10 minutes to SuperCalc

Create your first spreadsheet and graph in 10 minutes.

⊘ SORCIM
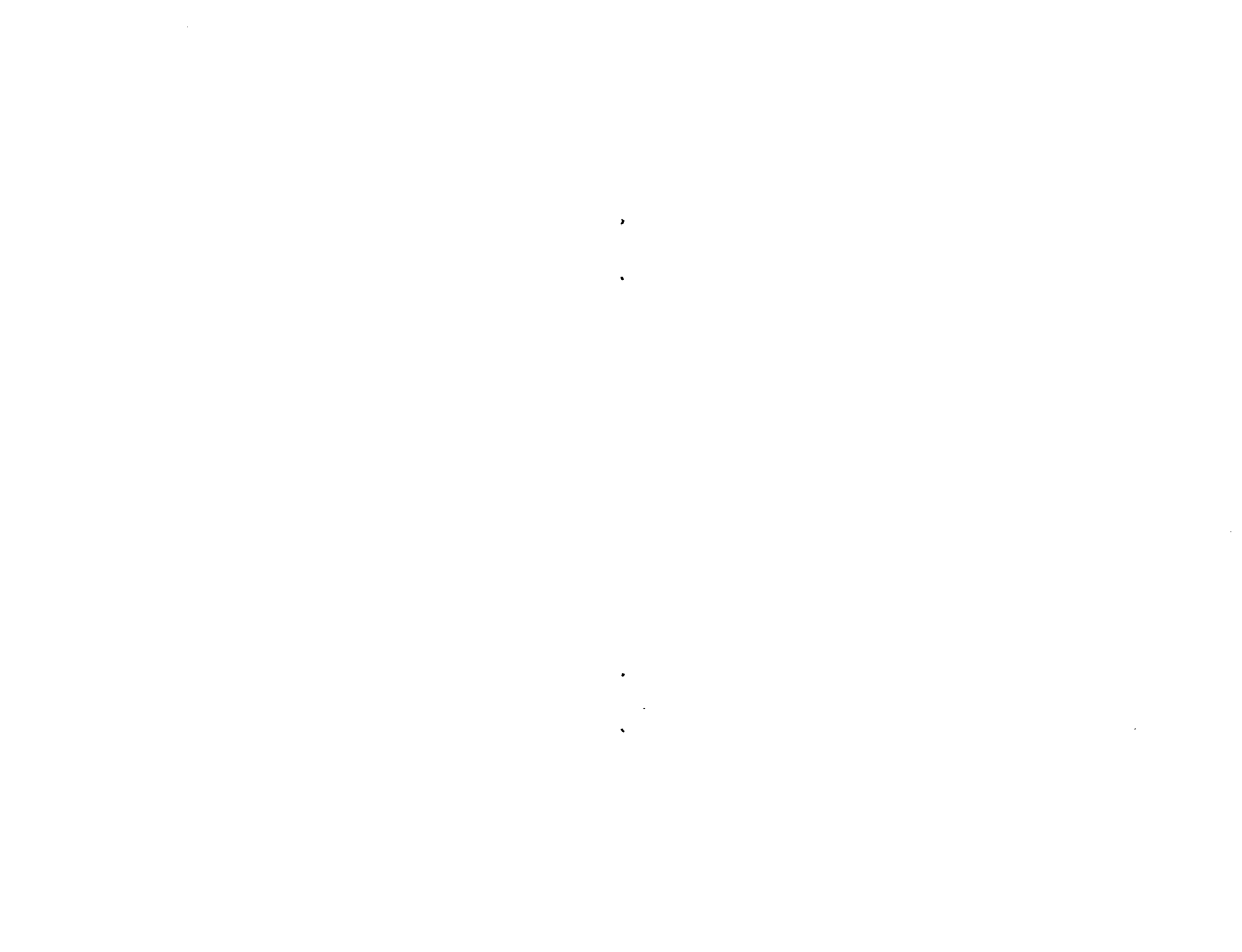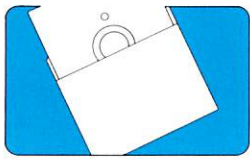
SuperCalc® 3

Super

Consolidation

We can't resist showing you just one more powerhouse feature. We'll make it quick. With SuperCalc3 you can set up spreadsheets for different offices or divisions, do their projections, and then consolidate the spreadsheets to see company-wide results.

To see how this works, let's consolidate your original Income Statement data, stored in the TEN.CAL file, with the current spreadsheet. Watch the spreadsheet when you type the last entry. Type:

/L	(the Load command)
TEN,	(the original spreadsheet we saved earlier)
C	(to Consolidate)

The original values are added to the values in the current spreadsheet, and the lower part of the spreadsheet is recalculated to reflect these new values.

