

MasterMath

Comparing Linear, Exponential and Quadratic Models

Name _____

Date _____

1. This data describes what type of function: linear, exponential, or quadratic?

exponential

x	y		
-2	1.25		
-1	2.5		
0	5		
1	10		
2	20		
3	40		

2. Write an equation to describe the relationship shown in the table above.

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

3. These ordered pairs represent what type of function: linear, exponential or quadratic?

linear

$(-2, -9), (-1, -3), (0, 3), (1, 9), (2, 15)$

4.

Write an equation to describe the relationship shown in the ordered pairs above.

$$y = 6x + 3$$

5. This data describes what type of function: linear, exponential, or quadratic?

quadratic

x	y		
-2	12		
-1	3		
0	0		
1	3		
2	12		
3	27		

6. Write an equation to describe the relationship shown in the table above.

$$y = 3x^2$$

7. This data describes what type of function: linear, exponential, or quadratic?

linear

x	y		
-2	13		
-1	7		
0	1		
1	-5		
2	-11		
3	-17		

8. Write an equation to describe the relationship shown in the table above.

$$y = -6x + 1$$