## Sec1H

## Basic Exponential Equations

Identify whether the following tables represent a linear or exponential relationship or if it is neither:

1.

1.		
$\chi$	у	
1	12	
2	48	
4	768	
6	12288	

2.

<u> </u>		
$\chi$	y	
0	1.5	
2	96	
3	6144	
4	49152	

3.

$\chi$	y
-2	-1
0	-7
3	-16
5	-22

4. Create a table that represents a linear relationship

.,	ear relationship			
	$\boldsymbol{\mathcal{X}}$	У		

5. Create a table that represents an exponential relationship.

X	у

What is your rate of change?

What is your rate of change?

- 6. A river doubles its width every 2 years. When it starts it is 9 feet wide.
  - a. Write an equation to represent the growth of the river. Write the equation in two equivalent ways.
  - b. How wide will the river be in 10 years? Your answer should be in YARDS.

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- 7. There's an epidemic spreading in Orem. 100 people are found to be sick, then 5 additional people are reported sick every day.
  - a. Write an equation to represent the spread of the sickness. Write the equation in two equivalent ways.
  - b. How many people will be sick in two weeks?

- 8. Each week, a dumpster weighs three times as much as it did the week before. When it started it was 100 pounds.
  - a. Write an equation to represent the weight of the dumpster. Write the equation in two equivalent ways.
  - b. How much will it weigh after four weeks?

Neither	Exponential	Linear
170	96	8100

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