



# VP SPREADSHEET

XEROX

*VP Series Training Guide*  
*Version 1.0*

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# 1. Introduction

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Have you ever wanted to compile a list of numbers in row and column format, perform some calculations on them, and then store and print them, perhaps for a monthly expense report, budget, or sales report? Spreadsheets allow you to do just that. You can create a spreadsheet, enter labels for columns and rows, enter numbers and formulas, and use your workstation to perform calculations on those numbers.

Typically, spreadsheets are used for compiling numerical data such as budgets, financial reports, accounts receivable or payable, but they can be used to compile almost any kind of numerical data.

With spreadsheets you can display a large amount of data, change any number of variables, and see the results entered immediately. After you have entered data into a spreadsheet, you can easily transfer the information into a document and print the document at a local printer or at a network printer.

This self study guide is designed to provide you with the general concepts and practice necessary to effectively use spreadsheets. It will take you step-by-step through the basic spreadsheet commands and functions to enable you to create and modify a simple spreadsheet, and store and print its contents.

Upon completion of this self study guide, you should be able to:

- Describe the layout of a spreadsheet
- Change spreadsheet properties
- Enter, edit, and delete labels and values in the status area as well as in specific cells

- Access the function keys and the virtual spreadsheet keyboard to make modifications
- Use the primary spreadsheet commands
- Adjust rows and columns
- Change the spreadsheet format
- Print, mail, and store spreadsheets.

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## Getting started

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Before you begin this self study guide, you should know how to operate your 6085 or 8010 workstation. Complete the following:

- "Training Introduction" tab
- "Xerox ViewPoint" self study guide
- "Document Editor" self study guide
- "VP NetCom," "VP RemoteCom," or "VP Standalone" self study guide, depending on the configuration of your workstation.

To complete this self study guide, you need a 6085 Professional Computer System or an 8010 Information system with the following software installed and running:

- VP Spreadsheet software
- VP Document Editor software (to transfer the contents of a spreadsheet to a table)
- VP NetCom, VP RemoteCom, or VP StandAlone software (to print spreadsheet data at an interpress printer)
- VP Local Draft Printer (to print spreadsheet data at a local printer)

To verify that the software packages are installed and running on your workstation, open the application loader, which is located in the workstation divider of the directory. If a package is not listed when you open the application loader, or if it is set to Idle, refer to the



"Application Loader" chapter of the "Xerox ViewPoint" self study guide.

Each chapter of this self study guide introduces a number of related concepts. When these concepts involve on-line practice, practice exercises are included. At the end of each chapter, you test your knowledge with a self check; at the end of your training, you review all the skills taught with a final progress check.

When a term that is new or unique is introduced, it is italicized and placed in boldface type. You can find a more detailed explanation of each term in the "Glossary" tab of the VP Series reference library.

To get started, you need the folder titled VP Spreadsheets on the VP Training exercises floppy disk. Within this folder are all the documents necessary to complete this self study guide. The folder contains three types of documents:

- SPreadsheet PRACTICE documents (for example, SP PR 2-1)
- SPreadsheet Self Check documents (for example, SP SC 2-1)
- SPreadsheet Progress Check documents (for example, SP PC 7-1)

At this point you are ready to load the VP Training Exercises floppy disk onto your desktop. To review the procedure for loading a floppy disk, refer to the chapter titled "Floppy Utility" in the "Xerox ViewPoint" self study guide. If your system does not have a floppy disk drive, see your System Administrator.

You can copy the VP Spreadsheet folder and rename it. This automatically allows you to work with a copy of the original documents and to store your completed practices.

Beginning with this introduction, continue through each chapter sequentially, at your own pace, until you have mastered the skills taught. Your training should take approximately six hours.

While you are completing this self study guide, it is advisable that you have the tabs titled "VP Introduction," "VP Document Editor" and "VP Spreadsheet" in the VP Series reference library available for easy referral.

## 2. **Basic actions**

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### **Overview**

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Before you can use spreadsheets, you must master a number of basic actions.

After completing this chapter, you should be able to copy a spreadsheet icon to your desktop, name the icon, display the spreadsheet, enter and edit data in the status area, erase the contents of cells as well as the entire spreadsheet, move the cursor, cancel commands, scroll the spreadsheet, and use the function keys and the virtual keyboard.

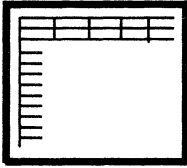
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### **Copying a spreadsheet icon**

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If you have used your workstation before, you are familiar with icons. You know that document icons are used for creating letters, reports, and other word processing tasks; file drawer icons are used to store files and documents; and mailing icons are used to exchange electronic mail with other users. Just as icons are used in other applications, they are also used to access spreadsheets.

The spreadsheet icon (Figure 2-1) is used to create an electronic worksheet.



**Figure 2-1 Spreadsheet icon**

Before you can begin using electronic spreadsheets, you must copy a blank spreadsheet icon from your directory to your desktop.

In the following exercise, you copy a spreadsheet icon from the basic documents, folders, and record files divider of your directory.

1. **Log on to your workstation.**
2. **Open the directory divider.**
3. **Open the workstation divider.**
4. **Open the basic icons divider.**
5. **Open the blank spreadsheet icon.**
6. **Move the pointer to an empty spot on your desktop and click the left mouse button.**
7. **Select [CLOSE ALL] in the directory menu to close the directory.**

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## Naming a spreadsheet

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Like other icons, the spreadsheet icon has an associated property sheet. The property sheet allows you to name the icon.

To display spreadsheet properties, you select the icon and then press <PROP'S>. In the following exercise, you change the spreadsheet icon's name.

1. Select the spreadsheet icon (if it is not already selected) and press <PROP'S>.
2. Select the spreadsheet name and press <DELETE>.
3. Type: TEST
4. Select [DONE].

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## Displaying a spreadsheet

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To display a spreadsheet, you select the spreadsheet icon and press <OPEN>.

In the following exercise, you open the practice spreadsheet.

1. Select the VP Spreadsheet folder (if it is not already selected) and press <OPEN>.
2. Select the spreadsheet icon labeled SC PR 2-1 and press <COPY>.
3. Move the pointer to an empty spot on your desktop and click the left mouse button.
4. Close the folder.
5. Open the spreadsheet icon.

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## Spreadsheet layout

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Notice the matrix (column and row) layout of the spreadsheet. Columns are labeled across the top of the spreadsheet with letters. Rows are numbered down the lefthand side of the spreadsheet.

Although all of the columns and rows are not visible on this spreadsheet, the spreadsheet has a total of 63 columns (A to Z, AA to AZ, and BA to BK) and 255 rows. A spreadsheet this large can be particularly useful when you need to perform calculations on a wide range of numbers, such as a sales report that shows figures for every week of the year, along with monthly and quarterly totals. In Chapter 2 you display other sections of the spreadsheet by scrolling.

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## Cells

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Look at the location where column A and row 1 intersect. Notice that the label Expense has been typed at that coordinate. The coordinate at which a row and a column intersect is called a **cell**.

Look again at the location where column A and row 1 intersect. Notice that the cell containing the label Expense is highlighted. This cell is highlighted because it has been selected. Selecting and highlighting a cell prepare it for data entry.

Before you can enter labels (text), numbers, or formulas into a spreadsheet, you must select the cell you wish to edit. Cells can be selected in a number of ways, but the easiest way is to place the pointer in the cell and click the left mouse button. The cell highlights when it has been selected.