Ending the Show

It isn't necessary to save the consolidated spreadsheet. This was just a demonstration. If you do want to save the consolidated file, however, type **/S** and give the file a new name, such as **TENCON**, followed by **A** (for All).

To end the SuperCalc3 program, just type **/Q** (for Quit), then **Y** (for Yes).

Congratulations! You are ready to increase your productivity with SuperCalc3.

SuperCalc³

Table of Contents

Introduction

SuperCalc3—with easy-to-use, super-powered spreadsheet, graphing and data management capabilities. Proven productivity tools for an almost unlimited range of financial, engineering, and scientific applications.

These few pages get you started. We assume your copy of the SuperCalc3 program has been tailored (configured) to work with your plotter or graphics printer. If not, refer to Appendix C of the SuperCalc3 manual for instructions.

In this introductory lesson, we will show you how to build a trial spreadsheet and graph. You can then ask, "What if I change this number or revise that approximation?" and you will see the immediate response. You can also save your work, print out a copy of the spreadsheet, and plot your graph.

```
Income Statement

                Q1        Q2        Q3        Q4       Year
             ----------------------------------------------
Sales         25000     20000     35000     25000     105000
Costs         15000     12000     21000     15000      63000

Profit        10000      8000     14000     10000      42000
```


Income Statement
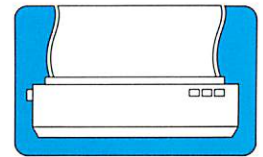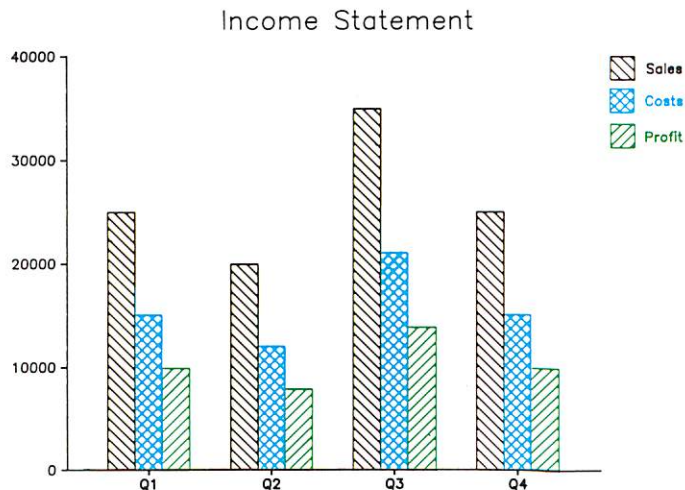
The border disappears, and you are ready to print. Type:

/O	(the Output command)
D	(to output the display)
All	(to output All of the spreadsheet)
,	(to indicate the end of the range entry)
P	(to send the output to the printer)

The printout will look like the spreadsheet on your screen.

Press any key to continue.

To plot the current graph, your computer must be connected to a pen plotter or a graphics printer supported by SuperCalc3.

If you see "F9 = Plot" at the bottom of your screen, press F9 . Otherwise, press CTRL Y .

If you have a graphics printer, plotting should begin immediately. If you have a pen plotter, the program prompts you to insert the pen colors of your choice. Respond to each prompt during the plotting process, changing the pen colors as often as you wish.

Depending on your plotting device, your graph should look something like this:

