System of Equations Quiz

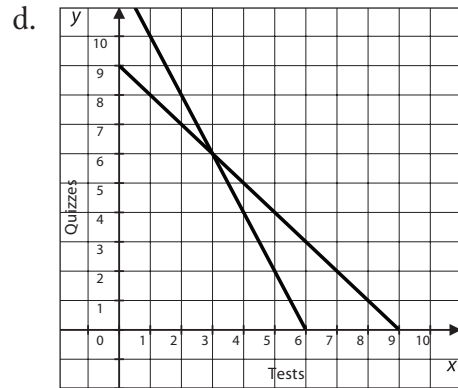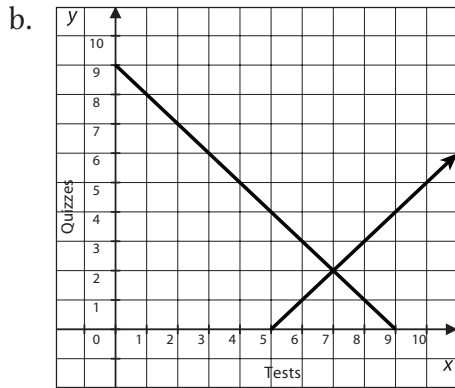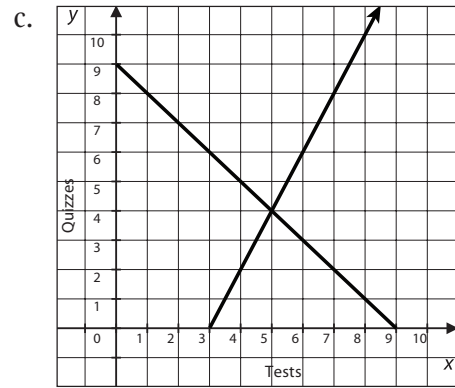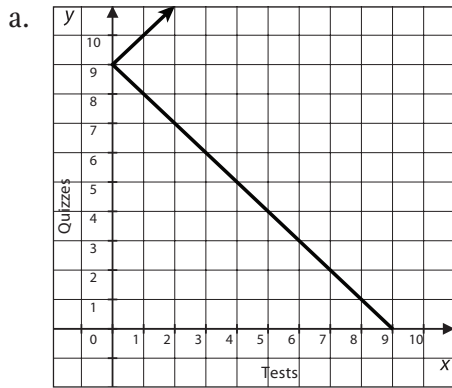## Progress Assessment

Circle the letter of the best answer.

$$\begin{bmatrix} 6 & 3 \\ 6 & 7 \end{bmatrix}$$

1. What is the solution to the system $\begin{cases} y = 6x - 3 \\ 6x - y = 72 \end{cases}$?

    a. (3.1, 15.6)

    b. (5.75, 31.5)

    c. There are infinitely many solutions to this system of equations.

    d. There are no solutions to this system of equations.

2. Tickets to the carnival cost $9.00 for adults and $7.50 for children. A group of 11 people went to the carnival and paid $87 for tickets. How many adult tickets were purchased? How many children's tickets were purchased?

    a. 3 adult tickets and 8 children's tickets were purchased.

    b. 8 adult tickets and 3 children's tickets were purchased.

    c. 5 adult tickets and 6 children's tickets were purchased.

    d. The number of each ticket purchased can't be determined from the given information.

3. What is the solution to the system $\begin{cases} 4x - 6y = 42 \\ x + 6y = 48 \end{cases}$?

    a. (5, 18)

    b. (18, 5)

    c. There are infinitely many solutions to this system of equations.

    d. There are no solutions to this system of equations.

4. What is the solution to the system $\begin{cases} 3x + y = 10 \\ -3x + 2y = 65 \end{cases}$?

    a. (–5, 5)

    b. (–5, 25)

    c. There are infinitely many solutions to this system of equations.

    d. There are no solutions to this system of equations.

5.

Your science class has 9 assessments. Tests are worth 100 points, and quizzes are worth 50 points. There were 600 points possible in the quarter. Which graph below represents the number of tests and quizzes you had last quarter?
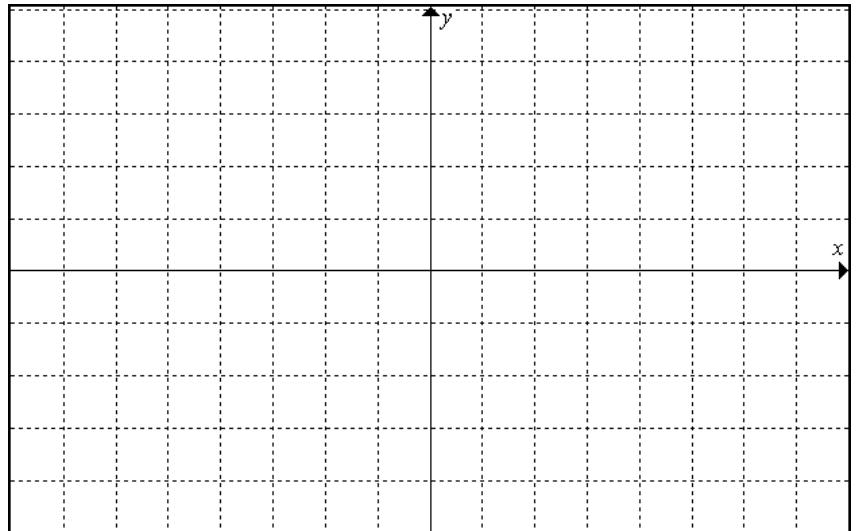
a.

c.

b.

d.

SHOW ALL WORKING

6. Solve by *graphing*

$$y = -2x + 3$$
$$y - x = -3$$

7. Solve the following system of equation by *substitution* **SHOW ALL WORKING**

$$y = 2x + 4$$
$$y = x + 2$$

8. Solve the following system of equation by *elimination* **SHOW ALL WORKING**

$$-3x + 8y = 8$$
$$3x - 9y = -15$$

9. The sum of two numbers is 25. The sum of twice the smaller number and the greater number is 32. Find the two numbers.

10. A group of friends went to the movies. They spent $30 on popcorn and drinks. Each tub of popcorn cost $5, and each drink cost $3. They bought 8 total items. How many of each did they buy?