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## Entering data in the status area

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Notice the area in the far upper lefthand corner of the spreadsheet. This is the **status area**. It consists of the following three lines:

- The **status line** displays the location or address of the active cell (cell in which the cursor resides). It also displays the current contents of that cell.
- The **prompt line** displays the available commands or options and tells what you can type. It is located right below the status line.
- The **entry line** contains commands or numbers that you can enter. It is located right below the prompt line.

In the following exercise, you select a cell, add a label to the spreadsheet, and type a number in a cell.

### Selecting a cell:

1. Select cell A1.

The status line now reads A1 (L) [9] EXPENSE. A1 is the address of the active cell. The (L) stands for **label**. A label is one of the two types of data (labels and values) that can be entered into a spreadsheet. The column and row headings of the spreadsheet are entered as labels. The [9] stands for the column width.

Additionally, a row of function keys appears at the bottom of the screen. You will use these keys later.

### Entering a label:

2. Select cell A2 with the left mouse button.
3. **Type:** Reports

Label is displayed on the prompt line and Reports is displayed on the entry line.

4. Press the backspace key (the arrow key located in the top righthand section of the keyboard). Notice

that the last letter has been deleted. The backspace key erases errors.

Label is displayed on prompt line and Report is displayed on the entry line.

5. **Press** the return key. The return key enters data into the cell address. No matter what you type, nothing is entered into the active cell until you press the return key. Report has now been entered into cell A2 and the status line reads A2 (L) [9] Report.

#### Entering a number:

6. **Select** cell C4.
7. **Type:** 35

Value is now displayed on the prompt line. The spreadsheet program looks at the first character you type and determines if it is a label or a value.

8. **Press** the return key.

Now the status line reads C4 (V) [9] 35, telling you that the contents of cell C4 is the value 35.

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## Editing in the status area

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To edit text in the status area, you simply select the cell you want to edit and then press <ITALICS> (the function key that corresponds to <EDIT>) or type /E.

In the following exercise, you edit cell A1:

1. **Select** cell A1.
2. **Press** the function key that corresponds to <EDIT> The contents of the cell appear on the entry line.
3. **Select** the space following the last letter in Expense on the entry line.
4. **Type:** Report



### 5. Press the return key.

The label "ExpenseRep" is entered in cell A1. Report has been abbreviated to Rep because the entire word cannot be displayed in the current column width. If you selected the cell, however, you could see that the entire label has been entered.

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## Entering spreadsheet commands

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In electronic spreadsheets, the slash always tells the spreadsheet program that you want to enter a command. If you type a slash after selecting a cell, a list of available commands will appear on the status line. At that point, you may enter any one of the listed commands. The primary commands are discussed in this self study guide.

**NOTE:** Refer to the tab titled "VP Spreadsheets" in the VP Series reference library for a complete list of the slash commands.

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## Erasing contents of cells

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To erase the contents of cells, you must enter the /B (blank) command. The slash tells the spreadsheet you are about to enter a command, and the B tells the spreadsheet program to erase the contents of the selected cell.

In the following exercise, you use the /B command to erase the value stored in C4.

1. Select cell C4.
2. Type: / (a slash)

The prompt line reads as follows: Command: B,C,D,E,F,G,I,M,R,T,V,W or - (listing of the available commands).

### 3. Type: B

The prompt line now reads: Blank.

4. Press the return key. The contents of the cell have now been deleted.

Continue to practice selecting cells, entering text and numbers, and editing entries on the the entry line of the status area until you feel comfortable using these features.

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## Moving the cursor

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You can move the cursor in a number of ways. One way to move the cursor is with the cursor keys. Another way to move the cursor is with <NEXT>.

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## Using the cursor keys

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When you select a cell in the spreadsheet, a row of keys appears at the bottom of the spreadsheet. These are **spreadsheet function keys**. They are used as a shorthand way of entering commands into the spreadsheet. Later you will use the spreadsheet function keys to access the spreadsheet virtual keyboard for entering data; now you use them to move the cursor and to select cells.

Select a cell and look at the spreadsheet function keys at the bottom of your spreadsheet. They correspond to the top row of keys on your main keyboard. For example, <KBD> (which stands for keyboard) on the spreadsheet function keys corresponds to <CENTER> on the main keyboard.

The keys labeled <←>, <↑>, <↓>, and <→> are called cursor keys. They allow you to move the cursor.

In the following exercise, you use the cursor keys.

1. Select cell A1.

2. Press the function key that corresponds to < ↓ > until cell A5 is selected.
3. Press the function key that corresponds to < → > until cell D5 is selected.
4. Press the function key that corresponds to < ← > until cell A5 is selected.
5. Press the function key that corresponds to < ↑ > until cell A1 is selected.

## Using <NEXT>

---

So far you have learned to move the cursor and select cells with the mouse and cursor keys. You can also move the cursor and select cells by pressing <NEXT>. To do so, first select a cell with the mouse. Then press <NEXT>. Pressing <NEXT> causes keys to be selected across, up, or down the spreadsheet, depending on the direction in which the selection was made. For example, suppose the current cell selection is in cell A1, and then B1 is selected. Because the selection is made to the right of cell A1, when <NEXT> is pressed, the cursor moves to cell C1. If <NEXT> is pressed again, the cursor moves to cell D1, and so on.

Additionally, pressing <NEXT> causes any data typed on the entry line to be entered in the selected cell before the next cell is selected.

In the following exercise, you select cells with <NEXT>.

1. Select cell B1.
2. Press <NEXT> until cell F1 is selected. Cells are selected to the right because cell A1 was already selected before you selected cell B1.
3. Select cell E1.
4. Press <NEXT> until cell A1 is selected. Notice that the selection moves to the left.
5. Press <NEXT> again.

The beep signals that you have reached the left edge of the spreadsheet.

6. Select cell A2.
7. Press <NEXT>. The selection now moves downward. Continue pressing <NEXT> until you select cell A10.
8. Select cell A9.
9. Press <NEXT> until cell A1 is selected again.
10. Press <NEXT> again.

The beep signals that you have reached the top edge of the spreadsheet.

Earlier, when you typed a label or value, you used the return key to enter it into a cell. <NEXT> is an alternate way to enter data into cells.

If you type a label or value and press <NEXT>, the data is entered into the selected cell and the selection moves to the following cell.

In the following exercise, you enter data using <NEXT>.

1. Select cell B1. You are selecting to the right of cell A1.
2. Type: Auto
3. Press <NEXT>. Notice the direction in which the selection moves.

Auto has now been entered into cell B1, and the selection has moved one cell to the right.

4. Select cell C3.
5. Type: 25
6. Press <NEXT>. Notice the direction in which the selection moves.

The value 25 has now been entered into cell C3 and the selection has moved downward to C4.

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## Jumping to a cell

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When you are entering data into a spreadsheet, you may want to go to a cell that is not displayed on the screen. The <GOTO> key is useful for selecting a cell at a specific coordinate.

<GOTO> is one of the spreadsheet virtual function keys. When <GOTO> is pressed, the prompt, Go to: Coordinate appears at the prompt line. You can then enter the address of the cell you want to go to.

In the following exercise, you use <GOTO>.

1. Press the function key corresponding to <GOTO>. The system now responds: Go to : Coordinate. It is asking you to enter the cell address you want to go to.
2. Type: B5
3. Press the return key. The selection is now at cell B5.
4. Press the function key corresponding to <GOTO>.
5. Type: A1
6. Press the return key. The selection is now at cell A1.

