

**Regression Equations:
TI-83+,TI-84+**

For the first time and maybe occasionally afterwards (if you change your battery, reset your memory, etc. you need to turn your diagnostic on:

- a) Press [2nd] [0]
 - b) Press [x^{-1}]
 - c) Scroll down to "DiagnosticOn"
 - d) Press [ENTER] twice
 - e) You should see "DiagnosticOn" and "Done"
1. Enter your data into Lists 1 and 2.
 - a) Press [STAT]
 - b) Press [1] or select [EDIT]
 - c) Scroll to the upper left entry (in L_1)
 - d) Type in the x values of data, hitting enter after each
 - e) Once you have typed all the x-values, delete any other numbers in L_1
 - f) Go to the top most entry in L_2 and enter y-values that corresponds to the data you entered in L_1
 - g) Once you have typed all the y-values, delete any other numbers in L_2
 2. Try one regression model (the problem may or may not tell you which one).
 - a) Press [STAT]
 - b) Press [→] to "Calc"
 - c) Press [4], [5], [6] (later we may also use [0] or others in this list)
 - d) Press [ENTER]
 - e) You may want to write this down – I may ask for your regression equation

**Regression Equations:
TI-85, TI-86**

1. Enter your data into xStat, yStat, fStat.
 - a) Press [2ND] [–] ([LIST])
 - b) Press [F4] ([EDIT])
 - c) Scroll to the upper left entry (in xStat)
 - d) Type in the x values of data, hitting enter after each
 - e) Once you have typed all the x-values, delete any other numbers in xStat
 - f) Go to the top most entry in yStat and enter y-values that corresponds to the data you entered in xStat
 - g) Once you have typed all the y-values, delete any other numbers in yStat
 - h) Go to the top most entry in fStat and enter [1] for every pair of data in corresponding xStat, yStat
 - i) Delete any other numbers in fStat
2. Try one regression model (the problem may or may not tell you which one).
 - a) Press [2nd] [+] ([STAT])
 - b) Press [F1] ([CALC])
 - c) If you want a linear regression, press [F3] ([LINR]); otherwise, press [MORE]
 - d) If you want a quadratic regression, press [F4] ([P2REG]); if you want a cubic regression, press [F5] ([P3REG]); otherwise press [MORE] and then press [F1] ([P4REG]) (We may use others of these later on)
 - e) Press [ENTER]
 - f) The first number is the coefficient of the highest power, the second number the coefficient of the second highest power and so on ... the last number is the constant (You may need to write these down if I as you for the equation)

Note: the TI-86 will give r (corr) values for linear, exponential, and logarithmic equations only. It does not give any r^2 values.