Income Statement
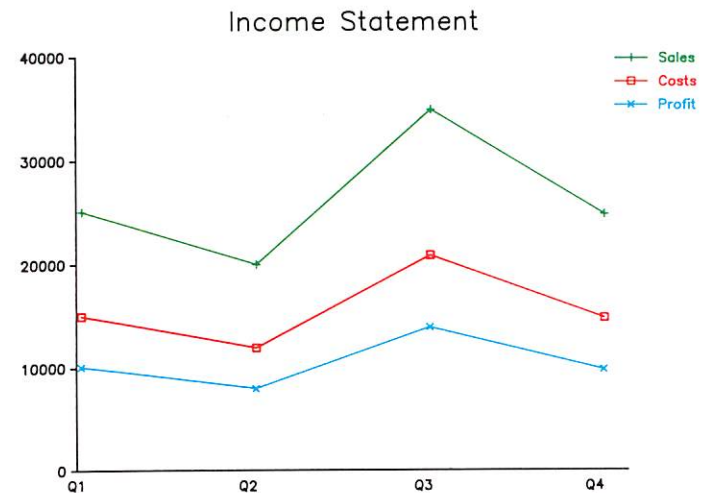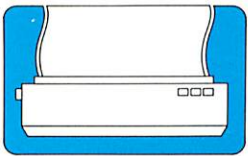
```
      !  A  ||     B     !! C !!    D    !      ! F !!         G              !
   1 !         CONSOLIDATED MONTHLY PAYROLL   1 !
   2 !                                        2 !
   3 !Today's Date                4/15/1983   3 !Deduction Percentages
   4 !Payroll Start Date          4/ 1/1983   4 !Fica      0.0670
   5 !Days this period                   15   5 !State     0.008
   6 !Recalculate YTD Y/N?N                   6 !
   7 !                         Gross          7 !     Net                    YTD
   8 ! Emp# Employee      Status    Salary    8 !     Pay                    Gross
   9 !=====================================   9 !=================================
  12 !  84  Johnson        S     $1,200.00   10 ! D10+E10 IF(C6="Y",G10+D10,G10)
  13 !  92  Jones          M       $900.00   11 ! D11+E11 IF(C6="Y",G11+D11,G11)
  14 !  12  Samson         S       $560.00   12 ! D12+E12 IF(C6="Y",G12+D12,G12)
  15 !  19  Santos         M       $650.00   13 ! D13+E13 IF(C6="Y",G13+D13,G13)
  16 !  45  Smith          S       $700.00   14 ! D14+E14 IF(C6="Y",G14+D14,G14)
  17 !=====================================   15 ! D15+E15 IF(C6="Y",G15+D15,G15)
  18 !Total # employees      7               16 ! D16+E16 IF(C6="Y",G16+D16,G16)
  19 !                                       17 !=================================
  20 !Total Gross Salaries(100s)    $55.1    18 !
  21 !Total Deductions(100s)    (    $4.1)   19 !
  22 !Total Net Pay(100s)           $51.0    20 !
  > F18   H    P Form=SUM(F9:F17)                          Protected Entry
  Width:  8  Memory:463 Last Col/Row:G22    ? for HELP
  11>SUM(F9:F17)
```

SuperCalc3 will search for and extract data from your spreadsheet, sort data by a column or row, and consolidate any number of spreadsheets to combine all the data into one master report.

We've only scratched the surface of all the functions and features you get with SuperCalc3, but let's move on.

Printing and Plotting

Want to print the spreadsheet? Make sure your printer is properly connected and ready to go.

Before we print, let's remove the border characters at the top and left of the spreadsheet. If the graph is still displayed, press any key to return to the spreadsheet. Then type:

/GB   (for Global, and Border off)

Note: The same command is used to turn the border back on.

Getting Started

Switch on your computer and put your SuperCalc3 program disk into drive A.

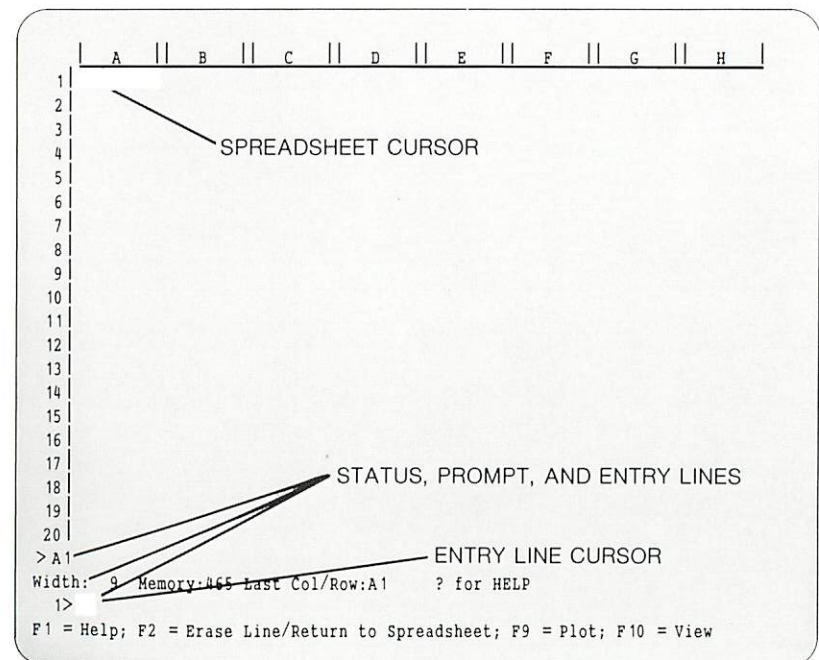When you see the A> system-ready prompt, type **SC3** and press the ⏎ key.

Note: The ⏎ keytop symbol means "Press the key labeled (ENTER) on your Tandy TRS-80 Model 2000.

Your computer dealer can show you how to get started if you need more help (or refer to the "Getting Started" chapter in the SuperCalc3 manual).

You will see an initial screen with the SuperCalc3 version number, and a copyright notice. OK? Now press ⏎

Your screen shows the SuperCalc3 equivalent of a blank page. But before you start typing, let's see what we've got.

```
      |  A  ||    B    ||  C  ||  D   ||  E  ||  F  ||  G  ||  H  |
   1 |
   2 |
   3 |
   4 |            SPREADSHEET CURSOR
   5 |
   6 |
   7 |
   8 |
   9 |
  10 |
  11 |
  12 |
  13 |
  14 |
  15 |
  16 |
  17 |
  18 |                      STATUS, PROMPT, AND ENTRY LINES
  19 |
  20 |
  > A1                                    ENTRY LINE CURSOR
  Width:  9  Memory:465 Last Col/Row:A1   ? for HELP
   1>
  F1 = Help; F2 = Erase Line/Return to Spreadsheet; F9 = Plot; F10 = View
```
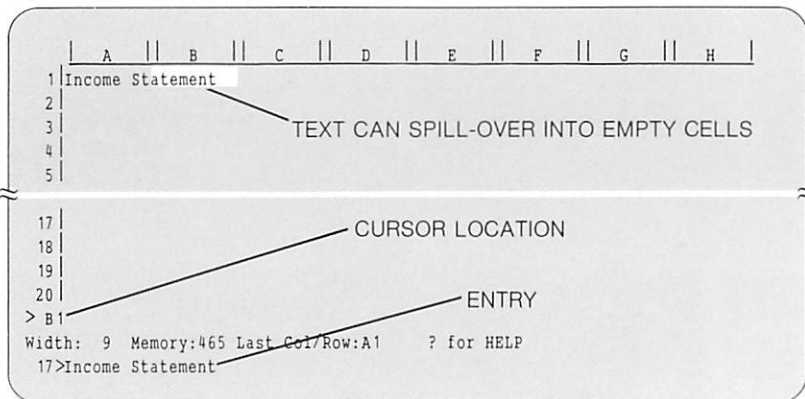
Creating a Spreadsheet

The SuperCalc3 spreadsheet is a grid or matrix of cells. These cells are arranged in rows (numbered 1 through 254) and columns (lettered A through BK).

A CELL is a slot for information such as a word or label, a number, or the result of a mathematical calculation or formula.

Let's create a condensed version of an Income Statement. First, we'll give it a heading. Type:

Income Statement

and press ↵. If you make a typing mistake just backspace (with the Backspace or left-arrow key) and retype.

```
         | A    || B   || C   || D   || E   || F   || G   || H   |
 1 | Income Statement
 2 |
 3 |                    TEXT CAN SPILL-OVER INTO EMPTY CELLS
 4 |
 5 |
~~                                                              ~~
17 |                    CURSOR LOCATION
18 |
19 |
20 |
 > B1                                  ENTRY
Width:  9  Memory:465  Last Col/Row:A1     ? for HELP
17>Income Statement
```

Press the down-arrow key to move the spreadsheet cursor down one row.
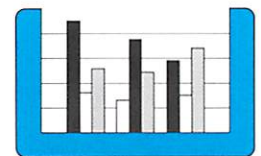
See how 3rd Quarter Net Income went from 3,640.00 to 3,848.00?

What if General & Admin expense increases in the 4th Quarter? Move to E12 and type:

/E   (for the Edit command)

and press ↵ to specify the current cell. The content of that cell (that is, the formula 15%E5) is shown on the entry line:

```
> E12            Form=15%E5
Width: 12  Memory:463  LastCol/Row:G19   ? for HELP
  6>15%E5
```

Using the left-arrow key, move the cursor to the 1 in 15, then press the down-arrow key. The down-arrow key deletes the character at the cursor (the up-arrow inserts more space).

Now press ↵. The formula in E12 is changed to 5% of Sales, rather than 15%. Notice how this affects the Income Statement. Net Income increases to 4,600.00 in the 4th Quarter.

To see your changes on a graph we have already defined for this spreadsheet, just press **/V** ↵ or you can press the F10 key.

Other Super Features

Before showing you how to print a spreadsheet and plot a graph, we'd like you to know about several other major features in SuperCalc3.

For starters, SuperCalc3 has a broad range of arithmetic capabilities, including a wide array of functions and operators. You can also split the screen to view two different parts of your spreadsheet, or view formulas and resulting values at the same time.

You can also protect a range of cells against changes, and hide confidential information so that it won't display on the spreadsheet, or print.

Now we'll load a similar, but expanded, spreadsheet with enhancements such as decimals, commas, and dollar signs.

