**Mathematics**

**Power Standard 8:7**

**Summative Test**

**Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Hour \_\_\_\_\_\_\_\_\_\_\_**

1. Describe the following situation: The size of square flooring tiles and the number of tiles required to cover the floor.
2. positive relationship
3. no relationship
4. negative relationship
5. neutral relationship
6. Given: y = $\frac{1}{2}$ x -3, which of the following is true?
7. m = 3, b = $\frac{1}{2}$
8. m = $\frac{1}{2}$, b = -3
9. m = $\frac{1}{2}$, b = 3
10. m = 1, b = 2
11. Solve: 2w – 6 = 5w + 15
12. w = -7
13. w = 3
14. w = 16
15. w = 7
16. Solve: 6 – 4x = 4x – 2
17. x = - $\frac{1}{2}$
18. x = 0
19. x = -1
20. x = 1
21. Solve for x: -$ \frac{x}{3}$ + 4 = -5 Show steps:
22. The student council wants to rent a D.J. for their fall party. The D.J. charges $50 per hour. In addition to the hourly charge, there is a set-up fee of $100. Write and solve an equation showing how long the D.J. can stay if the student council has $300 to spend.
23. Identify the slope and y-intercept of the following:

Y= -3x+4

m=\_\_\_\_\_\_\_\_\_\_ b = \_\_\_\_\_\_\_\_\_

1. Given the following graph of a linear function, write the equation of the line in slope-intercept form.

Equation: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_



1. Graph y= -($\frac{1}{2}$)x + 2. Identify the slope and y-intercept.

m = \_\_\_\_\_\_\_\_\_ b = \_\_\_\_\_\_\_\_\_\_\_



10. Use the following t-bar to make a scatter plot. Use a line of fit to predict the

 number of words read per minute. Explain how you arrived at your

 prediction.



Minutes Words Read

 2 115

 3 175

 4 200

 5 250

 6 280

1. Use the following table to answer the following question. What was the rate of change between 1:10 and 1:20? Explain your answer.

Time 1:00 1:05 1:10 1:20

Envelopes Stuffed 15 25 40 70