

Modeling Functions: Fitting Lines (or curves) to Data Points

TI-86

A. Clear Previous Data

1. Press 2nd [+]
2. F2 [EDIT]
3. Up arrow to highlight xStat
4. CLEAR, ENTER
5. Up arrow to highlight yStat
6. CLEAR, ENTER

xStat	yStat	fStat
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xStat =		
{	}	NAMES " OPS

B. Enter New Data

Enter the x values in the 1st column, the y values in the second, and 1's for fStat.

C. Calculate the Regression equation

1. Press 2nd [+]
2. F1 [CALC];
3. Choose the equation to fit the data:
 - F3 [LinR] – linear function; The model is $y = a + bx$ or $bx + a$
 - F4 [LnR] – logarithmic function
 - F5 [ExpR] – exponential function
 - MORE; F1 [PwrR] – power function
 - MORE; F4 [P2Reg] – quadratic function
 - MORE; F5 [P3Reg] – cubic function
4. ENTER
5. Go to GRAPH and enter the equation for y1.