## Chapter 9 Study Guide and Review for Test Form 2A and 2B

## PROBLEMS 1, 18, 19, & 20 ARE EXTRA CREDIT ONLY AND NOT REQUIRED

Chapter 9, Lesson 1: "Functions" (problems 4-6 & 16-17)

- What do you do when you have a problem such as this: f(x) if f(2) = x - 7

- If you were given the function values & table below, how you would determine the correct function?

$$f(x)$$
 if  $f = 4x - 2$ 

$$f(x)$$
 if  $f = 5x + 1$ 

$$f(x) \text{ if } f = 2x + 4$$

$$f(x) \text{ if } f = 4x + 2$$

x	f(x)
-3	-14
0	-2
3	10

Chapter 9, Lesson 2: "Representing Linear Functions" (problems 6 - 7)

- If you were given the functions below, how you would find the correct function graphed from the one shown?

$$y = -4x + 4$$

$$y = -1/4x + 4$$

$$y = 4x + 4$$

$$y = 1/4x + 4$$



How would you solve this problem:

Which ordered pair is not a point on the graph of: y = 2x - 3 A(1, -1) B(2, 1) C(0, 3) D(-2, -7)

Chapter 9, Lesson 3: "Slope" (problems 8 - 10)

- How would you find the slope of a line if they simply gave you this: A (-1, -4), B (2, 2)?

Chapter 9, Lesson 4: "Direct Variation" (problem 2)

- Describe how you would solve the following:

If y varies directly with x, write an equation for the direct variation, then find each value.

If 
$$y = -12$$
 when  $x = 9$ , find y when  $x = -4$ 

Chapter 9, Lesson 5: "Slope-Intercept Form" (problems 11 - 13)

How would you find the slope for the equation y = 3x + 4? How would you find the y-intercept for y = 3x + 4?

- Describe what you would do with this equation first before identifying the slope and y-intercept: 3x + y = -4

Chapter 9, Lesson 8: "Scatter Plots" (problems 14 - 15)

A positive relationship scatter plot: A n

A negative relationship scatter plot:

A no relationship scatter plot:

- Describe what you would do to determine the relationship between the length of a shower and water used: