Press	Result
100	X²-13X-48=0 X=100█ bound={-1ε99,1... left-rt=0
ALPHA [SOLVE]	X²-13X-48=0 ∎X=16 bound={-1ε99,1... ∎left-rt=0

The two roots are -3 and 16. Since you did not enter a guess, the TI-84 Plus used 0 (the default guess) and first returned the answer nearest 0. To find other roots, you must enter another guess. In this example, you entered 100.

Entering data into lists

You can enter data into lists using either of two methods:

• Using braces and STO▸ on the home screen

—or—

• Using the statistical list editor.

Using STO▸

Example: Store 1, 2, 3, and 4 to list 1 (L1).

Press	Result
2nd [{] 1 , 2 , 3 , 4 2nd [}]	{1,2,3,4}

Press	Result
STO▸	{1,2,3,4}▸█
2nd [L1] ENTER	{1,2,3,4}→L1 {1 2 3 4}

Using the statistical list editor

Example: Store 5, 6, 7, and 8 to list 2 (L2).

Press	Result
STAT ENTER	L1 L2 L3 1 2 3 4 L1(1)=1
▸ ▲ CLEAR ENTER	L2(1)= (if L2 already contains data)
5 ENTER 6 ENTER 7 ENTER 8 ENTER	L2(5) =

Press | **Result**
2nd [QUIT] 2nd [L₂]
(displays the contents of the list on the home screen)
ENTER

	Result
L₂	{5 6 7 8}

Plotting data

When you have statistical data stored in lists, you can display the data you have collected in a scatter plot, xyLine, histogram, box plot, or normal probability plot.

You will need to:

1. Determine which lists contain your data.

2. Tell the TI-84 Plus which lists of data you want to plot and define the plot.

3. Display the plot.

Determine which lists contain your data

Press	Result
STAT	**EDIT** CALC TESTS **1:**Edit... 2:SortA(3:SortD(4:ClrList 5:SetUpEditor
ENTER	L1 L2 L3 (list display) L2(1)=5

Note: In some cases, you may have several lists stored and you may have to press ▶ several times to find the correct lists.

Tell the TI-84 Plus which lists you want to plot

Press	Result

2nd [STAT PLOT]	**STAT PLOTS**
	1:Plot1...On
	     L1 L2
	2:Plot2...On
	     L1 L2
	3:Plot3...Off
	     L1 L2
	4↓PlotsOff
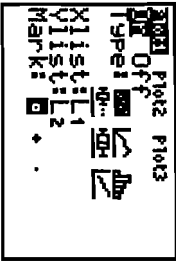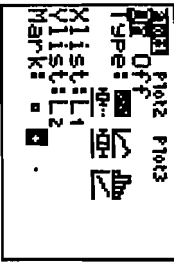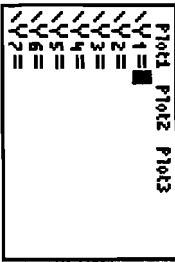
4 ENTER (turns plots off if any plots are on)	PlotsOff Done

2nd [STAT PLOT]	**STAT PLOTS**
	1:Plot1...Off
	     L1 L2
	2:Plot2...Off
	     L1 L2
	3:Plot3...Off
	     L1 L2
	4↓PlotsOff
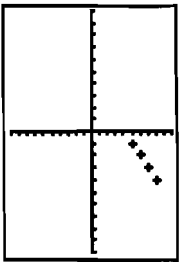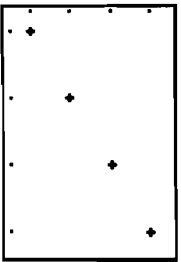
ENTER (turns Plot1 on)	Plot1 Plot2 Plot3 **On** Off Type: ... Xlist:L1 Ylist:L2 Mark: ■ + ·
▶ ▶ 2nd [LIST] ENTER (enters L1 as the Xlist)	Plot1 Plot2 Plot3 On **Off** Type: ... Xlist:L1 Ylist:L2 Mark: ■ + ·

Press

Press	Result

▶ 2nd [LIST] ▼

ENTER

(enters L2 as the Ylist)

▼ ▶ ENTER

(selects + as the plotting mark)

Y= CLEAR

Note: This step is optional and is not necessary unless there is a previous entry in the Y= Editor. If there are additional entries in the Y= Editor, press **▼ CLEAR** until all are clear.

Display the plot

Press	Result

GRAPH

ZOOM ▶ ▶ ENTER

(selects ZoomStat)

Note: If you would like to add the regression line to a scatter plot, adding Y1 to the end of the instruction: **LinReg(ax+b) L1, L2, Y1**. (Press **VARS ▶ ENTER ENTER** to add Y1.) Press **GRAPH** to see the regression line.
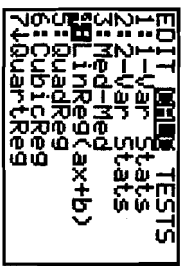
Calculating a linear regression

If you wish to calculate the linear regression for data, you can do so using the **LinReg** instruction from the **STAT** CALC menu.

Example: Calculate the linear regression for the data entered in L1 and L2.

Press	Result

STAT ▶ ▼ ▼ ▼

```
EDIT CALC TESTS
1:1-Var Stats
2:2-Var Stats
3:Med-Med
4:LinReg(ax+b)
5:QuadReg
6:CubicReg
7:QuartReg
```

ENTER

```
LinReg(ax+b) ■
```

2nd [L1] , 2nd [L2]

```
LinReg(ax+b) L1,
L2■
```

ENTER

```
LinReg
y=ax+b
a=1
b=4
■
```

Note: The information on the last screen means that the points in L1 and L2 [(1,5) (2,6) (3,7) (4,8)] all lie on the line Y = X + 4.

Calculating statistical variables

The TI-84 Plus lets you easily calculate one-variable or two-variable statistics for data that you have entered into lists.

Example: Using the data that you entered into L1 from the previous section "Using [STO▶]", calculate one-variable statistics.

Press	Result
[STAT] [▷]	EDIT **CALC** TESTS **1:**1-Var Stats 2:2-Var Stats 3:Med-Med 4:LinReg(ax+b) 5:QuadReg 6:CubicReg 7:QuartReg
[ENTER]	1-Var Stats
[2nd] [L1]	1-Var Stats L1
[ENTER]	1-Var Stats x̄=2.5 Σx=10 Σx²=30 Sx=1.290994449 σx=1.118033989 ↓n=4 ■