Using TI-84 for Regression

How to enter data into calculator
Press STAT
Press 1 (for edit)

Make sure   and   are clear. If not, scroll up. Press CLEAR and ENTER . Do this for   and   .
Enter data into each list.

How to make a scatter plot
Press 2nd then Y=
Press 1
Make sure **ON** is highlighted
Press WINDOW change the Xmin, Xmax, Xscl, etc to match your data.
Press GRAPH to see scatter plot

How to find regression equation
Press STAT
Press $\rightarrow$ (to move to CALC)
Scroll down to the desired regression and hit ENTER
You will arrive at a screen where you must check or add entries (scroll down to each to change).

Xlist: should be

Ylist: should be
FreqList:
Store RegEQ: where you want your equation stored in the Y= screen
To store equation, press VARS, move right to Y-VARS, press 1 for function, and enter the
number where you want your equation stored (usually at Y_1)
Scroll down to Calculate and enter to see your equation

*Skip this step if you stored your equation when finding a regression equation
How to graph regression equation
Press Y=
Make sure there are no equations enter. If so, clear each.
Make sure the cursor is at Y_1
Press VARS
Press 5 (for statistics)
Press $\rightarrow$ twice (to move to EQ)
Press 1 (for REGEQ)

Using Desmos.com for Regression

Go to desmos.com and click on "Start Graphing"

How to enter data into Desmos and make a scatter plot

- With your cursor in a cell, Click on [+▾] to "add item" then click on **table.**

- Enter data into table.

- You should see your points on the graph. If not, adjust your graph settings using [🔧].

How to find a linear regression equation (y = mx + b)

- After entering your data in a table, move your cursor to a new cell and use the keypad (bottom left of your screen) to type in: $y_1 \sim mx_1 + b$
  (Note: Any number entered immediately following a letter will automatically show as a subscript. Click on [A B C] to find the ~ symbol)

- Your line will automatically be graphed and your values of *m* and *b* will be displayed. Use these values to write your equation, **y = mx + b.**

How to find a quadratic regression equation (y = ax^2 + bx + c)

- After entering your data in a table, move your cursor to a new cell and use the keypad (bottom left of your screen) to type in: $y_2 \sim ax_2^2 + bx_2 + c$
  (Note: Use the correct subscript according to the variables in the table.)

- Your parabola will automatically be graphed and your values of *a*, *b*, and *c* will be displayed. Use these values to write your equation, **y = ax^2 + bx + c.**

How to find an exponential regression equation (y = ab^x)

- After entering your data in a table, move your cursor to a new cell and use the keypad (bottom left of your screen) to type in: $y_3 \sim ab^{x_3}$
  (Note: Use the correct subscript according to the variables in the table.)

- Your exponential will automatically be graphed and your values of *a* and *b* will be displayed. Use these values to write your equation, **y = ab^x.**