/L	(for Load)
TENMIN	(filename for a SuperCalc3 sample spreadsheet)
,	(to end the filename)
A	(for All, so we get the whole thing)

Here's what it looks like:

	A	B	C	D	E	F
1	Income Statement					
2						
3		Q1	Q2	Q3	Q4	Year
4		-------	-------	-------	-------	-------
5	Sales	$25,000.00	$20,000.00	$35,000.00	$25,000.00	$105,000.00
6	Costs	15,000.00	12,000.00	21,000.00	15,000.00	63,000.00
7						
8	Profit	10,000.00	8,000.00	14,000.00	10,000.00	42,000.00
9						
10						
11	EXPENSES					
12	General & Admin	3,750.00	3,000.00	5,250.00	3,750.00	15,750.00
13	Consultant Fees	3,000.00	2,400.00	4,200.00	3,000.00	12,600.00
14						
15	Total Expenses	6,750.00	5,400.00	9,450.00	6,750.00	28,350.00
16	Net Before Tax	3,250.00	2,600.00	4,550.00	3,250.00	13,650.00
17	Income Tax	650.00	520.00	910.00	650.00	2,730.00
18						
19	Net Income	2,600.00	2,080.00	3,640.00	2,600.00	10,920.00

Changes and Adjustments

Here's another major feature in SuperCalc3: When you change a single number or formula, your entire spreadsheet is adjusted accordingly. In an instant. And so are your graphs. Let's change some data with a few "What If's" and see what happens.

What if you increase 3rd Quarter sales by $2000? Try it.

Move the Spreadsheet Cursor to cell D5 and type:

37000 ⏎

If you prefer, you can press CTRL X (press CTRL and X at the same time) to move the cursor down one row. Try it.

When you need to move the spreadsheet cursor, you can use the arrow keys or the cursor Control keys:

Press the key marked CTRL while pressing the key marked E, X, S, or D.
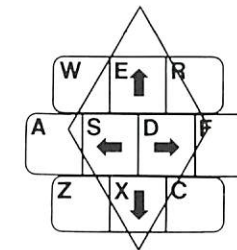
Now let's try a sample entry to practice moving a different cursor: the cursor on the Entry Line near the bottom of the screen. Type:

practice (Do NOT press ⏎)

Press the TAB key two or three times and watch the Entry Line cursor jump from one end of your entry to the other. Now press the right-arrow and left-arrow keys a few times to see the Entry Line cursor move one character at a time.

Press CTRL Z to "Zap" or clear the entry.

Note: If you entered the word "practice" into the spreadsheet by mistake, just move the spreadsheet cursor to the cell you want to erase, then type **/B** ⏎. The /B is called the Blank command.

Words and Labels

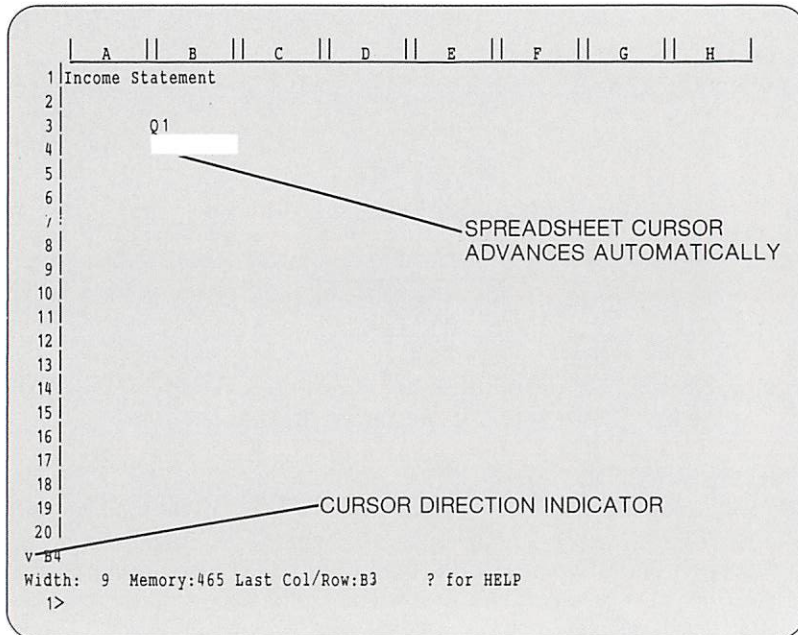Use the arrow keys or cursor Control keys to move the spreadsheet cursor to cell B3 (where column B meets row 3).

Let's say you want to use the abbreviation Q1 for 1st Quarter. You need to type a quotation mark ⟨"⟩ in front of Q1, because Q1 is also a cell name.

