## VISI ON GRAPH QuickStart" Course



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GRAPH ${ }^{*}$

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Are you an office professional or someone who must communicate the importance of information to others? Have you been frustrated because your spreadsheet or table, although it is composed of accurate and current information, does not give the "whole picture?" If the answer to either of these questions is "yes," then the Visi On Graph'" program is just what you have been waiting for.

The Visi On Graph program helps you quickly change your numbers into professional-looking graphs. You can draw graphs of information transferred from other Visi On"' programs, or you can enter new information directly with the Visi On Graph program to create many different kinds of graphs for your reports, presentations, and displays-or for any other kind of graphic communication need.

The Visi On Graph program is so easy to learn and use that you may not have to refer to the Visi On Graph User's Guide. The Visi On Graph program, like all Visi On programs, is virtually self-teaching. Help instructions are right there at your fingertips, available to you at any time just by selecting "HELP" from the Visi On menu.

## Taking this QuickStart ${ }^{\text {TM }}$ Course

You should have completed the Visi On Tutorial or have experience with the Visi On system before taking this course. If you have not done so already, complete the Visi On Tutorial before attempting this Visi On Graph QuickStart Course.

Follow this QuickStart Course to begin using the Visi On Graph program. The QuickStart Course is designed to give you what you need to know to create your own graphs. When you finish this QuickStart Course, you will be able to:

- Enter your information

Edit your information

- Create a graph based on your information
- Add labels to your graph
- Store your information and graphs
- Print your finished graphs

When you are finished with the QuickStart Course, the section "Where to Go from Here" describes each of the chapters in the Visi On Graph User's Guide so that you can choose what you want to read next. You can also learn more about the features of the Visi On Graph program by experimenting on your own (using the Visi On "HELP" command to get you instructions on any part of the program) or by referring to the specific chapters and sections of the User's Guide.

## When You're Looking at the Screen. . .

Menu items, prompts, and messages that you see on your computer screen appear in this QuickStart Course in "quotation marks."

Characters that you type at your keyboard-to enter information, for example-are in "boldface" type.

You can select a command in either of two ways:

- Use your pointing device to move the pointer to the command you want. When the command is highlighted in inverse video, press the select button on the pointing device.
- Press the Esc key; then type the first letter of the command's name. You may only select commands that begin with a lowercase letter in this manner.

Representations of keys used in this QuickStart Course are illustrated in the following table.

| Key | Representation | Meaning and Use |
| :--- | :--- | :--- |
| Escape | ESC | Escape-pressed before <br> the first letter of a <br> command name as an <br> alternate way to select <br> that command. |
| Return | $\square$ | Return-ends entry of <br> data. |


| Key | Representation | Meaning and Use |
| :---: | :---: | :---: |
| Backspace | BKSP | Backspace-deletes characters to the left of the entry line cursor. |
| Delete | DEL | Delete-deletes characters at the entry line cursor position. |
| End | END | End-deletes the entire contents of the entry line. |
| Left arrow | $\square$ | Left arrow-moves the cursor to the left in the Edit display or entry line. |
| Right arrow | $\rightarrow$ | Right arrow-moves the cursor to the right in the Edit display or on the entry line. |
| Up arrow | $\square$ | Up arrow-moves the cursor up in the Edit display. |
| Down arrow | $\square$ | Down arrow-moves the cursor down in the Edit display. |

## Beginning: Opening a Visi On Graph ${ }^{\text {m" }}$ Program Window

If you have set your equipment up and have installed both the Visi On system and the Visi On Graph program, you are ready to begin this QuickStart Course. (If you have not set up your equipment or have not installed the Visi On Graph program, follow the instructions in the Setup Guide that came with your Visi On User's Guide.)

Your screen should resemble Figure 1.
Begin the QuickStart Course by opening a Visi On Graph window:

1. If the Visi On Services window is not your current, active window, select the Services window.


HELP CLOSE OPEN FULL FRAFIE OPTIONS TRANSFER STOP
Figure 1. The Visi On screen
2. Select "start" from the Services window menu line.
3. Select "Visi On Graph" from the product area of the Services window.
4. The Services menu prompts you to enter a name for the new window. Type:

## Tutorial ■

It is a good idea to move the pointer away from the line whenever you are entering a name, number, or any information in the Visi On Graph program.
Although the pointer will not alter your information, it may obscure your view of what you type.
The Visi On Graph window is framed on the screen.
You will use a full-screen window during this course.
Open the window to the full-screen size.
5. Select "FULL" from the Visi On menu.
6. Select the Visi On Graph window you just opened.

