

CALCULATOR DIRECTIONS FOR FINDING A CUBIC MODEL

Example: Find the cubic model for the following points. (-2,7), (-1,0), (0,1), (1,2), (2,9)

- First understand that a model is the equation that may be used to “*model*” the data.
- As with data in ch. 5, enter the data in **STAT >Edit 1: edit enter** (L1 is x and L2 is y)
- **2nd --Y=** (stat plot), **1:** turn on the first stat plot
- **ZOOM 9: stat** the data points will be plotted. Here for this data it resembles a possible cubic equation.
- **STAT CALC 6:Cubic Reg** now here before we hit enter twice and got the variables. *Short cut:*
- **VARIS > Y-VARS1: Function, 1: Y1** Vars is variables. Hit the VARS key, arrow over to y-variables and arrow down to select function then select Y1
- Here the view screen shows CubicReg Y1. This means we are going to perform the cubic regression and it will be recognized as Y1. **ENTER**
- For this example we get:
a=-.166666666667
b=2.3333333333
c=1.1666666667
d=-1.33333333
- Now hit **Y=** and your equation is already entered into Y1. **GRAPH** and the line is graphed as seen in the view screen.