



12.3

Technology Activity

GRAPHING CALCULATOR

Making Data Displays

GOAL Use a graphing calculator to create data displays.

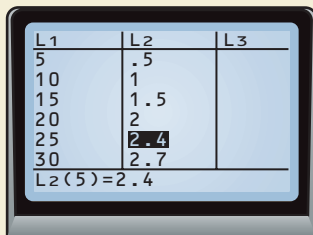
Example 1

The table shows the cost, in dollars, of a phone call, based on the length, in minutes, of the call. Make a scatter plot or a line graph on your calculator.

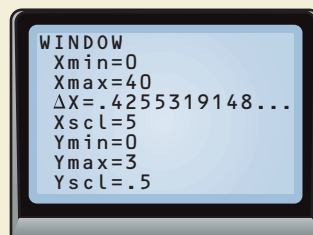
Minutes	Cost
5	0.5
10	1
15	1.5
20	2
25	2.4
30	2.7

Solution

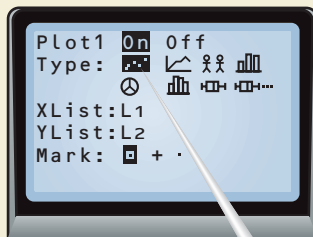
1 Enter the data into two lists.



2 Choose maximums and minimums for the window.

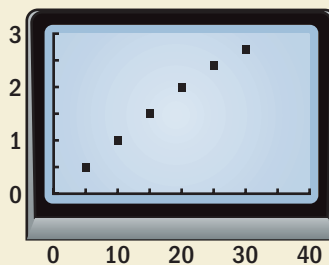


3 Choose a display from the PLOT menu and set the Xlist and Ylist.



Choose for a scatter plot or for a line graph.

4 Press **GRAPH** to show the display you have chosen.



Your turn now

Make a scatter plot and a line graph of the data.

1.	Year	1997	1998	1999	2000	2001
	Rainfall (in.)	21.4	39.8	34.5	26.1	44.9

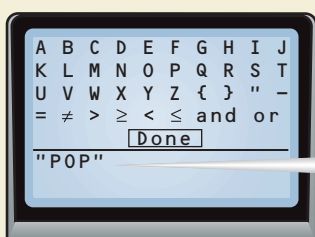
Example 2

The table shows the number of people out of 200 surveyed who prefer each type of music. You can use a graphing calculator to make a circle graph of the data.

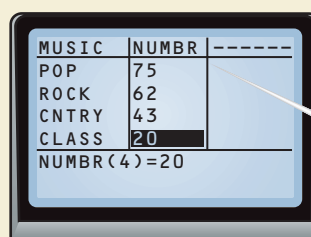
Pop	75
Rock	62
Country	43
Classical	20

Solution

- 1 Press **LIST**. Then use the TEXT menu to name a list and its categories. Use quotation marks for the first item, so the calculator recognizes that the list is *categorical* (contains words).

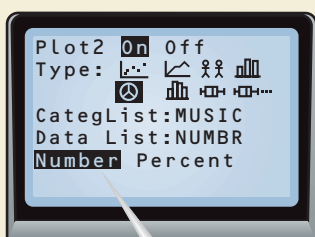


Use quotation marks for categorical data.



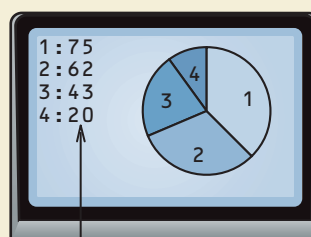
Enter the numerical data into a second list.

- 2 Use the PLOT menu to choose the two lists.



You can display the data as numbers or as percents.

- 3 Press **GRAPH** to display the circle graph.



number display

Your turn now

Make a circle graph of the survey data.

2.

Did You Get Enough Sleep?

Need more	541
Need less	167
Just right	282
Don't know	21

3.

The last movie I saw I watched...

in a theater.	410
on a television.	483
on a computer.	21