## Creating a Graph

Now that you have the program in front of you, it's time to look it over. Figure 2 describes the parts of the Graph display.

Suppose that you are preparing a report on the previous year's expenditures. Someone has already provided you with a spreadsheet printout containing the information seen in Figure 3.

This information, as it stands, is accurate but does not quickly communicate the history of each department's expenditures. To help communicate these issues, you decide to use the Visi On Graph program to change the numbers into a graph.

Before a graph can be plotted, the information from your spreadsheet must be entered into the Visi On Graph program. New information is normally entered into the Visi On Graph program through the Edit display. To enter the Edit display:


Figure 2. The Graph display

|  |  |  | Qua |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $\bigcirc$ | Dept. | 1st | 2nd | 3 rd | 4 th |
| 0 |  |  |  |  |  |
| 0 | Marketing | 32 | 56 | 45 | 35 |
| $\bigcirc$ | Corporate | 21 | 33 | 35 | 32 |
| 0 | Distribution | 17 | 20 | 23 | 22 |
| 0 | (A11 numbers in thousands) |  |  |  |  |
| 0 |  |  |  |  |  |

Figure 3. Your worksheet information
Select "Edit" from the Graph menu.
Figure 4 shows you the parts of the Edit display.


Figure 4. The Edit display

Every number in the spreadsheet is referenced both by a subject that is being measured and by the time period for which it was recorded. In this case the subjects being measured are individual departments in the same company. Each collection of numbers, for each individual department, will become a series in the Visi On Graph program.

You can control the way series are displayed and the order in which they are displayed in the graph. Series can show the contrasts between, or the collective totals of, their subjects.

This series information has been collected on a quarterly basis. The Visi On Graph program will provide labels on the graph's horizontal axis that show these quarterly dates. But to do this, the program needs a number that describes the type of time cycle. This number is called the series periodicity.

Because there are four quarters in a year, the periodicity for all three of these series will be entered as 4 . When you create these series, you will tell the Visi On Graph program that the series periodicity is 4 and that the series begin in 1983.
The program will also ask for a starting period for your series. This period could be any number between 1 and 4 , depending upon in which quarter the first value in your series was recorded. Because all three series began in the first quarter of 1983, the starting period for these series will be 1 .

After you have entered this information, the Visi On Graph program will keep track of the series dates.

## Starting Your Series

Because you are creating new series, you must first enter some background information that the program will use to create your graph. You begin by indicating how many series you are going to create. (If you make a mistake, use the BKSP to erase the last character you have typed.)

1. Select "series" from the Edit menu.
2. Select "new series" from above the menu lines.
3. Select "done" to indicate that you have finished selecting series.
The program asks you how many new series you want to create.
It is a good idea to move the pointer away from the line whenever you are entering a name, number, or any information in the Visi On Graph program.
Although the pointer will not alter your information, it may obscure your view of what you type.
4. Type 3 ■.

The program asks for the periodicity of the series you are creating. The information was reported quarterly, so its periodicity is 4 .
5. Type $4 \bowtie$.

The program asks for a name for the first series and supplies the default name of "SERIES01." Series names can be a maximum of 12 characters.
6. Type Mktg. .

The program asks for the start year for the first series. The information was reported beginning in 1983.
7. Type 1983 ■.

The program asks for the start period for the first series. The first value reported in 1983 was in the first period. As with the previous entries, the program offers a default value. These values are usually the last answer you gave to the current question, a simple name (such as SERIES01), or the value of 1 . The default answer is always shown above the menu line and can be chosen by pressing ( ) by itself.
8. Type $\llbracket$ to accept 1 as the default period.

You've now entered background information for the first series. The program will now ask the same questions for each of the additional series. With the exception of the name, you will press $\square$ to accept the default values for each of the series start dates.

The program won＇t ask for the periodicity again because all of the series being edited at one time must have the same periodicity．
Enter a name for the second series and accept the default period values．
9．Type Corp．$\square \boxtimes \square$.
Accept the default values and enter a name for the third series．

10．Type Dist．』』』．
The name of each series is listed at the top of a column in the Edit display（Figure 5）．

## Entering Your Numbers

You begin entering your numbers with the＂add＂ command．

## Warmup

1．Select＂add＂from the Edit menu．
The program asks you to select the location in which you will begin adding numbers．


Figure 5．Series ready for entry
2. Select the word "empty" under the word "Mktg." A white rectangle replaces the word you selected. This is the editing cursor. It shows you where you are-in what row and what column/series.

