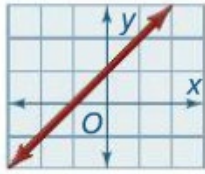


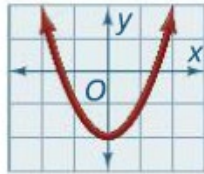
Math 2 Unit 10 Worksheet 9
Linear, Quadratic, and Exponential Functions

Name: _____
 Date: _____ Per: _____

Linear: $y = mx + b$



Quadratic: $y = ax^2 + bx + c$



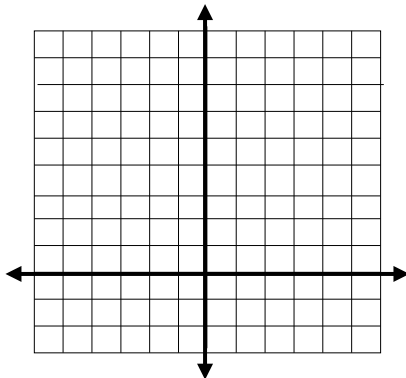
Exponential: $y = a \cdot b^x$



[1-3] Graph each set of points. Which model is most appropriate for each set? Choose from linear, quadratic, or exponential.

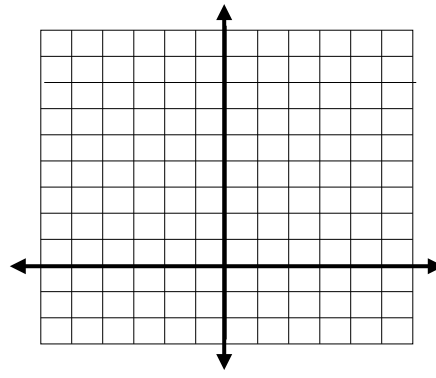
1. $(-1, 0.5), (0, 1), (2, 4), (3, 8)$

Model: _____



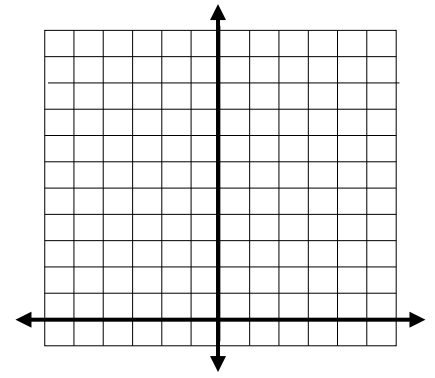
2. $(-3, 8), (-1, 6), (0, 5), (2, 3), (3, 2)$

Model: _____



3. $(-2, 11), (-1, 5), (0, 3), (1, 5)$

Model: _____



[4-11] Which type of function best models the data in each table? Choose from linear, quadratic, exponential or neither.
 Hint: Use differences or ratios.

4. Model: _____

x	$f(x)$
-2	9
-1	6
0	5
1	6
2	9

5. Model: _____

x	$f(x)$
-3	3
-2	6
-1	12
0	24
1	48

6. Model: _____

x	$f(x)$
-2	3
-1	9
0	19
1	33
2	51

7. Model: _____

x	$f(x)$
-1	8
0	-1
1	0
2	1
3	8

8. Model: _____

x	$f(x)$
-2	-7
-1	-3
0	1
1	5
2	9

9. Model: _____

x	$f(x)$
-3	-1
-2	1
-1	3
0	5
1	7

10. Model: _____

x	$f(x)$
-2	1
-1	4
0	16
1	64
2	256

11. Model: _____

x	$f(x)$
-1	-1
0	-4
1	-2
2	0
3	2