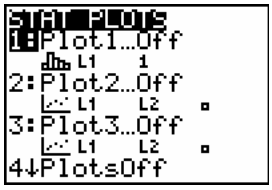
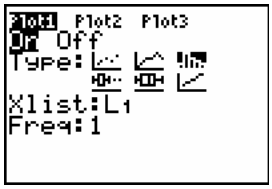
## Making a Histogram

Enter the data into **L1**. Let's use:

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 228 | 178 | 186 | 162 | 206 | 166 | 163 | 183 | 181 | 206 | 177 |
| 175 | 167 | 162 | 160 | 160 | 157 | 156 | 153 | 153 | 152 | |

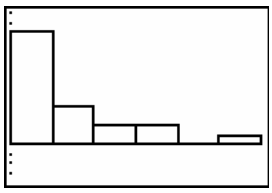



Go to **2ND**, **STAT PLOT**, choose **Plot1**, then **ENTER**.



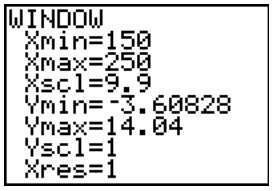

In the **Plot1** screen, choose **On**, select the little histogram icon, then specify **Xlist:L1** and **Freq:1**.

Be sure all the other **Plots** are **Off** and that you have nothing in any of the **Y=** equations.



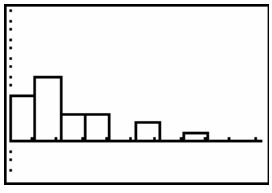
Go to **ZOOM** and select **9:ZoomStat** and then **ENTER**. This is the calculator's initial attempt at the histogram of the data. Not bad. It looks roughly symmetric, but it's hard to tell exactly what the histogram shows. Let's fix it up a bit.

Under **WINDOW**, let's reset the bins to more sensible values. Try **Xmin = 150**, **Xmax = 250**. This changes the x-axis scale.

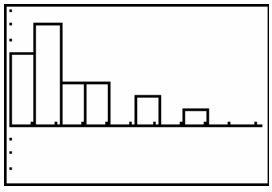



Changing the **Xscl** value changes the width of the bins – the number of data in each bar! Setting the **Xscl** value ***lower*** will ***increase*** the number of bars. Setting the **Xscl** value ***higher*** will ***decrease*** the number of bars.

As you change these **WINDOW** values, press **GRAPH** (not **9:ZoomStat**!)



Play around with this **Xscl** value until you arrive at a histogram that you are comfortable with using. There is no "magic" value for **Xscl**; it is a matter of personal opinion. Remember that you are aiming for about 7 or 8 bars ***at the same time*** as you're aiming for symmetry and unimodal. Using decimal values for **Xscl** is completely fine.



Changing the **Ymin** and **Ymax** values change the height of the bars.