

Regression on the TI-85

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Steps:

- 1) Press [STAT] and select [EDIT].
- 2) You are asked for *xlist Name* and *ylist Name*, by default they will be named *xStat* and *yStat* respectively. Press [ENTER] twice.
- 3) You will be asked to enter the coordinates as pairs where the first point will be (x1, y1) and so on.

Note: If there are already data stored in this list, select [CLRxy] to erase the data.

- 4) Once all of the data have been entered press [EXIT] twice to get back to the home screen.
- 5) Press [STAT] and select [CALC].
- 6) You are asked to enter the names of the *xlist* and *ylist* (the default names are already there) so press [ENTER] twice.
- 7) Select the regression model you wish to choose according to the table below.

<i>Regression Model</i>	<i>Form of equation</i>
LINR	$y = bx + a$
LNR	$y = a + b \ln x$
EXPR	$y = ab^x$
PWRR	$y = ax^b$
P2REG	$y = ax^2 + bx + c$
P3REG	$y = ax^3 + bx^2 + cx + d$
P4REG	$y = ax^4 + bx^3 + cx^2 + dx + e$

Note: For the P2REG, P3REG, and P4REG the coefficients are given as a list. For example, in a P2REG an answer of {2.3 1.6 0.6} corresponds to the polynomial $y = 2.3x^2 + 1.6x + 0.6$.