Typing a number followed by $\amalg$ enters that number into the series at that point and moves the cursor down into the next row. If you select a position that already has an entry, that entry and all entries that follow are moved down one row to make room for your new number.
3. Try selecting the word "empty" under the word "Corp." If you select any area outside of the rows just under the series names, you'll hear a beep. Practice this until you feel comfortable selecting a new entry point; then move the cursor back under the word "Mktg."
The other way of moving the cursor is with the arrow keys. You can move the cursor by pressing the arrow keys $\uparrow \square \square \rightarrow$.
4. Try selecting the word "empty" under the word "Dist." by pressing $\rightarrow$. Press $\rightarrow$ again to select the last column. Press $\leftarrow \leftarrow$ to move back to the beginning again. Press $\uparrow$. Note that the cursor doesn't move and that you hear a beep. You can't move the cursor to any location that you can't select. Later, when you are editing numbers, you will be able to use $\uparrow$ and $\square$ to move the cursor up and down in a column.
5. Move the cursor back under the word "Mktg."

## Begin adding numbers to the series

Now you can begin to enter the values from the worksheet. Enter the first column of numbers, the Mktg. series, in the following way:

1. Type 32, but do not press (■.

After you type the number, an $\Phi$ enters the number into the series and moves the cursor down to the next row. If you make a mistake typing the number, you can correct it with the "replace" command (you'll learn about that in a few pages.)

But while you are using the "add" command you can still correct the error, BEFORE you press $\square$.
The (BKSP lets you erase the last digit you have typed.
2. Type BKSP BKSP 99 (again, do not press (D). If you make a mistake before you press $\square$ you can correct it, one digit at a time, by using BKSP to erase part of your entry and reenter it. Another key, END, will remove the whole entry and let you retype it.
3. Type END $32 \square$.

The $\square$ entered the number 32 into the first period of 1983 and then moved the editing cursor down to the next row.
Continue making the entries into this column.
4. Type 56 .
5. Type $45 \square$.
6. Type $35 \square$.

Congratulations; you have just created your first series.

## Filling the other series

Now it's time to fill in the other series. This time you'll learn how to enter numbers into two of the series at once. Again, follow the instructions, using $\square$ to enter the value and the arrow keys to move to a new location.

Note: Three of the numbers are not the same as those on the spreadsheet we saw before. Type them in as they appear below; you will learn how to correct them later.

1. Select the word "empty" below "Corp."
2. Type $\mathbf{2 1} \square \dagger(17 \square \square$.

When you pressed $\uparrow$ the editing cursor moved up into the Corp. series, pushing the single entry down one row. This feature allows you to use the "add" command to insert values into the body of a series as well as add them to the end.

In this particular case, pressing the $\rightarrow$ key moved the editing cursor into the Dist. series and restored the 21 to its previous position.
Continue entering the series.
3. Type $\mathbf{3 3} \downarrow \mathbf{2 3}(\mathbf{3 2} \downarrow$.
4. Type $\uparrow \uparrow \subset \rightarrow$.
5. Type $\mathbf{2 0} \downarrow \mathbf{3 5} \mathbb{\mathbf { 1 }} \downarrow$.
6. Select "done" from the Edit menu line.

Your series should now look like Figure 6.

## Editing Your Series

Everybody makes mistakes, but the editing commands available to you in the Visi On Graph program make correcting and updating your series very simple.

In the Visi On Graph program, three different commands can be used to change the numbers in your series:


Figure 6. The completed series

- "add"-You have already used the "add" command to create your series. This command inserts values into the series, pushing following numbers into the next rows.
- "replace"-The "replace" command removes a number from a series and allows you to insert a new number in its place. This command does not affect surrounding entries.
"delete"-The "delete" command removes numbers from series. Existing numbers that follow are moved up to fill in the space.
Remember that in the last section you were told to enter some numbers that differed from those listed in the spreadsheet. Now you'll learn how to correct those errors.

There are three incorrect entries in the series you have just created. These errors and the correct values are shown in Figure 7 and Figure 8 (page 18).

The third number in the Corp. series is wrong. It should be 35. You will use the "replace" command to change it.


