Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ November 21, 2017

Teacher: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Math 8

**Unit 4 Writing Linear Equations Review**

*Part I. Multiple Choice. Please circle the correct answer – No partial credit*

1. What is an equation of the linear function that is represented by the following table of values? 
	1. y = 1 – x
	2. y = x – 1
	3. y = -x
	4. y = x
2. What is an equation of the linear function that is represented by the following table of values? 
	1. y = x + 2
	2. y = x + 3
	3. y = x – 2
	4. y = 2x + 1
3. What is the equation of the line having a slope of 0 and passing through the point (-4, -2)?
	1. x = -4
	2. y = -2
	3. y = -4
	4. x = -2
4. What is the equation of the line having no slope and passing through the point (6,8)?
	1. y = 6
	2. y = 8
	3. x = 6
	4. x = 8
5. What is an equation of the linear function whose graph passes through the points (3, 17) and (7, 25)?
	1. y = 2x + 11
	2. y = 2x – 11
	3. y = -3x + 26
	4. y = -2x + 23
6. What is an equation of the linear function whose graph passes through the points (-10, 6) and (15, -14)?
	1. $y=-\frac{5}{4}x-2$
	2. $y=-\frac{4}{5}x-2$
	3. $y=\frac{4}{5}x-2$
	4. $y=-2x-\frac{4}{5}$
7. What is the equation of the line having a slope of -4 and passing through the point (-2, 10)?
	1. y = -4x + 10
	2. y = -4x + 18
	3. y = -4x + 2
	4. y = -4x – 2
8. What is the equation of the line having a slope of $\frac{1}{3}$ and passing through the point (6, -5)?
	1. $y=\frac{1}{3}x+6$
	2. $y= \frac{1}{3}x+7$
	3. $y=\frac{1}{3}x-7$
	4. $y= \frac{1}{3}x-5$

1. What is the equation of the line that passes through the points (-4, 2) and (-4, 6)?
	1. x = 2
	2. y = 2
	3. x = -4
	4. y = -4
2. What is the equation of the line graphed?

 

* 1. $y= 1$
	2. $y= -1$
	3. $x=1$
	4. $x= -1$
1. What is the equation of the line graphed?
	1. y = 3x – 3
	2. y = -3x – 3
	3. $y=\frac{1}{3}x-3$
	4. $y=-\frac{1}{3}x-3$
2. If point (-1, 0) is on the line of the equation y = 2x + b, what is the value of b?
	1. 0
	2. 1
	3. 2
	4. 3

*Part II. Short Response. Show all work for full credit.*

1. Write the equation of the line that passes through the points (-3, -4) and (12, -9).
2. Write the equation of the line that has a slope of $-\frac{1}{2}$ and passes through the point (-4, -6).
3. Write the equation of a linear function that is represented by the following table of values.

|  |  |
| --- | --- |
| X | Y |
| 6 | -2 |
| 3 | 0 |
| -3 | 4 |

1. Write the equation of the line graphed below.



1. Write the equation of the line graphed below.



1. If you buy a car wash at the gas station for $5, the cost per gallon of gas is $3.
	1. Write an equation to represent the amount of money you would spend for an unknown amount of gas.
	2. If you have $51.50 find the number of gallons of gas you can afford.
2. You and your friends plan to attend the county fair this weekend. The admission to the fair is $5 and the cost per ride is $0.50.
	1. Write an equation to represent the number of rides you can go on.
	2. If your parents gave you $20, how many rides can you go on?
3. While your family is visiting Deep Creek Lake, you and your mother decide to go boating. The rangers charge $6.50 per hour in addition to a $25 fee to rent a canoe.
	1. Write and equation to find the total cost of renting the canoe.
	2. If you rent the canoe at 12:30 PM, what time do you return the canoe if your total cost was $67.25?