The quote mark tells the program you want to use a cell name (or even a number) as a text entry. Type:

"Q1 ⏎


```
        A      B       C       D       E       F       G       H
 1 |Income Statement
 2 |
 3 |       Q1
 4 |       ▭
 5 |
 6 |
 7 |
 8 |                                      SPREADSHEET CURSOR
 9 |                                      ADVANCES AUTOMATICALLY
10 |
11 |
12 |
13 |
14 |
15 |
16 |
17 |
18 |
19 |                    CURSOR DIRECTION INDICATOR
20 |
 v B4
Width:  9  Memory:465 Last Col/Row:B3    ? for HELP
   1>
```

The spreadsheet cursor advances in the direction you were moving prior to your last entry.

Move the spreadsheet cursor back to cell B3, then to cell C3, so the cursor direction indicator points to the right. Remember, you can use CTRL Z (or F2 on some computers) any time you want to erase an entry on the Entry Line. Type:

"Q2 (Did you include the quote mark? Good.)

Press ⏎, and then type in the other period names. Notice that after each entry the spreadsheet cursor moves one cell to the right. Type: **"Q3** ⏎ in cell D3; **"Q4** ⏎ in cell E3; **Year** ⏎ in cell F3. The spreadsheet will now look like this:

/IR7 ⏎ 　　　(/I is the Insert command. R7 is Row 7)

Everything in row 7 was moved down to row 8. The formulas automatically adjusted to their new locations.

You now have an Income Statement and Graph in the memory of your computer, but not on your disk. If you turn off the computer you lose all the work you've done so far. In order to save your work, type:

/S	(the Save command)
TEN	(a name for filing this spreadsheet)
,	(to end the filename)

If you see a "File already exists" message on the prompt line, type **O** to Overwrite the old TEN file with your new file.

The last step in the save procedure is to type **A** for All, to save the entire spreadsheet.

This saves the spreadsheet on your SuperCalc3 disk, filed under the name **TEN.CAL** (the ".CAL" is added automatically to identify the file as a spreadsheet).

What You've Learned

At this point you're probably looking at the clock and thinking, "Not bad for ten minutes!". You have already learned a lot. These are the basics you will use to build even the most sophisticated spreadsheets and graphs.

If you want to stop now, you can type the Quit command, **/Q**, and respond to the prompts. If you have a few more minutes, though, we'll show you how to load a disk file, revise and print a spreadsheet, and plot a graph.
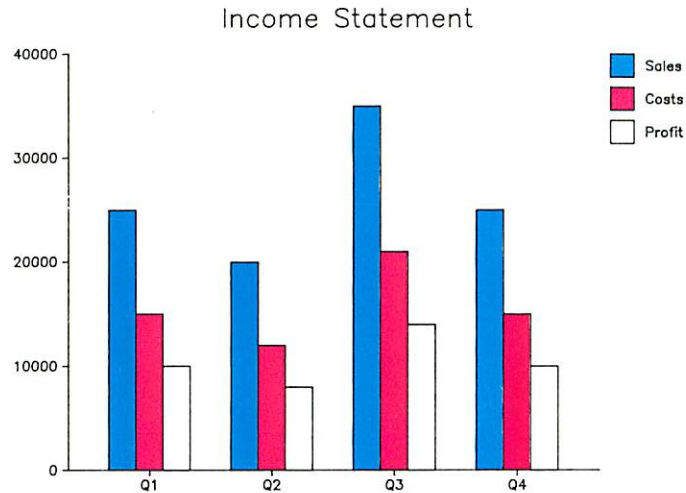
If You Have More Time

First, let's clear the screen with the Zap Command. Type:

/ZY 　　　(for Zap, and Yes)

Press ⏎ for the main View prompt.

Now press ⏎ again (or (F10) on some computers) to view your completed bar graph.

Income Statement

There are many ways to enhance the appearance of your graph with SuperCalc3. For example, you can add grid lines, or change such features as scales, patterns, and colors. You can even plot more than one graph on the same sheet of paper.

You can also display your data using other types of graphs, and revise your graphs as quickly as you revise a spreadsheet. We'll tell you about those and other super graphing features in the manual.

Now press any key, to clear the graph, so we can finish the lesson.