Figure 7. The errors in the series

1. Select "replace" from the Edit menu.
2. Select the number 23 in the Corp. column.

If you select the number correctly, it will be highlighted. If you highlight a different number, just reselect the correct number.
3. Type 35 D.

The number is now correct. You could continue to replace numbers by selecting them (either with the pointer or arrow keys,) typing a new value, and pressing $\llbracket$, but for now you will stop replacing.
4. Select "done" from the Edit menu line.

There are two incorrect values in the Dist. series, both 35 and 12. You will use the "delete" command to remove these values and then use the "add" command to insert the new values.

1. Select "delete" from the Edit menu.
2. Select the number 35 in the Dist. series.

You are prompted to select the lower right corner of the area you are deleting. If you were deleting from more than one series, you would select the number farthest down and to the right in the rectangle you were deleting. If you were only deleting one number, you would select the same number a second time. In this example you are deleting two numbers from the same series.
3. Select the number 12 (directly below 35 ) in the Dist. series.
4. You are prompted to confirm that these are the numbers that you want to delete.

If your screen does not look like Figure 8 (page 18), then select "no." Go back to step 1.
If your screen looks like Figure 8, select "yes."
Now, using the "add" command, you can put the correct numbers in the Dist. series.
5. Select "add" from the Visi On Graph menu.
6. Select the first blank space following the Dist. series.


Figure 8. Deleting the incorrect numbers

## 7. Type $23 \backsim 22 \square$.

8. Select "done" from the Edit menu line.

The series are now correct and should resemble Figure 9.

If your screen doesn't look like Figure 9, use the "replace" and "add" commands to change any of the numbers that you may have mistyped.

If your screen looks like Figure 9, your series are finished and ready to be plotted. But what type of graph do you want to make?


Figure 9. The finished series

## Plotting Your Graph

Now that your series information is entered, you can begin creating graphs. First, you need to return to the Graph main menu.

- Select "Graph" from the line above the Edit menu.

The display clears and you are back in the Graph menu.

There are four basic commands you will use in creating your graphs.

- "data"-allows you to select the series that will be used in a specific graph.
- "style"-allows you to select the specific graph type.
- "plot"-draws the graph in the Graph display after you have selected series and a graph type.
- "erase"-clears the current graph from the Graph display. If you do not select "erase" between graphs, the new graph will be drawn over the old graph. This is called an overlay graph.


## Selecting Series

The first step in creating a graph is to select the series that will be used in it.

1. Select "data" from the Graph menu.

There are two types of information that can be selected from the "data" command-series and graphs.
2. Select "series" from the data type menu.

The names of series you have created are displayed above the menu line.
As you select each of the series names, it is marked, indicating that it will be used in the next graph.
Selecting a marked series name unmarks and unselects it.
3. Select "Mktg."
4. Select "Corp."
5. Select "Dist."
6. Select "done."

You are returned to the Graph menu. The series you have selected will be used for all the graphs you draw until you use the same commands to select other series.

## Selecting the Graph Type

Many types of graphs are available, and you'll often be faced with the problem of selecting the best type of graph for your specific information. With the Visi On Graph program, you can easily redraw your series with different graph types until you see the best way to present your information.

1. Select "style" from the Graph menu.
2. Select "bar" from the graph type menu.

Two types of bar graphs are available to you:
"stack"-draws the series bars one on top of the next, showing you the cumulative total of all the selected series.
"compare"-draws the series bars next to each other, letting you compare the differences between each series.
When you are drawing a bar graph with only one series, you may select either graph type. The resulting graph will be the same no matter which is chosen.
3. Select "stack."

You are returned to the Graph display to draw your graph.

## Drawing the Graph

Now that you have selected the series and graph type, drawing the graph is simple.

Select "plot."
Your finished graph should look like Figure 10.

Figure 10. The stacked bar graph


## Changing the Graph Type

Changing the graph type is just as easy as selecting the first graph type. In the next few steps, you will draw several graphs. Notice how few selections you have to make to create each new graph.

To draw a new graph, you must first clear the Graph display.

1. Select "erase."

After you have cleared the display, you may select a new graph type.
2. Select "style."

This time, draw a comparative bar graph.
3. Select "bar" and then "compare."

You are returned to the Graph display.
4. Select "plot."

Your finished graph should look like Figure 11.


Figure 11. The comparative bar graph

Now that you have seen how selecting graph types works, try a "line" graph.

