Math 8: Unit 4 Study Guide (Complete and check answers on blog. Test is Tuesday, January 19.)

1) What is a function?

2) What are the different ways that a function can be represented?

3) For each of the following, write whether or not it is a function <u>and</u> how you know.



b)	x	У		
	-2	-2		
	-1	2		
	0	6		
	1	10		
	2	14		



d)
$$y = 5x - 8$$







f) x = 3

g)	X	У	
	3	1	
	4	2	
	6	3	
	3	4	
	4	5	

4) Complete the function table below:

X	1		5	8	9
У	0	15	24	63	80

Equation: _____

- 5) Given inputs of {2, 4, 6, 8} name the domain and range of the function: $y = \frac{x}{2} 7$
- 6) For the function graphed below, what is the output when the input is -2?



- 7) If the relationship between the number of texts you send and your cell phone bill was graphed, which variable should be graphed on the *x*-axis? Why?
- 8) At a football game, the winner is determined by which team scores more point. Identify the dependent and independent variables for this situation.
- 9) Harold is raking lawns to earn spending money. The fee he charges for raking a lawn is calculated based on how long it takes to rake it. Identify the dependent and independent variables for this situation.