

## Entering and Plotting Data Points (TI-83, 84)

First, you need to enter your data points in the list editor. To do this, select **STAT** **EDIT**. You should see headings L1, L2, and L3. List the input values from your data points under L1, and the output values under L2.

To display the data points that you just typed in, you need to tell the calculator that you want to plot your data points instead of a standard function  $y = f(x)$ . To do this, hit the **Y=** key just like you would if you were going to plot a function defined as a formula, and then activate Plot1 at the top of your screen by placing the cursor over it and hitting **ENTER**. Plot1 should now be highlighted, and when you hit **GRAPH**, your data points will be plotted (along with any other functions or data that are active).

A couple of notes. If you don't see your data points when you hit **GRAPH**, that probably means that the viewing window that you last selected doesn't include your data points. You can have the calculator choose a viewing window for you that automatically includes all data points by selecting **ZOOM** **9:ZoomStat** and then hitting **GRAPH**. Also, your calculator will continue to display your data points every time you hit **GRAPH** until you turn Plot1 off. To do this, just move the cursor to Plot1 and hit **ENTER** so that Plot1 is no longer highlighted.

To find the line, quadratic, cubic, quartic, exponential, power function of best fit you will need to

**STAT** **CALC** 'Then find the desire function' then **ENTER**

Example if Line of best fit

**STAT** **CALC** **4:LinReg(ax+b)** **ENTER**

**STAT** **CALC** **4:LinReg(ax+b)** **VARS** **Y-VARS** **1:Function** **1:Y<sub>1</sub>**

If you use this then the function will be placed into  $Y_1$  of your calculator. Or you can type the function in yourself if you like.

### Quadratic of best fit

b) Finding the quadratic equation of best fit.

Now go to **[Stat]** **[Calc]** **[5:QuadReg]** **[Vars]****[y-Var]****[1:function]****[2:Y<sub>2</sub>]**

b) Quadratic of best fit \_\_\_\_\_  $r=$