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## Canceling commands

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<STOP> is used to cancel spreadsheet commands. If you make an error, press <STOP>.

In the following exercise, you cancel <GOTO>.

1. Press the function key corresponding to <GOTO>.
2. Press <STOP>. The action associated with <GOTO> has now been canceled and the Go to: Coordinate prompt has disappeared from the prompt line.

## Scrolling spreadsheets

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A spreadsheet is scrolled by pressing <NEXT> or a cursor key in the direction indicated until you reach the edge of the spreadsheet.

In the following exercise, you scroll your practice spreadsheet with the cursor keys.

1. Select cell A1.
2. Press the key corresponding to <→> until you reach cell M1.

**Note:** The cursor key must be pressed once to advance a column or row. Holding it down does not cause it to advance faster.

3. Press the key corresponding to <→> twice. Columns N and O are now visible on the spreadsheet.
4. Press the function key corresponding to <GOTO>.
5. Type: A55
6. Press the return key.
7. Press the key corresponding to <↓> twice, so that rows 56 and 57 are visible. The rows have scrolled upward.
8. Press the function key corresponding to <GOTO>.
9. Type A1
10. Press the return key.
11. Press the key corresponding to <↑>. The beep signifies the top edge of the spreadsheet.

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## Erasing spreadsheet contents

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The /C (clear) command allows you to erase the entire contents of a spreadsheet. In the following exercise, you erase all data entered in your practice spreadsheet.

1. Type: /
2. Type: C

The prompt line reads: Clear: Type Y to confirm.

3. Type: Y

The contents of the spreadsheet have now been erased.

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## Using the virtual spreadsheet keyboard

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So far, you have used the function key corresponding to <GOTO> and the cursor keys to select cells, and <EDIT> to edit cells.

The spreadsheet function keys also allow you to switch to the virtual spreadsheet keyboard, which is used for entering some spreadsheet commands. The virtual spreadsheet keyboard is displayed by selecting any cell on the spreadsheet and pressing the function keys on your keyboard that correspond to <KBD> and <SHOW>.

In the following exercise, you access the virtual spreadsheet keyboard with the function keys.

1. **Open** your practice spreadsheet (if it is not already opened).
2. **Select** any cell (to display the spreadsheet function keys)
3. **Press** the function key that corresponds to <KBD>
4. **Press** the function key that corresponds to <SHOW>

The keyboard interpretation displayed at the lower left of your screen is now in effect. This means that the keys will

now perform only those functions shown on the screen and not on the physical keyboard.

## Selecting cells

---

Earlier you learned to move the cursor using the mouse; using the function keys corresponding to <←>, <↑>, <↓>, and <→>, or pressing the function key corresponding to <GOTO>. Additionally the key corresponding to <HOME> on the virtual spreadsheet keyboard can be used for this purpose.

<HOME> always moves the selection to cell A1. <HOME> is located on the upper righthand side of the spreadsheet virtual keyboard.

In the following exercise, you use <HOME>.

1. **Select** any cell other than A1.
2. **Press** the key corresponding to <HOME>. The selection has now moved to cell A1.

## Switching to the standard keyboard

---

In the following exercise, you switch back to the regular or English keyboard.

1. **Hold down** <SHIFT> and press the key corresponding to <KBD>. You have now switched back to the English keyboard.
2. **Select** [CLOSE] on the alternate keyboard displayed on the screen.
3. **Close** the SC PR 2-1 practice spreadsheet.



## Summary

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In this chapter, you studied how to:

- Copy, name, and display a spreadsheet
- Enter and edit labels and numbers
- Use the cursor keys to move the cursor and scroll the spreadsheet
- Use <NEXT>, <GOTO>, <HOME>, and <STOP>.
- Access the spreadsheet function keys and the virtual spreadsheet keyboard
- Use the /B (blank) and /C (clear) commands

At this point, you may want to practice some of the skills you have learned. Practice selecting cells, entering data, and scrolling until you feel comfortable with those features. Don't worry if you are slow at first. The more you use spreadsheets, the faster you will become.

When you have finished practicing, delete SC PR 2-1. You will not use it again.

The following pages contain an optional self check exercise.

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## Self check 2-1

---

To check your understanding of the material in this chapter, perform the following tasks. If you need assistance with any of the procedures, then turn to the next page for detailed instructions.

1. Retrieve a blank spreadsheet icon from the directory and name it Household Expenses.
2. Label column B Jan., column C Feb., and column D March.
3. Label row 3 Rent, row 4 Auto, row 5 Gas, row 6 Electric, and row 7 Food, and row 8 Entertainment.
4. Enter the estimated amount you spent each month in the appropriate cells.
5. Erase the contents of the spreadsheet.
6. Switch to the virtual spreadsheet keyboard and use <HOME> to return to cell A1.

Close and delete the household expense spreadsheet when you are done.

---

## Answers to self check 2-1

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1. To retrieve a blank spreadsheet icon from the directory and name it Household Expenses:

Open the directory divider.

Open the workstation divider.

Open the basic icons divider.

Copy the blank spreadsheet icon to your desktop.

Select [CLOSE ALL] in the directory menu to close the directory.

Select the blank spreadsheet icon and press <PROP'S>.

Select the spreadsheet name and press <DELETE>.

Type: Household Expenses.

Select [DONE].

2. To label column B Jan., column C Feb., and column D March:

Select the cell in which you wish to type the label and type the label.

Press the return key or <NEXT> to enter the label.

- 3. To label row 3 Rent, row 4 Auto, row 5 Gas, row 6 Electric, row 7 Food, and row 8 Entertainment.**

Select the cell in which you wish to type each label and type the label.

Press the return key or <NEXT> to enter each label.

- 4 . To enter the estimated amount you spent each month in the appropriate cells.**

Select the cell in which you wish to type an amount and type the amount.

Press the return key or <NEXT>.

- 5. To erase the contents of the spreadsheet**

Select any cell

Type: /C

Type: Y (to confirm)

- 6. To switch to the virtual spreadsheet keyboard and use <HOME> to return to cell A1:**

Press the function key that corresponds to <KBD>.

Press the function key that corresponds to <SHOW>.

Press the key that corresponds to <HOME> on the virtual keyboard.

# 3. More about entering text and values

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## Overview

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In Chapter 2, you studied how to select cells and how to enter labels and numbers in a spreadsheet. In this chapter you build on those basic actions as you enter formulas and replicate data.

After completing this chapter, you should be able to enter numbers as labels, enter formulas, replicate values, use the @SUM function, and back up your spreadsheet.

---

## Entering numbers as labels

---

To enter labels and numbers into a spreadsheet, you select a cell, type the label or number, and press the return key or <NEXT>. The electronic spreadsheet program looks at the first character you type and determines if it is a label or a value. If a label is typed, (L) is displayed on the prompt line. If a number is typed, (V) is displayed. You then press the return key or <NEXT> to enter the data.

But what happens if the label you enter begins with a digit, such as 5th Region Sales? If you enter any character that begins with a digit, with any of the arithmetic operators (+, -, /), or with any of the special characters that could begin a formula or function (+ or @), the spreadsheet program assumes you are about to enter a value.

To let the program know you want to type a digit as a label, you must give it a signal. The left, right, or neutral double quotation mark tells the spreadsheet program you are about to type a label entry that begins with a digit.

In the following exercise, you enter a digit as a label.

