Regression on the TI-83/84

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Steps:

1) Press [STAT] and select [EDIT...]

2) Enter the x-coordinates in the L1 column and the y-coordinates in the L2 column.

   Two notes:
   - If there are numbers already in either of the columns then use the arrows to highlight the name of the column (L1 or L2) and press [CLEAR] then [ENTER]
   - If you don't see columns L1 and L2 then press [STAT] and select [5:SetUpEditor], then go back to step 1.

3) Once the data has been entered press [2nd] [QUIT] to exit the list editor.

4) Press [STAT] and select [CALC] and choose the regression model you want according to the table below, then L1, L2 and press enter (L1 and L2 can be found above the [1] and [2] key respectively). For example, if you want to use a quadratic regression model the command would look like *QuadReg L1, L2*.

5) To get the correlation coefficient (Linear, Logarithmic, Power, and Exponential regression only) press [VARS] and select [5: Statistics...], scroll over to [EQ] and select [7: r]. Please note that this can only be done after you have found the equation.

Regression Model	*Form of equation*
3: CubicReg	$y = ax^3 + bx^2 + cx + d$
4: ExpReg	$y = ab^x$
5: LinReg	$y = ax + b$
6: LnReg	$y = a + b \ln x$
8: PowerReg	$y = ax^b$
9: QuadReg	$y = ax^2 + bx + c$
A: QuartReg	$y = ax^4 + bx^3 + cx^2 + dx + e$
B: SinReg	$y = a \sin(bx + c) + d$
C: Logistic	$y = \dfrac{c}{1 + ae^{-bx}}$

Note that 4: LinReg(ax + b) and 8: LinReg(a + bx) are essentially the same.
Another note: The regression models are in a different order on the TI-83+ and TI-84