

Day 1 – Comparing Linear, Quadratic, & Exponential Representations

Name: _____

HW Practice Assignment

Determine if each equation below represents a linear, quadratic or exponential function:

1. $f(x) = 3x + 2$

2. $y = 3^x$

3. $y = 7^2$

4. $f(x) = \frac{1}{2}(2)^x + 1$

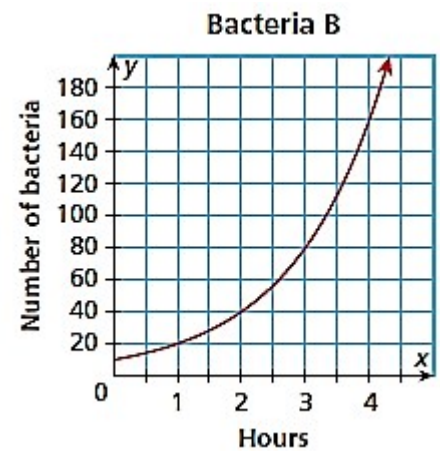
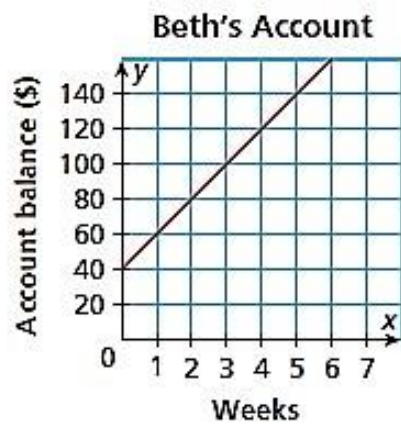
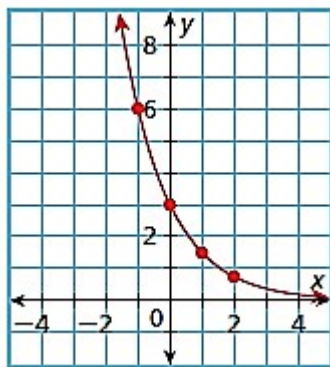
5. $y = x^2$

Determine if each graph represents a linear, quadratic or exponential function.

5.

6.

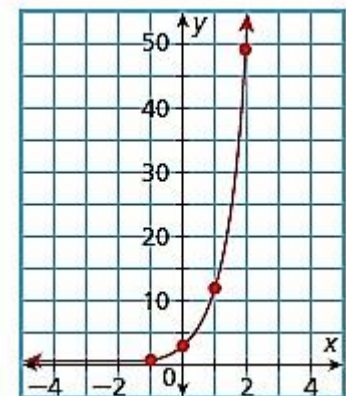
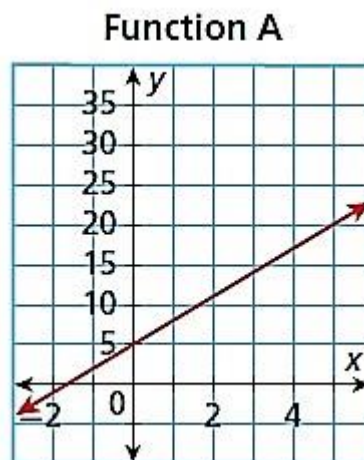
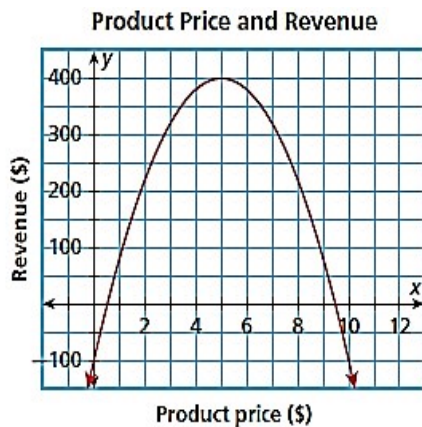
7.



8.

9.

10.



Determine if each sets of ordered pairs or tables represent a linear, quadratic or exponential function and justify why:

11.

Weeks	0	1	2	3
Account Balance (\$)	425	375	325	255

12.

Time (h)	0	1	2	3
Bacteria	10	20	40	80

13.

Height of Bridge Suspension Cables	
Cable's Distance from Tower (ft)	Cable's Height (ft)
0	400
100	256
200	144
300	64

14.

Ladybug Population	
Time (mo)	Ladybugs
0	10
1	30
2	90
3	270

15.

$\{(-4, 0), (-3, -5), (-2, -8), (-1, -9), (0, -8), (1, -5)\}$

16.

$\{(-2, 8), (-1, 4), (0, 2), (1, 1), (2, 0.5)\}$