Scatterplots and linear regression for TI-83/84

This handout will help you use your TI-83/84 graphics calculator make a scatterplot, find the correlation coefficient, and draw the best-fit line on top of the scatterplot.

Before you begin
Press Y= and clear any equations that appear.

Step 1: Enter data into two lists (L1 and L2)
Use the same steps as in the previous handout on 1-var stats (one-variable summary statistics)

Step 2: Making the scatterplot
Follow these steps:
2. Turn on the plot, choose the first type, set Xlist to L1 and Ylist to L2, and choose your mark.

Step 3: Finding the correlation coefficient, and the slope and y-intercept of the best-fit line.
Follow these steps:
1. Press STAT and arrow over to CALC.
3. Press the following keys:
   a. 2nd 1
   b. ,
   c. 2nd 2
   d. ENTER
4. Now a is the slope of the line, b is the y-intercept of the line, and r is the correlation coefficient.

Plotting the best-fit line
Follow these steps:
1. Write down the a value (round appropriately) and the b value (round appropriately).
2. Press Y=.
3. Next to Y1= enter in the a value, then press X,T,θ,n, then press +, then enter the b value.
4. Press GRAPH