

Name: \_\_\_\_\_  
Date: \_\_\_\_\_  
Class: \_\_\_\_\_

Algebra  
Unit 6  
HW 6-7

1) Using the 2 tables below, which is a linear function and which is an exponential function? Explain your answer.

TABLE 1

$x$	0	1	2	3	4
$y$	5	10	20	40	80

TABLE 2

$x$	0	1	2	3	4
$y$	8	11	14	17	20

2) Find an equation for both tables in #1.

3) Using the points (0, 12) and (1, 3) find a linear equation that would go through both points.

4) Using the same points as in #2, find an exponential equation that would go through both points.

5) Find an equation for the data in the following table (first determine if it is linear or exponential).

$x$	-2	-1	0	1	2
$y$	32	16	8	4	2

6) Find an exponential equation that passes through the points (0, 5) and (1, 15).

7) If you are placing \$1200 in a savings account that pays 4.25% interest per year, find the balance that would be in the account after 6 years.

8) Simplify:  $\frac{14a^2b^7cd^4}{4a^8bcd^3}$