1. **Open** the folder labeled VP Spreadsheets.
2. **Copy** the spreadsheet named SP PR 3-1 to your desktop.
3. **Close** the folder.
4. **Select** SP PR 3-1 (if it is not already selected) and press <PROP'S>.
5. **Select** the spreadsheet name and press <DELETE>.
6. **Type:** Expense Report
7. **Select** [DONE].
8. **Open** the practice spreadsheet. Look at cell A6. A date (9/1) has been entered into cell A6.
9. **Select** cell A7.
10. **Type:**"

The prompt line reads: Label

11. **Type:** 9/2
12. **Press** the return key.
13. **Repeat** steps 8 through 11 to type 9/3 in cell A8 and 9/4 in cell A9.

Remember, any time you want to enter a label that begins with a digit or other arithmetic character, you must type a double quotation mark before the entry.

**NOTE:** If you want to use quotation marks as the initial characters in a label, you must type two sets of quotation marks.

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## Entering formulas

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One of the VP Spreadsheet software's most powerful features is its ability to store a formula in a cell. Instead of just allowing you to enter a simple numerical value into a cell, it allows you to enter a formula representing a calculation that may be based on the contents of other cells.

Look at your practice spreadsheet and consider the numbers in column B (Auto). What if you wanted to find the total for auto expense and enter it into cell B11? With electronic spreadsheets, you can have the total calculated for you and displayed on the entry line before it is actually entered into B11.

In the following exercise, you enter a formula in cell B11.

1. Select cell B11
2. Type:  $25 + 25 + 25 + 25$

If you make an error, correct it by pressing the backspace key.

3. Type: !

The exclamation point tells the program to calculate the formula and display it on the entry line. Notice the value 100 displayed at the entry line.

4. Press the return key. Now the value 100 has been entered into cell B11, and the contents of B11 are displayed on the status line.

It is not necessary to delete the value in cell B11 before entering a new value. The spreadsheet program simply writes over the old value when a new one is entered.

In the following exercise, you enter a new formula into cell B11. Since the formula you are about to enter begins with a letter, the spreadsheet program will assume you are entering a label unless you tell it you are about to enter a formula. Just as the quotation mark tells the program you are about to enter a label entry that begins

with a digit or arithmetic operator, the plus sign (+) tells the program you are about to enter a formula that begins with an alphanumeric character.

1. **Type:** +

A plus sign tells the program you are about to enter a formula. The prompt line reads: Value

2. **Type:** B6 + B7 + B8 + B9

3. **Press** the return key. Now the total has been entered into cell B11 and the formula B6 + B7 + B8 + B9 has been displayed on the status line.

---

## Replicating contents of cells

---

In column E, the hotel expense is the same for each day. To enter the cost of the hotel (\$50.00) in cells E7, E8, and E9, you could select each cell and type the amount individually, but there is an easier way. You can use the /R (replicate) command to copy labels or values from cell to cell, or you can copy a whole range of labels or values to a range of cells.

The replicate command is executed in three stages. In the first stage, you must specify the **source range**, the range of cells you want copied. In the second stage, you enter the **target range**, the range of cells into which you want to copy the source range. In the third stage, if you are replicating a formula that contains cell addresses, you must tell the program how to treat any cell addresses that appear in the formula. You must tell the program whether the values stored at the cell address should be copied exactly or changed relative to the position in each row.

Later in this section, you'll learn more about replicating formulas.



In the following exercise, you copy the hotel costs to cells E7, E8, and E9.

1. **Select cell E6, which contains the value (50) you want to replicate.**
2. **Type: /R**

The prompt line now reads: Replicate: Source Range or ENTER. The entry line displays E6..., the address of the cell you just selected. The series of three periods is a standard notation for an ellipsis, or specification of a range or series by beginning and ending location. The program is now waiting for you to enter the source range.

3. **Press the return key.**

Since you want to replicate only one cell, the program automatically enters the rest of the source range when you press the return key. The prompt line now reads: Replicate: Target Range, and the program is now waiting for you to enter the range of cells into which you want the source range copied.

4. **Type: E7.E9 (don't forget the period)**

The entry line now reads: E6...E6:E7...E9. You are telling the program to copy the contents of cell E6 to cells E7, E8, and E9.

5. **Press the return key.**

The value 50 has now been replicated to all three cells.

You may be thinking that it is easier to type the value in each one of the cells individually, rather than use the replicate command. On the other hand, if you have 50 or 100 values to copy, replicate is a very useful command.

---

## Entering spreadsheet functions

---

VP Spreadsheet software provides a variety of functions that can be used in writing formulas. These functions include simple arithmetic functions such as sum and average, as well as more advanced functions such as square root and exponent. In the next paragraph, you are going to look at the @SUM function. For a complete list of the functions that can be used in VP Spreadsheets, refer to the tab titled "VP Spreadsheets" in the VP Series reference library.

---

### The @SUM function

---

Suppose you wanted to find the total expenses for 9/1. You could have the program add all the amounts for that row and enter them into cell F6 (Total). But there is an easier way. The @SUM function allows you to total a range of numbers and enter them into a cell.

The @ sign is a flag that tells the program you are about to enter a function.

In the @SUM function, you must list the values you want totaled. This list of values is called the *argument* of a function and is surrounded by parentheses.

To total the amounts across row 6 of the practice spreadsheet, you could enter @SUM(B6,C6,D6,E6), but that would be time-consuming. Instead, you can specify a range of cells. To tell the program you are about to enter a range, you must type a period between the first cell in the range and the last cell in the range.

In the following exercise, you use @SUM and specify a range to total the amounts in row 6.

1. **Select** cell F6.
2. **Type:** @SUM(B6.E6) (don't forget to type the parentheses and period.)

The entry line reads: @SUM(B6...E6) .

**NOTE:** B6 is the cell address of the first number in the range. The period tells the spreadsheet program you are entering a range. E6 is the address of the last cell in the range.

3. **Press** the return key.

The values in row 6 have now been totaled and the total amount entered into cell F6.

In the following exercise, you find the totals for rows 7, 8, 9, and 11.

1. **Select** cell F7.
2. **Type:** @SUM(B7.E7)
3. **Press** <NEXT>.
4. **Type:** @SUM(B8.E8)
5. **Press** <NEXT>.
6. **Type:** @SUM(B9.E9)
7. **Press** <NEXT> twice.
8. **Type:** @SUM(B11.E11)
9. **Press** <NEXT>.

The totals have now been calculated for rows 7,8, 9, and 11.

In the following exercise, you find the expenses paid by the employee. The formula is F11 - F13 (total expenses minus company-paid expenses).

1. **Press** <NEXT> twice to position the cursor at cell F14.

2. **Type:** + (to tell the program you are about to enter a formula)
3. **Type:** F11-F13
4. **Press** the return key. The value has been entered into cell F14, and the formula is displayed at the status line.

---

## Replicating formulas

---

Before you replicate a formula, you should understand how to treat cell addresses that may appear in the formula.

In the following exercise, you replicate the contents of cells C6 to C9.

1. **Select** cell C9.
2. **Type:** + C6

The + tells the program you are entering a value entry, not a label entry.

3. **Press** the return key. Look at the prompt line. It reads: C9 (V) [9] + C6, but the cell shows the value 900. The contents of cell C6 have been copied to cell C9. In other words, the program accessed the value contained in C6 and repeated it.

When you use the replicate command, you must tell the program how to treat cell addresses. You must tell it whether to use the exact same value stored in the cell or change the value depending on its relative position.

