

BASIC LINEAR REGRESSION ANALYSIS ON THE TI-83:

Press **STAT**, and use the cursor to highlight **CALC**, then press **4:LinReg(ax+b)** then tell the calculator to store the resulting regression equation in Y_1 by pressing **VARS**, **right-arrow** (to select the Y-VARS menu), **ENTER** (for FUNCTION), then **1:Y₁** and finally press **ENTER** (your screens may look different, and the last two lines on the right screen below may not appear).

```
LinReg(ax+b) Y1
```

```
LinReg
y=ax+b
a=.487883061
b=-2.721874626
r2=.9999492189
r=.9999746091
```

The screen displays the slope a and the y-intercept b of the regression line, and this equation is automatically entered as Y_1 on the **Y=** screen. You can press **GRAPH** to see how well it fits the data.

NON-LINEAR REGRESSION ON THE TI-83:

Press **STAT**, and use the cursor to highlight **CALC**, then select a regression starting at **5:QuadReg** through **C:SinReg**. Then tell the calculator to store the resulting regression equation in Y_1 by pressing **VARS**, **right-arrow** (to select the Y-VARS menu), **ENTER** (for FUNCTION), then **1:Y₁** and finally press **ENTER**. You can then press **GRAPH** to see how well it fits the data.

A NOTE ON RESTORING YOUR CALCULATOR:

Once you have finished your work with scatter plots and do not want them to appear on the screen when you are graphing other functions, you should turn off the scatterplot (and you also may wish to clear the lists of data). To turn off the scatterplot, press **Y=**, and use the up cursor to highlight **Plot 1**, then press **ENTER**. If Plot2 or Plot3 are highlighted, turn them off in the same way. When appropriate, remember you can clear column 1, use the up cursor to highlight L_1 , press **CLEAR**, then **ENTER**. Clear L_2 and L_3 the same way.