

Notes 9.1-9.2 – Exponential Regression on the Calculator

Alg 2 Trig G



Directions for **Exponential Regression** in your calculator

1. Find and click the STAT button
2. Make sure the EDIT COLUMN is highlighted and hit ENTER
3. You will see something that says L1, L2, L3 and so on (YOU WILL ONLY USE L1 and L2 FOR NOW!). The L1 column is for all of the X values you are given, and L2 is for the Y values. You must hit ENTER after every value you put in *Be sure that whatever coordinates you are given, match in the calculator.

Example: (0,2) (1,6) (2,18)

X	Y
0	2
1	6
2	18

4. Hit 2nd MODE This will QUIT the screen.
5. Hit STAT again and scroll over with the arrow key to the **CALC COLUMN** and **scroll DOWN** with the arrow key and highlight **0: ExpReg** Hit ENTER twice!

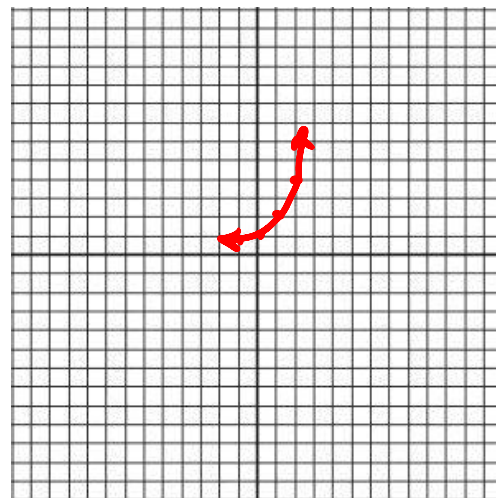
You will be given an **a-value** and a **b-value**. Put them into your exponential equation and you're done!

$$y = 2(3)^x$$

After graphing the points, write the equation of an exponential function that passes through the given points.

1) $\left(-1, \frac{1}{2}\right), (0, 1), (1, 2), (2, 4)$

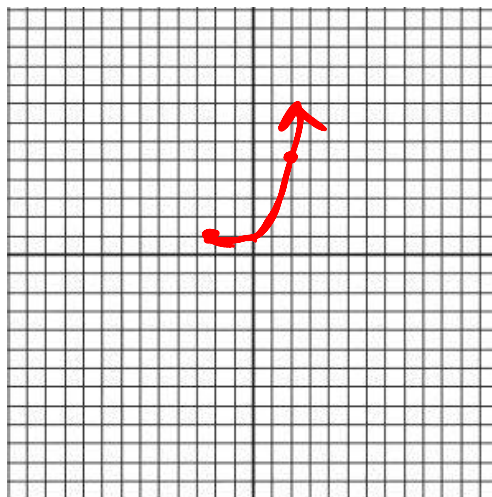
$$y = 1 \cdot (2)^x$$



2) $\left(0, \frac{1}{5}\right), (2, 5)$

growth $b > 1$

$$y = .2(5)^x$$



3) $(0, 3), \left(2, \frac{3}{4}\right)$

decay $b < 1$

$$y = 3(.5)^x$$