## Replicating across cells

---

Suppose you wish to add a label titled Due Employee in row 15 and copy the formula from cell F14 into cell F15. You could re-enter the formula at cell F15, but it is easier to use the replicate command.

Earlier, you replicated a single value to a range of cells. Replicating a formula to a range of cells is similar to replicating a single value. The difference is that if the formula contains cell addresses, you must tell the program how to treat them.

In the following exercise, you replicate the formula in F14 to F15.

### Entering a label for row 15:

1. **Select** cell A15.
2. **Type:** Due Employee
3. **Press** the return key.

The label Due Employee has been abbreviated because the column width is smaller than the label. The cell, however, contains all the characters in the label.

### Replicating the total in cell F14 to cell F15:

4. **Select** cell F14 (the cell you want to replicate).
5. **Type:** /R

The prompt line reads: Replicate: Source Range or ENTER. The entry line displays F14..., the address of the cell you just selected and an ellipsis. It is waiting for you to enter the rest of the source range.

6. **Press** the return key.

Since you want to replicate the value of only one cell, the program has automatically entered the source range. The prompt line now reads: Replicate: Target Range. It is waiting for you to

enter the range of cells into which you want the source range copied.

**7. Type: F15**

Since you are replicating the contents of a single cell, you do not need to complete the target range.

**8. Press the return key.**

The prompt line now reads: Replicate: N = No change, R = Relative. It is referring to the first cell address + F11 in the formula. "No change" means you want the exact cell address repeated in the formula each time it is copied. "Relative" means you want the cell address to change, relative to the position in each row. In this case, you are making an exact copy of the formula, so the answer to this prompt is N.

**9. Type: N**

The line still reads: Replicate: N = No change, R = Relative. The entry now displays the second cell address -F13 in the formula. Again it is asking if the cell address should remain the same or change. The answer is N.

**NOTE:** When there are multiple cell addresses in a formula being replicated, the prompt Replicate: N = No change, R = Relative appears for each one.

**10. Type: N**

The formula is replicated in cell F15.

**11. Select cell F15. The formula + F11-F13 is now displayed on the status line.**

---

## Saving edits

---

Once you have entered data in a spreadsheet, you want to make sure that the data you have entered is not lost if the system becomes inoperative while the spreadsheet window is open. To ensure that spreadsheet contents are updated to the backup file, the [SAVE EDITS] command in the spreadsheet window must be selected.

When [SAVE EDITS] is selected, the spreadsheet backup file on the workstation's fixed disk is updated with the current contents of the spreadsheet.

In the following exercise, you back up your practice spreadsheet:

1. Select [SAVE EDITS] in the window header.

The spreadsheet backup file has now been updated.

2. Select [CLOSE] in the window header.

**NOTE:** When [CLOSE] is selected in the spreadsheet window, the back up file is also updated if edits have been made since [SAVE EDITS] was last selected.

---

## Summary

---

In this chapter, you studied how to:

- Enter numbers as labels
- Enter formulas in cells
- Use the /R command to replicate cells and formulas
- Use the @SUM function
- Use [SAVE EDIT]

If you need more practice, complete the exercises again. To do this, use a new copy of your practice spreadsheet.

Do not delete the expense report practice spreadsheet. You will use it in the next chapter.

The following pages contain an optional self check exercise.



## Self check 3-1

---

To check your understanding of the material in this chapter, perform the following tasks. If you need assistance with any of the procedures, turn to the next page for detailed instructions.

1. Copy a blank spreadsheet icon from the directory and name it Self Check 3-1.
2. Type the label Book into cell B1 and the label Sales into cell C1.
3. Type the label #4567 into cell A3, #1768 into cell A4, #2456 into cell A5, #5678 into cell A6, #6788 into cell A7, and Total into cell A9.
4. Type the label Jan. into cell B2 and Feb. into cell C2.
5. Enter the value 350 into cell B3, 275 into cell B4, 160 into cell B5, 234 into cell B6, and 0 into cell B7.
6. Enter the value 235 into cell C3, 200 into cell C4, 155 into cell C5, 249 into cell C6, and 20 into cell C7.
7. Enter a formula into cell B9 to total the values in cells B3, B4, B5, B6, and B7.
8. Replicate the formula in cell B9 to cell C9.
9. Close and delete Self Check 3-1 when you are done.

---

## Answers to self check 3-1

---

1. To copy a blank spreadsheet icon from the directory and name it Self check 3-1:

Open the directory icon.

Open the workstation divider.

Open the basic icon divider.

Copy the blank spreadsheet icon to your desktop.

Select [CLOSE ALL] in the directory window.

2. To type the label **Book** into cell **B1** and type the label **Sales** into cell **C1**:

Select cell B1.

Type: **Book**

Press the return key.

Complete the same steps for cell C1.

3. To type the label **#4567** into cell **C3**, **#1768** into cell **A4**, **#2456** into cell **A5**, **#5678** into cell **A6**, **#6788** into cell **A7**, and **Total** into cell **A9**:

Select cell C3

Type: " (quotation marks)

Type: the number

Press the return key.

Complete the same steps for each label.

- 4. To type the label Jan into cell B2 and Feb. into cell C2:**

Select cell B2.

Type: Jan

Press the return key.

Repeat the same steps for each cell.

- 5. To enter the value 350 into cell B3, 275 into cell B4, 160 into cell B5, 234 into cell B6, and 0 into cell B7:**

Select cell B3.

Type: 350

Press the return key.

Repeat the same steps for each cell.

- 6. To enter the value 235 into cell C3, 200, into cell C4, 155 into cell C5, 249 into cell C6 and 20 into cell C7:**

Select cell C3.

Type: 235

Press the return key.

Repeat the same steps for each cell.

- 7. To enter a formula into cell B9 to total the values in cells B3, B4, B5, B6, and B7.**

Select cell B9.

Type: @SUM(B3.B7)

Press the return key.

**8. To replicate the formula in cell B9 to cell C9:**

Select cell B9.

Type: /R

Press the return key. The program enters the selected cell as the source range.

Type: C9 (the target range)

Press the return key.

Type: R

Type: R

## 4. Adjusting rows and columns

---

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### Overview

---

You have learned to manipulate information within the existing columns and rows of a spreadsheet. As you develop a spreadsheet you may find that columns need to be moved to adjust for new information. Columns may also be widened or narrowed to allow for larger or smaller values than originally anticipated, and rows may also be shifted to make room for subtotals or new entries.

After completing this chapter, you should be able to insert and delete rows and columns, move rows and columns, and change column width.

---

### Inserting and deleting rows and columns

---

Suppose you want to insert or delete a row or column on your spreadsheet. You might, for example, wish to add another column of expenses to your expense report. Or you might want to delete a blank row. The /IC (insert column), /IR (insert row), /DC (delete column:), and /DR (delete row) commands allow you to do just that.

In the following exercise, you insert and delete rows in your Expense Report spreadsheet.

**Deleting a row:**

1. **Open** the SP PR 3-1 (if it is not already opened.)
2. **Select** cell A12.
3. **Type:** / (to make the list of available commands appear).
4. **Type:** D

The prompt reads: Delete: R(ow) or C(olumn).

5. **Type:** R

The blank row has now been deleted. The calculations have not changed.

**Inserting a row:**

6. **Select** cell A12 (if it is not already selected)
7. **Type:** /
8. **Type:** I

The prompt reads: Insert: R(row) or C(olumn)

9. **Type:** R

A blank row has now been inserted above the cell you selected, and row 12 has become row 13.