To draw a line graph

1. Select "erase."
2. Select "style."
3. Select "line."

You have four types of line graphs to choose from:
$\square$ "line"-connects each series point with a straight line.
$\square$ "point"-draws a single point for each series value.
$\square$ "symbol"-assigns a symbol to each series and draws that symbol for each series value.
$\square$ "both"-draws the graph using a combination of the "line" and "symbol" types.
4. Select "both."

You are returned to the Graph display.
5. Select "plot."

Your finished graph should look like Figure 12.

Figure 12. The line graph

## Deciding Which Type of Graph to Use

Basically, deciding what graph type to use depends upon what you want to communicate about your information. For instance, comparative and stacked bar graphs create two very different impressions about the same information. In the example you are working with, your report focuses on the differences in budgets that departments showed over the last year. The comparative bar graph thus best suits your needs.
Draw the comparative bar graph again. If you have trouble recreating it, go back to page 22 and follow the steps. When your graph looks like Figure 13, go on to the next section.


Figure 13. The comparative bar graph

## Adding Text to Your Graph

Now that you have decided on your graph type, you could go ahead and print it. But think about it for a second. You know what the graph represents, but would someone else? Adding a couple of well-chosen labels to the graph would make it clear to everyone.

## Adding a Main Title

You decide to add a title and a couple of lines of explanation to the graph. To do this:

1. Select "Annotate."

The "Annotate" menu gives you access to all of the labeling commands, as you can see in
Figure 14.


Figure 14. The Annotate menu
2. Select "title."

The "title" command gives you access to the fixed-place labels. These are:
$\square$ "main"-which is placed at the top of the graph.
$\square$ "subtitle"-which is placed just below the main title.
$\square$ "side"-which runs vertically along the left side of the graph.
$\square$ "bottom"-which is placed below the graph.
These titles always are fixed: they always appear in the same place on the graph. For example, when you add a new main title, it replaces the old one in the same place.
3. Select "main."

Now enter a label, just for practice.
4. Type MAIN TITLE ■.

Notice that not only did the program place the title on the graph, but it also returned you to the
Annotate menu. Each time you add a title to the graph, you will select "title" and then the title type. Of course the title you entered is not descriptive of the graph. Change the title to something a bit more meaningful.
5. Select "title" and then select "main."
6. Type 1983 Expenditures $\square$. Remember that you can use BK S P to help correct any typing errors.
Notice that the new main title replaces the old one.
Now add a subtitle and a bottom title.
7. Select "title"; then select "subtitle."
8. Type Presentation to Executive Staff $\bowtie$.
9. Select "title"; then select "bottom."
10. Type Eastern, Central, and Western Divisions $\amalg$.

Remember that if you make a mistake, you can simply select that title type and reenter the title.

## Moving and Removing Labels

Occasionally you may decide that a label does not belong in a particular position or on the graph at all. Two Visi On Graph commands can fix either of these problems:

- "move"-picks a label up and places it wherever you specify.
- "delete"-erases a label from the graph.

Try them both out. In looking at your graph, you decide that the word Legend does not look quite right. Maybe it needs to be moved:

1. Select "move."
2. Move the pointer over the labels on the graph. As you do this, each one that can be moved will be highlighted. Move the pointer to the word "Legend."
3. Select the word "Legend."

The menu prompts you to select a new location for the label. You can move the label a number of times by selecting a new location before you select "done." When you decide that you have it just where you want it, selecting "done" from the menu line fixes the label in its current position.
4. Try moving the label to different positions on the graph. Do not select "done" yet.
5. Finally, move the label to the area about an inch to the right of the word "Staff."
6. Select "done."

You decide that the legend label really doesn't help your graph any, so you'll delete it.
7. Select "delete"

The menu prompts for you to select the label to remove.
8. Select the label "Legend."

The label is removed from your graph, which now should look like Figure 15 (page 28).


Figure 15. The labeled graph

If it does not look like Figure 15, use the "delete" command to individually remove any of the labels that do not match. Begin again at step 2 in "Adding a main title."

If it does, congratulations; your graph's finished. However, before you print it, it would be a good time to save all of your work.

## Saving Your Work

You have completed two major tasks so far: You've created your series and you've drawn and labeled a graph. With the Visi On Graph program, you can save your series information and all of the selections that went into creating your graph. This will let you continue working with the same information at a later date without having to redo any of your previous efforts.

## "Freezing" Your Graph

The first step in saving your work is to save the graph you have just created. You must first return to the Graph menu.