Saving Your Work

Later, if you have more time, we will show you how to consolidate values from your spreadsheet into another spreadsheet. To make the cells in both spreadsheets correspond, insert an empty row. Type:
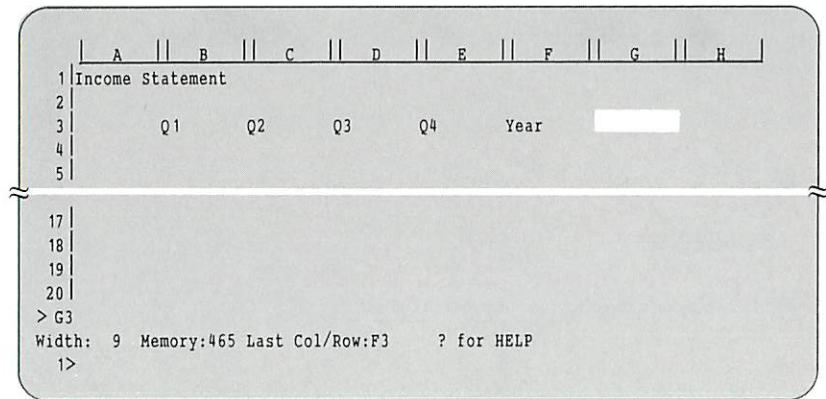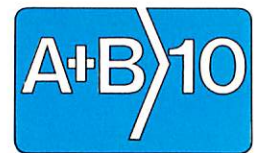
Getting the hang of it? Try something new. Type: **=B4**

Here's what you see on the Entry Line: 5>=>B4

The 5> means the cursor is positioned at the 5th space on the Entry Line. The => was displayed when you pressed the equal key, meaning go to the cell specified. Press ⏎ to GoTo cell B4.

Here's another time-saving feature. Use the repeat key (the apostrophe) and a hyphen to underline the text in row 3. Type:
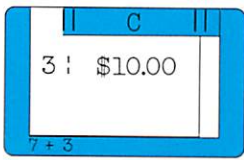
   '- ⏎

Now cut-off the underline at column G. GoTo cell G4 (type **=G4** ⏎) and enter a quote mark (" ⏎). You filled cell G4 with blank spaces.

Numbers and Formulas

GoTo A5 (=A5 ⏎), and enter **Sales** ⏎. Now let's enter some sales numbers. In B5, type:

   25000 ⏎

Though this is a dollar amount, you can (and must) enter it as a whole number without the $ or comma.

We'll show you how your spreadsheet will look with dollar signs, cents, and commas a little later.

Fill in C5 with 20000 (type **20000** ⏎), D5 with **35000**, and E5 with **25000**.

Now in F5 we want the totals for the row. In F5, type:

SUM(B5:E5) ⏎

SUM is a SuperCalc3 function that adds all cells in the specified range. The way you specify a range of cells is:

First cell location:Last cell location
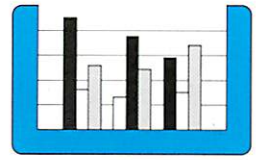
B5:E5 includes cells B5, C5, D5, and E5.

You will see the total displayed in cell F5.

```
      |  A  ||  B  ||  C  ||  D  ||  E  ||  F  ||  G  ||  H  |
 1 | Income Statement
 2 |
 3 |        Q1      Q2      Q3      Q4      Year
 4 |       --------------------------------------------
 5 | Sales    25000   20000   35000   25000   105000
 6 |
 ≈
17 |
18 |
19 |
20 |
> G5
Width:  9  Memory:465 Last Col/Row:G5    ? for HELP
 1>
```

Spreadsheet Format

Before we show you how to make format changes, move the cursor to cell A6 (type **=A6** ⏎) so you'll be all set for your next text entry.

Now widen the columns to open up a little more space between the entries.

M   (for Main Heading)
A1 ⏎   (to use the text in Cell A1)

At this point the program prompts you for additional headings. We'll forego the other headings and move on to the labels.

Press the ⏎ key to remove the word "Headings" from the entry line.

Now let's put a label under the set of bars for each Quarter. The label we put under the bars is called a Time-Label. Type:

T   (for Time–Label)

Your prompt line and entry line should look like this:

```
Enter Time-Label range (now empty) or <-> to clear
21>/View,1,Time-Labels,
```

The number "1" on the entry line is the graph number. It was entered for you by the program.

You can type in the range for the Time-Labels at this point, but here's another way. Press the ⎋ESC key. The location of the spreadsheet cursor appears on the entry line.

Now use the arrow keys to move the spreadsheet cursor to cell B3. Type a colon ⬡, then use the right-arrow key to move the cursor to cell E3. Note that the entry line now shows the range B3:E3. Remember, if you make a mistake you can always clear the entry line with the F2 key or CTRL Z.

Press ⏎ to return to the main View prompt.

Before we take another look at the bar graph, let's add some Variable-Labels.