**NOTE:** The spreadsheet program inserts a blank row by moving down rows. The rows that are moved down include the row containing the selected cell and the rows after the selected cell.

---

## Moving rows and columns

---

Once you have set up your spreadsheet, you may decide to adjust it by moving a row or column.

To move a row or column, you simply select a cell within the row or column you wish to move and type `/M`, the move command. You then either enter the cell address or the row or column to which you wish to move the selected column or row.

In the following exercise, you move row 12 (blank line) and row 11 (Total).

### Moving row 11 to row 12:

1. Select cell A12 (if it is not already selected).
2. Type: `/M`

The prompt line reads, Move: From...To.

3. Type: A11
4. Press the return key. Row 12 now contains the totals, and row 11 is blank.

### Moving row 12 back to row 11:

1. Type: `/M`
2. Type: A11
3. Press the return key. Row 12 is now blank and row 11 contains the totals.

**NOTE:** If you move a column to a new destination to the right, it is placed to the left of the requested column. For example, if you move column E to column T, Column E will be placed in column S.

## Changing column width

---

Sometimes you may want to see more columns in the spreadsheet window without having to scroll. You can do this by making the column width narrower. When you make the column width narrower, more columns can fit on the screen.

To uniformly change the column width, you select any cell (it doesn't matter what column is selected) and enter the /GC (global column width) command, followed by the new width of the column (the minimum is three characters and the maximum is the total width of the spreadsheet).

The spreadsheet program displays as many columns as it can across the window.

The standard column width for spreadsheets is nine characters.

In the following exercise, you change the column width to seven characters.

1. **Select** any cell.
2. **Type:** /
3. **Type:** G

The prompt line reads: Global: C(olumn) width, O(rder), R(ecalculation), or F(ormat).

4. **Type:** C

The prompt line reads: Global: C(olumn) width

5. **Type:** 7

This sets the number of characters for the new column width.

6. **Press** the return key.

The new column width has been set. Notice that now more columns are displayed on the screen. Some of the



labels, however, have been further shortened to fit the narrower width.

What happens if you make the columns even smaller?

In the following exercise, you change column width to three characters and then reset it to nine characters.

1. **Select any cell, if one isn't already selected.**
2. **Type: /GC3**
3. **Press the return key.**

The column width is even smaller - so small that the three-digit values do not fit. Notice that the spreadsheet program has entered > for the values it cannot display. If you select the cells in which > is displayed, however, you will see that they still contain the original values.

4. **Select any cell containing >.**

The status line displays the contents of the cell, or the cell's formula.

5. **Type: /GC9**
6. **Press the return key.**

This resets the column width to the initial width of nine characters.

7. **Close SP PR 3-1**

---

## Summary

---

In this chapter, you studied how to:

- Use the /IC and /IR commands to insert columns and rows
- Use the /DC and /DR commands to delete columns and rows
- Use the /M command to move columns and rows
- Use the /GC command to change the width of all columns in a spreadsheet

If you need more practice, complete the exercise again. To do this, use a new copy of your practice spreadsheet.

Do not delete your expense report practice spreadsheet. The following pages contain an optional self check exercise.

## Self check 4-1

---

To check your understanding of the commands presented in this chapter, open SP SC 4-1, select [EDIT], and perform the following tasks. If you need assistance with any of the procedures, turn to the next page for detailed instructions.

1. Insert a new row after row 7 in SP SC 4-1.
2. Move column D to column F.
3. Insert a blank row after row 2.

---

## Answers to self check 4-1

---

**1. To insert a blank row after row 7:**

Select a cell in row 8.

Type: /

Type: I

Type: R

Press the return key.

**2. To move column D to column F:**

Select a cell within column D.

Type: /M

Type: a cell address within column G

**NOTE:** To move column D to column F, you must give a cell address within column G because when columns are moved to the right, they are placed to the left of the requested column.

Press the return key.

**3. To insert a blank row after row 2:**

Select a cell within row 3.

Type: /R

Press the return key.

# 5. Formatting spreadsheets

---

---

## Overview

---

You have learned how to create a spreadsheet, how to enter labels and values, and how to manipulate rows and columns. Once you have created a spreadsheet and entered data, you will probably want to format it before printing it.

To change the format of a spreadsheet, you use the /F (format) command. There are a number of format command options, but in this chapter you will study four of them: /FL and /FR, used to change the cell alignment from left to right; and /F\$ and /GF\$, used to change numbers to money format.

After completing this chapter, you should be able to change numbers to money format in individual cells, as well as the entire spreadsheet, change alignment in individual cells, and enter repeating labels

---

## Changing numbers to money format

---

In your expense report practice spreadsheet, all the values are in integer format (whole numbers); however, you want it to be in money format. To set a cell to money format, select a cell and enter the /F\$ command; to set the entire spreadsheet to money format, you select a cell and enter the /GF\$ command.

In the following exercise, you set the spreadsheet to money format using the /F\$ and /GF\$ commands.

1. Open the expense report practice spreadsheet.
2. Select cell B6.
3. Type: /F\$

The cell you selected has now been set to money format. The /F\$ command is helpful if you want to set individual cells to money format, but you would not want to select each cell in the expense report and change the format.

Using the /GF\$ command:

4. Type: /GF\$

Now all values have been set to money format.

**NOTE:** The dollar sign (\$) cannot be used in a money format cell. The /GF\$ command can be overridden on a cell by cell basis.

---

## Changing the cell alignment

---

Look again at the labels in the spreadsheet. Notice that they are all left aligned. Before you print the spreadsheet contents, you may want to change the alignment of the column labels.

To change the alignment from left to right, you select the cell and enter the /FR command.

In the following exercise, you change all the column labels from left alignment to right alignment.

1. **Select cell B4**
2. **Type: /FR**
3. **Select cell C4**
4. **Type: /FR**
5. **Continue until you have selected cells D4, E4, and F4 and have changed the alignment for each one.**

If you want to change the format of an individual cell back to left alignment, you use the /FL command.

**NOTE:** The /GFR and /GFL commands can be used to change the cell alignment for the entire spreadsheet.

---

## Entering repeating labels

---

When you are formatting your spreadsheet, you may decide to draw a line across a row for visual separation of rows and numbers (to underline a total or subtotal, for example). You can do this by using the /- (repeating label) command and the /R (replicate) command.

The /- command allows you to enter a series of repeating labels across a cell. For example, if you wish to enter a series of dollar signs across a cell, you can use the /- command.

In the following exercise, you enter a line of hyphens across a cell using /- and /R.

1. **Select cell A3.**
2. **Type: /-**

The prompt line reads: Label: Repeating. It is waiting for you to enter a character. Any character or series of characters you enter is repeated across the cell.

3. **Type: -**

4. **Press** the return key. A line of hyphens is now entered in cell A3.

5. **Type:** /R

The prompt line reads: Replicate: Source range or ENTER. The edit line reads: A3... It is waiting for you to enter the source range.

6. **Press** the return key.

7. **Type:** B3.F3

This tells the program you want to replicate the contents of cell A3 to cells B3 to F3. The period tells the program you are entering a range.

8. **Press** the return key.

9. **Close** the expense report practice spreadsheet.

---

## Summary

---

In this chapter you studied how to:

- Use the /F\$ and /GF\$ commands to change numbers to money format
- Use the /FR and /FL commands to change cell alignment
- Use the /- and /R commands to repeat labels across a cell

If you need more practice, complete the exercises again. To do this, use a new copy of your practice spreadsheet.

