Algebra 2

6-07 Modeling with Exponential and Logarithmic Functions (6.7)

Choosing Functions to Model Data

- For _____ spaced *x*-values
  - If *y*-values have common ratio (multiple) → _____
  - If *y*-values have finite differences → _____

Determine the type of function represented by each table.

x	5	10	15	20	25	30
y	4	3	7	16	30	49

x	0	3	6	9	12	15
y	0.25	1	4	16	64	256

Use the regression feature on a graphing calculator

TI-84

1. Enter points in STAT → EDIT
2. To see points go Y= and highlight Plot1 and press ENTER to keep it highlighted
3. Press Zoom and choose ZoomStat
4. Go to STAT → CALC → ExpReg for exponential OR LnReg for logarithmic

NumWorks

1. Choose Regression from homescreen
2. In Data tab, enter points
3. Go to Graph tab
4. To change regression type, press OK and choose a different regression
5. Read the answer off the bottom of the graph

Determine whether the data show an exponential relationship. Then write a function that models the data.

x	−3	−1	1	3	5
y	2	7	24	68	194

x	1	6	11	16	21
y	12	28	76	190	450

342#1-4, 19, 20, 21, 22, 30, 31, 32, 39, 41, 47, 49 = 15