This will be your final graph-building entry for this lesson:

V   (for Variable–Labels, to define the bar colors)
**A5:A7**   (the Cells that contain the label text)
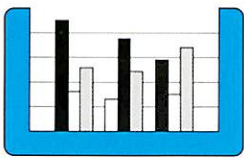
Quick and Easy Graphs

Now that you've created a spreadsheet, let's see how it looks as a graph. We'll choose a bar graph (or "chart" if you prefer) to compare the Sales, Costs, and Profit for each Quarter. Type:

/V (for the View command)
D (for Data)
B5:E7 ⏎ (to define the range for the bars)

Press ⏎ again. A bar graph replaces the spreadsheet on your screen. The scale numbers are entered automatically. When you want to see a line graph, or any other graph, you just select a different graph-type.
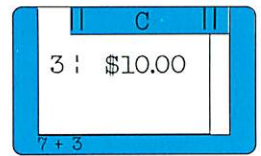
But you still need to enter a heading and labels, as you can see:
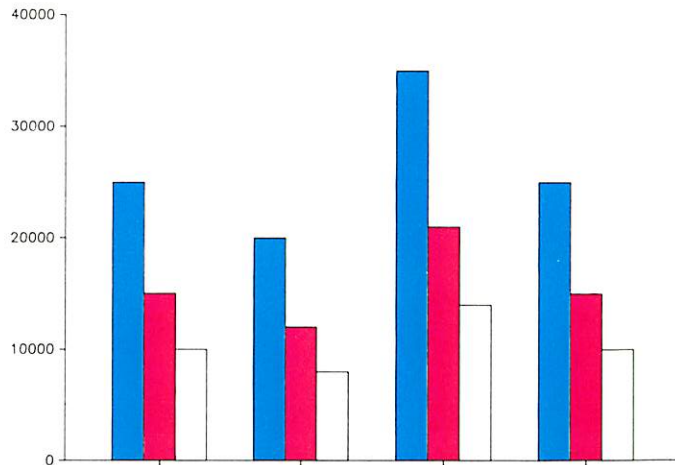
Press ⏎, or any other key, to return to the spreadsheet.

Now see how easy it is to add a heading and labels to the graph. Start with a heading. Type:

/V (for the View Command)
H (for Headings)

Type a slash (**/**). Notice that the prompt line changes:

```
Enter A,B,C,D,E,F,G,I,L,M,O,P,Q,R,S,T,U,V,W,X,Z,/,?
2>/
```

These are the SuperCalc3 Slash Command options that let you change your spreadsheet and produce graphs.

When you want to see an explanation of each of the Slash commands, press the ⟨?⟩ or ⟨F1⟩ key for help.

Now we want to change the Format, so type:

F (either a lower-case or capital letter will do)

The word Format is spelled-out on the entry line, and you see another prompt. Type:

G (for Global, to change the entire spreadsheet)
12 (the new column width)

and press ⏎.

Let's right justify the text entries in row 3 for a better appearance.

You already know that "/F" is the Format command. The "R3," in your next entry means Row 3, and "TR" means Text Right justification. Don't forget the comma after the 3. Type:

/FR3,TR ⏎

Moving On

Add a few more entries. In cell A6, enter:

Costs

Did you remember to press the ⏎ key? In B6 enter:

60%B5 ⏎

In this simple example let's assume our Costs are a straight 60 percent of Sales during the whole year. You could enter a formula in cells C6, D6, E6, and F6, but let's do it an easier way. Enter:

/R (to Replicate the content of the cell)
B6, (the cell content to be replicated, and a comma)
C6:F6 (the destination range)

Here's what the status lines looks like:

```
To? (Enter Range), then <RETURN>; or <,> for Options
20>/Replicate,B6,C6:F6
```

Now press ⏎. You will see a value filled in for all quarters.

```
      |    A    ||    B    ||    C    ||    D    ||    E    ||    F    |
 1 |Income Statement
 2 |
 3 |              Q1        Q2        Q3        Q4       Year
 4 |            ----------------------------------------------------
 5 |Sales        25000     20000     35000     25000    105000
 6 |Costs        15000     12000     21000     15000     63000
 7 |
```

Move the cursor to E6 and check the formula on the status line:

```
> E6           Form=60%E5
Width: 12  Memory: 465 Last Col/Row:G6    ? for HELP
  1>
```

Notice that the formula there has been automatically adjusted so that it uses E5, rather than B5 from the original formula.

GoTo cell A7 and enter:

Profit ⏎

Now at cell B7 enter this formula for subtracting Q1 Costs from Q1 Sales:

B5-B6 ⏎

Now replicate the formula. Enter:

/RB7,C7:F7 ⏎

```
      |    A    ||    B    ||    C    ||    D    ||    E    ||    F    |
 1 |Income Statement
 2 |
 3 |              Q1        Q2        Q3        Q4       Year
 4 |            ----------------------------------------------------
 5 |Sales        25000     20000     35000     25000    105000
 6 |Costs        15000     12000     21000     15000     63000
 7 |Profit       10000      8000     14000     10000     42000
 8 |
19 |
20 |
> C7           Form=C5-C6
Width: 12  Memory:465 Last Col/Row:G7    ? for HELP
  1>
```