Do not delete your practice spreadsheet. The following page contains an optional self check exercise.



---

## Self check 5-1

---

To check your understanding of the commands presented in this chapter, open SP SC 5-1, select [EDIT], and perform the following tasks. If you need assistance with any of the procedures, turn to the next page for detailed instructions.

1. Set all the numbers in SP SC 5-1 to money format.
2. Enter a series of repeating labels across cell A10.
3. Replicate the repeating labels from cell A10 to cell D10.

---

## Answers to self check 5-1

---

1. To change the numbers to money format:

Select any cell.

Type: /GF\$

2. To enter repeating labels in cell A10:

Select cell A10.

Type: /-

Type: -

Press the return key.

3. To replicate the repeating labels across row 10.

Type: /R

Press the return key.

Type: B10.D10

Press the return key.

## 6. Printing and storing spreadsheet data

---

---

### Overview

---

You have learned to create a spreadsheet and format it to meet your needs. Once your spreadsheet is complete, you will probably want to print a copy of it and store the electronic version in a folder, on a floppy disk, or in a file a drawer. In this chapter, you study how to print and store the contents of a spreadsheet.

After completing this chapter, you should be able to reformat a spreadsheet into tabular form for printing and prepare a spreadsheet for printing.

---

### Printing spreadsheet contents

---

Spreadsheets can be printed in three ways:

- By moving or copying the spreadsheet icon to a printer icon, and selecting [START] on the printer option sheet
- By using the [MAKE TABLE] option to transfer the spreadsheet's contents to a table within a document, and printing the document
- By using the [MAKE PRINT FORMAT DOCUMENT] option to transfer the spreadsheet's contents to a print format document, and sending it to a printer.

The [MAKE TABLE] option is useful if you want to edit the spreadsheet after transferring it to table format. The [MAKE PRINT FORMAT DOCUMENT] option is useful if you don't need to edit the spreadsheet. Print format documents cannot be opened or edited.

Before you can print the contents of a spreadsheet, you must enter the rows and columns you want printed. This information must be entered on the printing option sheet that appears after [MAKE TABLE] or [MAKE PRINT FORMAT DOCUMENT] is selected.

You can specify rows and columns by entering the number or letters separated by a comma (for example, 1,2,3,4) or by specifying a range. You can specify a range by entering the number or letters in the range separated by a comma, a period, an ellipsis, or a range character (for example; 1,4, or 1.4, 1...4, or 1→4)

The range character is used for specifying a range. It is found on the special keyboard associated with the option sheet that appears when either [MAKE PRINT FORMAT DOCUMENT] or [MAKE TABLE] is selected. You can use it by holding down <KEYBOARD>, pressing the function key corresponding to <SPECIAL>, and pressing <2> on the standard keyboard.

After you enter the columns and rows you want copied, you must select [START] to transfer the contents of the spreadsheet.

If the spreadsheet is copied to a table, a document containing the table appears on your desktop. This document can then be opened and edited.

If the spreadsheet is copied to a print format document, the print format document appears on your desktop. You can then move the print format document to a printer icon.

**NOTE:** Before you can send a document to the printer, the appropriate print software must be loaded on your workstation. Refer to Chapter 1 for the software that is required.

---

## Using [MAKE TABLE]

---

[MAKE TABLE] is found in the spreadsheet auxiliary menu.

In the following exercise, you create a table containing the contents of your practice spreadsheet.

1. Open the expense report practice spreadsheet.
2. Position the pointer on the spreadsheet auxiliary menu (the plus sign over the minus sign in the spreadsheet window).
3. Hold down the left mouse button.
4. Select [MAKE TABLE], which becomes highlighted once it is selected.
5. Release the mouse button. The option sheet associated with [MAKE TABLE] appears in the lower righthand corner of your screen.
6. Study the option sheet. Notice the flashing caret (it looks like an inverted v). It is waiting for you to enter the numbers of the rows and letters of the columns you want transferred to a table. Also notice that a document name has already been entered. You can change the name, if necessary.
7. Type: A.F (to specify that you want columns A through F printed)
8. Press <NEXT>.
9. Type: 1.11 (no spaces)
10. Select [START].

When the document has been created, the hourglass changes back into a pointer and the document appears in the first blank space nearest the lower righthand corner of your desktop.

11. Open the document, which contains the contents of the specified cells from your spreadsheet.

## Changing table properties

---

You can now reformat the table if necessary. You can change the text to bold or italics, or you can underline it.

In the following exercise, you change the typeface on the title to bold.

1. Select Expense
2. Press <BOLD>
3. Select Report
4. Press <BOLD>.
5. Select [CLOSE] in the window menu to close the document

You can now send the table to a printer. You must have a copy of a printer icon on your desktop before you can print the spreadsheet.

If your spreadsheet is very large, break it into smaller tables by specifying sets of rows and columns. For example, you might transfer rows 1 through 17 and columns A through H to a table. Then you might transfer rows 1 through 17 again and columns I through M to another table.

**NOTE:** If too many rows are specified, you receive an error message and are not able to close the option sheet until the error is corrected. You can correct the error by specifying smaller sections of the spreadsheet.

---

## Using [MAKE PRINT FORMAT DOCUMENT]

---

[MAKE PRINT FORMAT DOCUMENT] is found on the spreadsheet auxiliary menu.

In the following exercise, you use [MAKE PRINT FORMAT DOCUMENT].

1. **Open** the spreadsheet.
2. **Position** the pointer on the auxiliary menu
3. **Select** [MAKE PRINT FORMAT DOCUMENT], which becomes highlighted once it is selected.
4. **Release** the mouse button. The option sheet associated with [MAKE PRINT FORMAT DOCUMENT] appears in the lower righthand corner of your screen.
5. **Study** the [MAKE PRINT FORMAT DOCUMENT] option sheet.

Notice the cells options: [ALL NON-BLANK CELLS] and [SPECIFIED]. If you want to print a section of the spreadsheet including non-blank cells, select [ALL NON-BLANK CELLS]. If you want to enter specific cells, select [SPECIFIED] and then enter the numbers of the rows and letters of the columns you want in the resulting row and column options.

6. **Select** [SPECIFIED] to indicate specific cells.
7. **Type:** C.F

This specifies that you want columns C through F printed.

8. **Press** <NEXT>.
9. **Type:** 3.11

This specifies that you want rows 3 through 11 printed.

10. **Select** [START].

The pointer changes into an hourglass. This tells you that the program is creating your document. When the print format document has been created, the hourglass changes back into a pointer and the print format document appears in the first blank space nearest the lower righthand corner of your desktop.

11. Close the expense report practice spreadsheet.

---

## Storing and mailing spreadsheets

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As was explained earlier, the contents of spreadsheets are stored in a backup file on your workstation's rigid disk when [SAVE EDITS] is selected. The data you enter and any changes you make are also written to the rigid disk whenever the spreadsheet is closed.

Spreadsheets can also be stored in folders and file drawers and on floppy disks the same as any document. You store a spreadsheet by selecting the spreadsheet icon, pressing <COPY> or <MOVE>, and copying or moving it to a folder or file drawer. When the icon is positioned over the folder or file drawer, you click the left mouse button.

You mail a spreadsheet in the same way you mail any document, by copying or moving the spreadsheet to your out-basket, clicking the left mouse button, and filling out the mailing property sheet.



