## Directions for making a Scatter Plot using a TI-83

- Hit the CATALOG button (2<sup>nd</sup> & 0) and scroll down to "DiagnosticOn" Hit ENTER twice. The word 'Done' should appear on the screen.
- 2. Hit the **STATPLOT** button (2<sup>nd</sup> & **Y**=)
- 3. We will only be doing one plot at a time. Hit ENTER on Plot 1. Turn Plot 1 On by moving cursor to On and pressing ENTER. Keep 'Type' on the option in the top left corner. (The one with the dots) Make sure 'XList' is L1 and 'YList' is L2. If 'XList' and 'YList' are not L1 and L2 respectively, then make them L1 and L2 by using (2<sup>nd</sup> & 1 key) and (2<sup>nd</sup> & 2 key) The options for 'Mark' are purely aesthetic. Make sure Plot 2 and Plot 3 are Off.
- 4. Bring up the Statistics Menu by pressing the **STAT** button.
- 5. Bring up the List Editor by selecting Edit and pressing ENTER.
- Clear the lists. If there is existing data in the list, use the arrows to move the cursor to the list heading, L1. Press the CLEAR button and press ENTER. This clears all of the data in the list.
  Repeat for each list containing data.
- 7. Enter the numeric values of the inputs (independent variables) in list L1 pressing **ENTER** after each entry.
- 8. Enter the numeric values of the outputs (dependent variables) in list L2 pressing **ENTER** after each entry.
- 9. Press **WINDOW** and make sure Xmin, Xmax, Ymin, Ymax, are set so that they contain all the values in the lists. (Xmin < L1 < Xmax and Ymin< L2 < Ymax)
- 10. Press **GRAPH.** You should be looking at a scatter diagram/plot.

From here you can do either Linear or Quadratic Regression on your calculator depending on what the situation requires. From here start with Instructions for Quadratic Regression for quadratic regression, and start from step 6 in Instructions for Linear Regression for linear regression.