Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_

**Writing and Solving Equations Quiz Review Homework**

**Directions:** Show work and thenwrite your answer on the line provided.

\_\_\_1. You have $1.85 in nickels and dimes. You have 5 more dimes than nickels. How many of each type of coin do you have?

a. n + d = 1.85 b. .05n + .10d = 1.85

 d + 5 = n n + 5 = d

**For questions 2 and 3**

Two bowling alleys are comparing their prices. Bowl More charges $2 per game plus a one-time charge of $4 for shoe rental. Straight Strokes bowling charges $3 per game plus a one-time charge of $2 for shoe rental.

2. Write the two equations which represents how much each bowling alley charges

Bowl More:

Straight Strokes:

\_\_\_3. The total cost will be less at Bowl More if you bowl how many games?

a. 1 b. 2 c. 3 d. 4

\_\_\_4. Which system of linear equations, when graphed has lines that intersect at (5, 10)?

a. 2y – x = 0 b. y = 2x c. x – y = -5 d. y – x = 5

 x + y = 15 x + y = 15 y = 5x + 10 y = 5x

\_\_\_\_5. Which system of equations intersects at (-1, 4)

a. 2x + 4y = 9 b. y + 2x = 6 c. y – 2x = 6 d. x + 4y = 15

 x + 2y = 15 x + 4y = 15 x + 4y = 15 4x – y = 2

\_\_\_6. The x-coordinate of the intersection of the graphs of the system of equations shown below is 3. What is the y-coordinate of the intersection?

 2x + y = 3

 -x + 3y = -12

a. 0 b. -5 c. 3 d. -3

\_\_\_\_7. A system of linear equations is graphed on this coordinate grid.



What is the solution to the system of equations?

a. (-2, 2)

b. (-3, -4)

c. (-1, -2)

d. (-1, 3)

\_\_\_8. What is the solution to the system of equations below?

 8x – 3y = 5

 8x – 3y = 11

a. (0, 0) b. (0, 6) c. infinite solutions d. no solution

\_\_\_\_9. The point (-2, 3) is the solution to a system of two linear equations. Which of the following can be one of the equations?

a. y = -2x + 3 b. y = 3x – 2 c. y = -x + 1 d. y = x - 1

\_\_\_\_10. Solve the system algebraically: y = 2x + 4

 y = $\frac{1}{2}$x - 2

\_\_\_\_11. Solve the system algebraically: y = x + 4

 5x + 2y = 1

\_\_\_\_12. Solve the system algebraically: -2x + 5y = 10

 -4x + 10y = 20

\_\_\_\_13. Solve the system algebraically: 3x + y = 13

 6x + 2y = 26