## Summary

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In this chapter, you studied how to:

- Use [MAKE TABLE] to reformat a table for printing
- Change text properties in a completed table.
- Use [MAKE PRINT FORMAT DOCUMENT]

You have also reviewed the methods for sending the completed spreadsheet to the printer, filing it, and mailing it.

If you need more practice, complete the exercises again. To do this, use a new copy of your practice spreadsheet.

Delete your practice documents after you finish.

After you finish the final progress check in Chapter 7, you will have completed the training for spreadsheets. Refer to the tab titled "VP Spreadsheets" in the VP Series reference library for further information on this feature.

The following section contains an optional self check exercise.

## Self check 6-1

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To check your understanding of the commands presented in this chapter, open SP SC 6-1, select [EDIT], and perform the following tasks. If you need assistance with any of the procedures, turn to the next page for detailed instructions.

1. Make a print format document from the spreadsheet titled Self-Check 6-1. Specify rows 1 through 11 and columns A through D.
2. Send the print format document to an interpress printer.

---

## Answers to self check 6-1

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### 1. To make a print format document:

Open the practice spreadsheet.

Position the pointer in the auxiliary menu.

Hold down the left mouse button and move the pointer to select [MAKE PRINT FORMAT DOCUMENT]

Release the mouse button

Select [SPECIFIED] on the resulting option sheet

Type: 1.11 (in the rows field)

Press <NEXT>.

Type: A.D (in the columns field)

Select [START].

### 2. To send the print format document to an interpress printer.

Select the print format document.

Press <MOVE> or <COPY>.

Move the pointer to a printer icon and click the left mouse button.

Select [START] on the printer option sheet.

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## **7. Final progress check**

---

So far you have learned some of the basic concepts about electronic spreadsheets.

This chapter contains a final progress check. If you are able to complete all of the tasks listed, you have a good understanding of how electronic spreadsheets work.

After you complete the final check, you can build on your understanding by creating your own spreadsheets. Be sure to refer to the tab titled "VP Spreadsheets" in the VP Series reference library to look up specific procedures and commands.

In this final check, you are to retrieve a blank spreadsheet icon and perform the following tasks. If you need assistance with any of the procedures, turn to page 7-4 for detailed instructions.

1. Name the icon Office Budget.
2. Enter the title Office Budget in cells A1 and A2.
3. Label rows 4 through 9 in column A as follows:

Rent  
Furniture  
Telephone  
Equipment  
Advertising  
Labor

4. Label row 11 Total.

5. Label columns B, C, D, and E (in row 2) as follows:

Jan.  
Feb.  
March  
Total

6. Enter the following values into these cells:

Cell B4 = 1000  
Cell B5 = 200  
Cell B6 = 250  
Cell B7 = 800,  
Cell B8 = 200  
Cell B9 = 900

7. Enter hyphens across cell A3, and replicate the hyphens across the spreadsheet to cell E3.  
8. Replicate the hyphens in cell A3 to the following cells:

A10  
B10  
C10  
D10  
E10.

9. Replicate the value in B4 (1000) for rent to cells C4 and D4.  
10. Replicate the value in B5 (200) for furniture to cells C5 and D5.  
11. Replicate the value in B6 (250) for telephone to cells C6 and D6.  
12. Replicate the value in B8 (200) for advertising to cells C8 and D8.  
13. Replicate the value in B9 (900) for labor to cells C9 and D9.  
14. Enter a formula in cell B11 to total the value of column B. Then replicate the formula to cells C11 and D11.

15. Enter a formula in cell E4 to total the value of row 4. Then replicate the formula to the following cells:

E5  
E6  
E7  
E8  
E9

16. Enter a series hyphens across cell A10 and replicate them to cells B10 through E10.
17. Change the value in cell B5 to 300.
18. Change the format of the spreadsheet to money format.
19. Make a print format document and print the contents of the spreadsheet.

When you are finished, close and delete your practice spreadsheet.

---

## Answers to final progress check

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**1. To name a spreadsheet icon:**

Select the spreadsheet icon.

Press <PROP'S>.

Select the icon label and press <DELETE>.

Type the new name.

Select [DONE].

**2. To enter the label Office Budget into a cells A1 and A2:**

Select cell A1.

Type: Office

Press the return key.

Select cell A2

Type: Budget

Press the return key.

**3. To label rows 4 through 9 in column A:**

Select cell A4.

Type: Rent

Press the return key.



Follow the same procedure to label rows 5 through 9 in column A.

**4. To label row 11 in column A Total:**

Select cell A11.

Type: Total

Press the return key.

**5. To label columns B, C, D, and E (in row 2):**

Select cell B2.

Type: Jan.

Press the return key.

Follow the same procedure to label columns C, D, and E.

**6. To enter values into a cells B4 through B9:**

Select cell B4.

Type: 1000

Press the return key.

Follow the same procedure to label columns B5 through B9.

**7. To enter hyphens across cell A3, and replicate the hyphens across the spreadsheet to cell E3:**

Select cell A3.

Type: /-

Type: -

Press the return key.

Type: /R

Press the return key (to enter the target range)

Type: B3.E3

Press the return key.

**8 To replicate the hyphens in cell A3 to cells A10 through E10:**

Select cell A3.

Type: /R

Press the return key.

Type: A10.E10

Press the return key.

**9. To replicate the value in B4 to cells C4 and D4:**

Select cell B4.

Type: /R

Press the return key.

Type: C4. D4

Press the return key.

**10. To replicate the value in cell B5 to cells C5 and D5:**

Select cell B5

Type: /R

Press the return key.

Type: C5.D5

Press the return key.

**11. To replicate the value in cell B6 to cells C6 and D6:**

Select cell B6

Type: /R

Press the return key.

Type: C6.D6

Press the return key.

**12. To replicate the value in cell B8 to cells C8 and D8:**

Select cell B8

Type: /R

Press the return key.

Type: C8.D8

Press the return key.

**13. To replicate the value in cell B9 to cells C9 and D9:**

Select cell B9

Type: /R

Press the return key.

Type: C9.D9

Press the return key.

- 14. To enter a formula in cell B11 to total the values in column B and replicate the formula to cells C11 and D11:**

Select cell B11.

Type: @SUM(B6.B9)

Press the return key.

Type: /R

Press the return key.

Type: C11.D11

Press the return key.

Type: R

Type: R

- 15. Enter a formula in cell E4 to to total the value of row 4. Then replicate the formula to cells E5 through E9:**

Select cell E4.

Type: @SUM(B4.D4)

Press the return key.

Type: /R

Press the return key.

Type: E5.E9

Press the return key.

Type: R (each time N = No Change R = Relative appears)

- 16. To enter a series of hyphens across cell A10 and replicate them across cell B10 through E10:**

Select cell A10.

Type: /-

Type: -

Press the return key.

Type: /R

Press the return key.

Type: B10.E10

Press the return key.

- 17. To change the value in cell B5 to 300:**

Select cell B5

Type: /B

Press the return key.

Type: 200

Press the return key.

- 18. To change the format of a spreadsheet to money format:**

Select any cell

Type: /GF\$

**19. To make a print format document and print contents of a spreadsheet.**

Select [MAKE PRINT FORMAT DOCUMENT] in the spreadsheet popup window

Enter the numbers of the rows and letters of the columns you want printed.

Select [START].

Select the print format document

Move the pointer to a printer icon and click the left mouse button.

Select [START] on the printer option sheet.