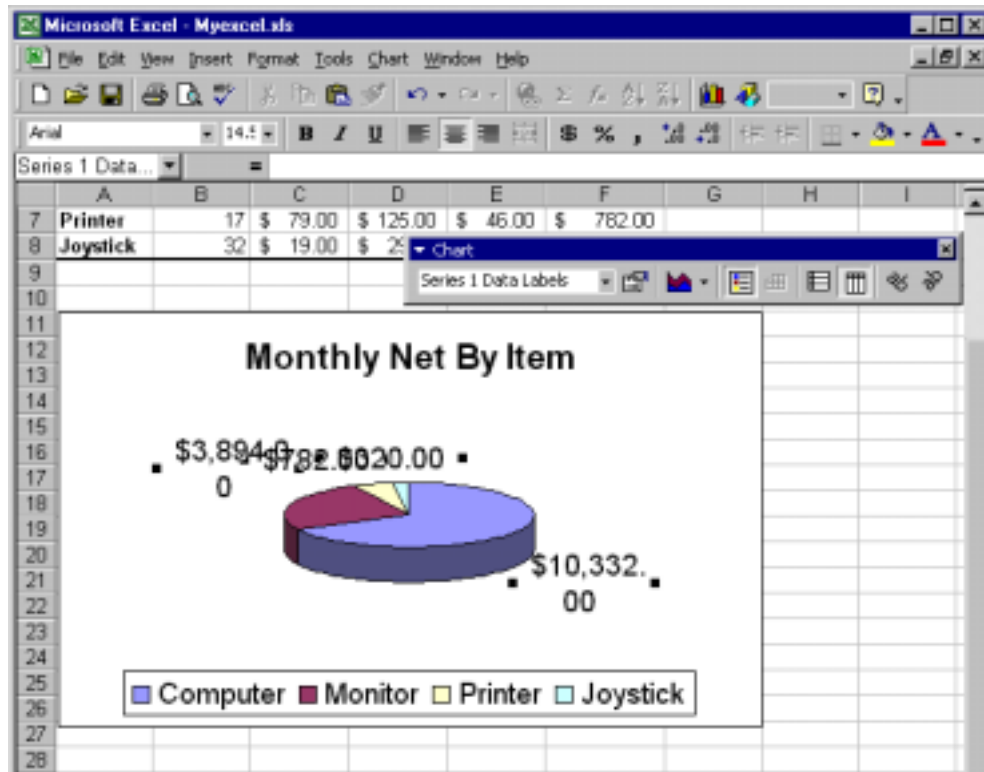
Item	Quantity	Cost	Price	Net Each	Net Total
Computer	41	\$ 347.00	\$ 599.00	\$ 252.00	\$10,332.00
Monitor	59	\$ 109.00	\$ 175.00	\$ 66.00	\$ 3,894.00
Printer	17	\$ 79.00	\$ 125.00	\$ 46.00	\$ 782.00
Joystick	32	\$ 19.00	\$ 29.00	\$ 10.00	\$ 320.00
Total					\$15,328.00

After selecting the range of cells you want to chart, <Click> on the Chart Wizard tool on the standard toolbar. This will initiate a series of windows leading you through the selection of type of chart, titling, placement, data labeling, etc., as you design exactly how you want the chart to be formatted. Step 3 of the Chart Wizard allows you to manipulate the Title, Legend placement, and Data Labels by <Clicking> on the appropriate Tab in the wizard window. The final step give you the option of placing the chart on the current worksheet or creating a new page in the Excel® workbook just for the chart. Choose the “As an Object in” option.

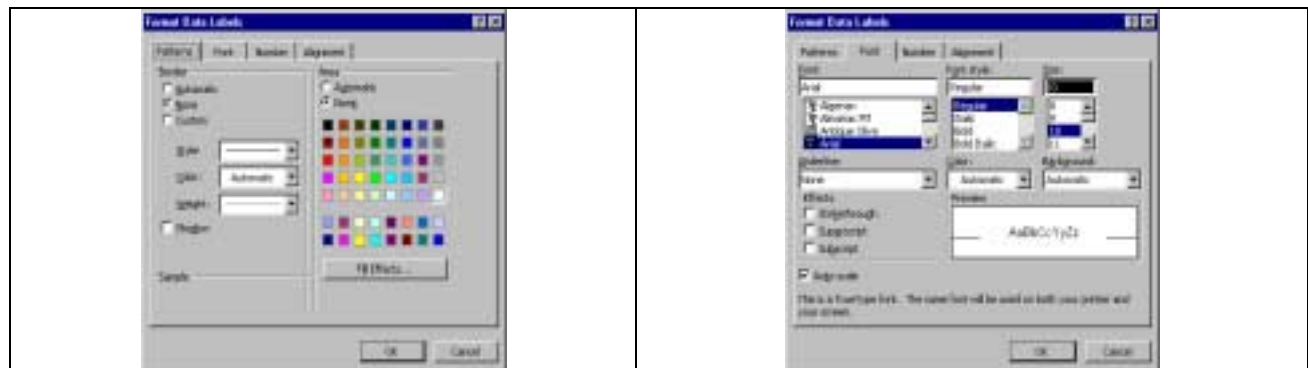


After you <Click> on the *Finish* button, the chart will be placed on the current worksheet. It will not be where you want it nor will it be the correct size. By placing your mouse pointer on the chart, you can <Drag> it to the position you want it place. By placing your mouse pointer on one of the small black squares at the corners or mid-points of the chart when it is “selected”, you can <Drag> and change the chart’s size on the worksheet.

<Drag> the chart so its upper left corner is placed in cell A11 and then <Drag> the lower right corner to cell G27 to resize the chart. Some of the data labels may become overlapped or otherwise confusing. Every item on the chart can be selected and formatted. Notice the small black squares indicating the Data Labels have been “selected”. Once selected with a single <Click> on any of the labels, <Click> on *Format/Selected Data Labels...* on the formatting toolbar to open the formatting window.



After opening the Format Data Labels window, choices you make on the options presented by <Clicking> on the various tabs will allow you to change the appearance of all of the labels on the chart. In this case, the critical formatting options are on the “Font” tab, where you will need to change to a smaller size.



Once you chart formatting is completed, the Excel® worksheet with chart should look like the following example. Using standard Windows® techniques, you should save this file.