1. Select "Graph" from the line above the Annotate menu.
Saving the series, labels, and other options that contribute to a finished graph is called freezing the graph. Freeze your current graph.
2. Select "data."
3. Select "graph."
4. Select "freeze."

The prompt line requests a name for the frozen graph.
5. Type GRAPH 83 』.

You are returned to the Graph display.

## Restoring a Frozen Graph

Saving a graph by freezing it allows you to retrieve it again later. If you are going to create several graphs and then print them all at once, you can save time by freezing each completed graph and then creating the next. Frozen graphs are easy to retrieve.

First, to erase the current Graph display:

1. Select "erase."

The display clears and you are ready to recall the frozen graph.
2. Select "data."
3. Select "graph."

You are shown the same "freeze" command as before, but now the name you entered for your frozen graph is also displayed.

## 4. Select "GRAPH 83."

Your graph is redrawn-the graph itself first, followed by the labels. You could continue to add labels, add series, or change options as you would normally.

## Saving Your Graphs and Series

Although you have frozen your graph, it still has not been saved (stored permanently on your disk) and would be lost if you turned off your computer. It currently exists, with the series you created, in the temporary storage area called the working folder. To save both the graph and the series you have created, you must use the Files display.

Select "file."
The Files display replaces the Graph display in your window (Figure 16). This display works exactly like any other Visi On program Files display. If you haven't worked with a Files display before, don't worry: everything you need to know now will be explained. However, if you have not done so already, you should read "Chapter 5, Organizing and Updating Your Information," in the Visi On User's Guide for additional information.

The Files display is divided into three areas: the folder/storage Archives area (at the top of the display), the current folder area (in the middle of the display),


Figure 16. The Files display
and the working folder area (at the bottom of the display). Each of these areas serves a different purpose:

- Folder/storage Archives-This area allows you access to different storage areas of the Archives. You will not be using this area in this QuickStart Course, but you may want to use it your routine use of the program. For additional information on folders, changing folders, and the storage Archives, see Chapter 5, "Organizing and Updating Your Information," in the Visi On User's Guide.
- Current folder-Shows you series and graphs that you have previously saved in the Archives. This area is probably empty right now, but you will use it later.
- Working folder-Shows the series and graphs you are currently using in the Visi On Graph program. Series and graphs appearing in the working folder are not necessarily saved in the Archives. They could be lost if you turn off your computer before saving them in the current folder.

Right away you probably recognized the names of your three series and the frozen graph. Printed on the same row as the item name is information about that series or graph. Most of this is self-explanatory, but right now you are interested in the asterisks beside each of the names.

An asterisk indicates that this series or graph has not been saved in the Archives since it was created or last changed. When you save a series or graph, its asterisk is removed.

You save your series and graphs by selecting them.
When you select a series or graph name in the working folder, that series or graph is copied into the current folder. Series or graphs in the current folder will not be lost when you turn off your computer.

## Creating a new folder

Before you save them, create a new folder for all of the QuickStart series you have created:

1. Select "create-folder."

The program asks you to enter a name for the folder.

## 2. Type QuickStart $\downarrow$.

The new folder is added to the Archives and becomes the current working folder. Everything you save in this session will be saved in this folder.

## Saving your series

To save your series

1. Select "Dist." from the working folder.

The program asks you to enter a new name for the stored series or press $\square$ to accept the current name.
2. Press $\square$.

That's all; the "Dist." series has been saved.
Notice that the current folder now has a new item in it called "Dist.", and that the asterisk beside the original item in the working series is gone, indicating that it has been saved.

Now save the other series and graph in the current folder.

1. Select "Corp." from the working folder.

Because there now is a series in the current folder, the "Dist." series, you could replace it with the "Corp." series. The program asks you to select a name from the current folder or to select "create" to create a new series in the current folder.
2. Select "create" from the menu line.
3. Press $\square$ to accept the default name.
4. Select "Mktg." from the working folder.
5. Select "create" from the menu line.
6. Press $\square$ to accept the default name.
7. Select "GRAPH 83 " from the working folder.
8. Select "create" from the menu line.
9. Press $\downarrow$ to accept the default name.

All of the working folder series and graphs have been now saved.

## Removing items from the working folder

The working folder can hold a maximum of 24 series and 8 frozen graphs. While you work in the Visi On Graph program, it may be necessary to remove series or graphs from the working folder to make room for new series and graphs. It is a good idea to save the series and graphs first. If they have not been saved, they and/or the changes you have made since you last saved them will be lost.

