UNIT **2** Patterns in Data



Displaying a Histogram

To display a histogram of data in a list, you need to specify the viewing window for the graph by selecting values for Xmin, Xmax, Xscl, Ymin, Ymax, and Yscl.

- Xmin is the number where you would like the horizontal axis to begin.
- Xmax is the number where you would like the horizontal axis to end.
- Choosing Xscl = 100 sets the width of each bar of the histogram to 100.
- Choosing Ymin = -2 leaves room at the bottom of the screen for the text.
- Choosing Ymax = 10 leaves room for a bar 10 units high.
- Selecting Yscl = 1 produces tick marks on the vertical axis that are 1 unit apart.

The following instructions display a histogram of total calories for Problem 8 on page 82.

Calculator Commands	Expected Display
To enter data: WINDOW v 3 0 0 ENTER	WINDOW Xmin=300 Xmax=20 Xsc1=2 Ymin=0 Ymax=50 Ysc1=5 Xres=1
 ▼ 1 1 0 0 ENTER ▼ 1 0 0 ENTER ▼ (-) 2 ENTER ▼ 10 ENTER ▼ 1 ENTER 	WINDOW Xmin=300 Xmax=1100 Xscl=100 Ymin=-2 Ymax=10 Yscl=1 Xres=1
To choose a histogram: 2nd $Y=$ 1 (If the plot is OFF, press ENTER to select ON. Be sure other plots are OFF.)	XIII Platz Plats Dr Off Type: Lot Im. We will be Xlist:L1 Fren: 1



Calculator Commands	Expected Display
Arrow to the histogram next to Type: ENTER	Image: Plot2 Plot2 Image: Plot2 Plot3 Image: Plot3 Plot3
GRAPH TRACE	P1:L1

Note: If no vertical axis appears on your graph, press 2nd ZOOM to get the FORMAT menu. Then select AxesOn.