To demonstrate the "remove" command you will clear the frozen "Graph 83" graph from the working folder.

1. Select "remove."
2. Select "Graph 83" from the working folder. Each time you select a series and/or graph to be removed, its name is highlighted. The series and/or graphs are not removed until you select "done" from the menu line. You can continue to select items to be removed, highlighting each one, and then select "done" when you have indicated all of the items you want to remove.

If you select an item by mistake and it becomes highlighted for removal, just select it a second time. The second selection removes the highlight.
3. Select the highlighted "Graph 83 " again.

The highlighting is gone.
4. Select "Graph 83 " from the working folder.

Selecting the item a third time will highlight it again, marking it to be deleted.
5. Select "done" from the menu line.

The program asks you to confirm that the highlighted name is what you want to remove.
6. Select:
$\square$ "yes" if "Graph 83 " is highlighted.
$\square$ "no" if the wrong name is highlighted. Then
begin the "remove" command again at step 1.
The "Graph 83 " graph is removed from the working folder.

## Retrieving Items from the Current Folder

Right now, if you were to turn off your computer, your information would still be there when you turned it back on. The only difference would be that you would have to copy it all back from the current folder into the working folder.

Right now the frozen "Graph 83 " graph is not currently available to you because it does not exist in your working folder. The process of loading it back into the folder so that you can work with it is similar to the way you saved it in the first place.

To load the frozen "Graph 83" graph into the working folder:

Select "Graph 83" from the current folder.
That's it. The "Graph 83" graph is copied from the current folder into your working folder. You could continue to copy items, both series and graphs, into the working folder. If you accidentally remove a file from the working folder, just select it from the current folder again.

## Leaving the Files Display

Now leave the Files display:
Select "done" from the menu line.
You are returned to the Graph display.

## Printing Your Graph

You will probably want to print most of the graphs you create. As you'll see, printing your graph is easy.

Note: You may complete this section even if you don't have a printer connected to your Visi On system station. (If you don't have a printer, pay particular attention to steps 7, 8, and 9).

To print your current graph

1. Select "Print" from the Graph menu.

The Print display replaces the Graph display in your window. Your graph should look like Figure 17.


Figure 17. The Print display. The top half of the graph is displayed.
The Print display shows your graph as it will appear when you print it on paper. Because the paper you will print your graph on is usually bigger than the Visi On Graph window, the program can only show you part of the graph at a time. To see it all, you can scroll the display. Try it now.
2. Put the pointer on the graph and scroll the display upward until you hear a beep.
You can now see the bottom of the graph, as
illustrated in Figure 18 (page 36).
You will also notice that the proportions of the graph have been altered slightly. Your graph is much taller than it was in the Graph display, again showing you how it will be printed on paper.
This display lets you preview the graph before you print it. If anything looked wrong-say a label should have been moved a little to the right-you could return to the Annotate display, move the label, and return to print the graph.
In addition, any of your frozen graphs are also available to you from the Print menu. To see this, you will first have to erase the current graph from the Print display.

Figure 18. The Print display. The bottom half of the graph is displayed.

3. Select "erase" and then select the graph in the print display to be erased.
Now, look at the frozen graphs available to you.
4. Select "put."

The name of the frozen graph, "GRAPH 83," appears in the display, along with the selections "done" and "current." Because the frozen graph is the current graph, you could select either one. Remember that the last graph you had in the Graph display is always the "current" selection.
5. Select "GRAPH 83."

The graph is redrawn in the Print display.
6. If you have a printer, check to see that it is ready to print.
$\square$ Is it turned on?
$\square$ Is there paper in it?
$\square$ Is it "ONLINE?" (Only if this is an option for your printer.)
7. Select "hardcopy."

You are asked to select a destination for your printed graph. There are two options:
$\square$ "local-print" if you have a printer attached to your Visi On station.
"remote-print" if you do not have a printer attached to your Visi On station. The printed graph will become an item in your transmittal folder and can be printed later. For additional information on printing items in your transmittal folder, see Chapter 7, "Printing," in the Visi On User's Guide.
8. Select:
$\square$ "local-print" if you have a printer attached to your Visi On station.
$\square$ "remote-print" if you do not have a printer attached to your Visi On station.
If you select "remote-print" you will see a list of printer models and be asked to select the model that you will eventually print your graph on.

- Select the printer on which you will later print your graph.
The program then asks you to enter a name that the printed output will be stored under in the transmittal folder.
- Type the name you want to save the printed output with and press ( $\downarrow$.

Then, for either "local-print" and "remote-print" printing:

The Print options appear to the right of the window.
You are asked to confirm all of the settings.
To print your graph now, just use the default settings. These are:

- No partitioning.
- One printed page.
- No pause after printing the page.
- An 8.5-by-11-inch page with a half-inch border.
- The document printed on the first installed printer.

All of these options are explained in detail in Chapter 6, "Printing," in the Visi On Graph User's Guide.
9. Select "yes" to confirm the print options.

Your printer should now begin to print the graph.
Each time you repeat steps 7 through 9, another copy of your graph will be printed.

By the way, congratulations! You have completed the QuickStart Course.

## Summing up

Well, you have accomplished quite a bit. In this
QuickStart Course you have learned how to:

- Create and edit series

Select series and graph types

- Plot graphs

Label your graph
Freeze graphs and save series
Print your graph
That's quite a list.

## Where to Go from Here

Please feel encouraged to work with the commands and options that were not covered in this QuickStart Course. You have two very effective tools to help you with this task, as illustrated in Figure 19.

The first of these tools is the Visi On "HELP" command. At any time while you're using the Visi On Graph program, you can ask the Visi On system for instructions on using anything you can see on the screen simply by selecting "HELP" from the Visi On menu and selecting the item you want to know more about.


Figure 19. The Visi On Graph program learning tools

The second tool is the Visi On Graph User's Guide. Instructions about the basic types of tasks you can perform with the Visi On Graph program are grouped together. Each chapter discusses one basic type of operation you'll want to perform, such as entering series information or labeling a graph. All the tasks related to carrying out that operation (for example, entering, moving, and removing labels) are described in detail within that chapter.

We recommend you use the Visi On program itself to take the next steps. As you have discovered, the program is almost self-teaching. You will probably be able to learn most of what you need by following your intuition, using the prompt messages before you try out a command to see what the command does, and using the prompt messages after you select a command to guide you through the necessary steps. You will not hurt the program.

- Try out the "HELP" command to see what information you can get at any time you need it. Use the "HELP" command before going to the User's Guide; you may not need to spend much time reading to get the answers you need.
- Use the Visi On Graph User's Guide for a detailed explanation of any procedure, concept, term, or program command. The manual gives complete coverage of the program and illustrates most concepts and topics. The chapters in the manual need not be read in order; each chapter is selfcontained. Concepts are generally discussed before exact procedures are outlined. Use the Index to find any topic you want, and use the Glossary to clarify definitions of terms you do not know.

For example, if you feel comfortable with your skills after completing the QuickStart Course, you can begin creating simple graphs, or turn to Chapter 5, "Enhancing Your Graph," to get more information about changing a graph's appearance.

Or if you need details on printing, go directly to Chapter 6, where you'll find examples of the different types of printed displays you can create.

In either case, and at any time, you can choose the pace of instruction you need.

## QuickStart ${ }^{\text {TM }}$ Course Task Summary

Table 1 summarizes the tasks you performed in this QuickStart Course.

Table 1. QuickStart Summary

| Task | From | Action |
| :---: | :---: | :---: |
| Create a series | Edit | Select "series." <br> Select "new series." <br> Select "done." <br> Enter: number of series, periodicity, start dates. <br> Select "add." <br> Select the series you are creating. <br> Type your numbers pressing $\amalg$ after each one. <br> Select "done" when you are finished. |
| Replace numbers in a series | Edit | Select "replace." <br> Select the number you are replacing. <br> Type the new numbers pressing $\square$ after each one. <br> Select "done" when you are finished. |
| Delete numbers in a series | Edit | Select "delete." <br> Select the first number you are deleting. Select the last number you are deleting. Select "yes." |
| Plot a graph | Graph | Select "data." <br> Select "series." <br> Select the series you are using in your graph. <br> Select "done." <br> Select "style." <br> Select a graph type. <br> Select "erase." <br> Select "plot." |

Table 1. QuickStart Summary (Cont.)

| Task | From |
| :--- | :--- |
| Add a title to <br> a graph | Annotate |
| Select "title." <br> Select a title type. <br> Type the text to be used in the title and <br> press |  |
| Move labels <br> on a graph | Annotate | | Select "move." |
| :--- |
| Select the label to be moved. |
| Select the new position for the label. |
| Select "done." |

