Name:
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Period:

## **Test 1 Review**

1. Name and describe the different methods for solving a system of equations.

Solve the following systems of equations using two different methods. Write your answer as a coordinate point.

2. 
$$\begin{cases} y = -x + 2 \\ y = 3x - 6 \end{cases}$$

3. 
$$\begin{cases} 3x + 2y = -4 \\ 2x - 2y = -6 \end{cases}$$

4. Describe the method for solving a system of inequalities.

Solve the following systems of inequalities.

5. 
$$\begin{cases} y \le \frac{3}{4}x - 5 \\ y > -2x + 1 \end{cases}$$

6. 
$$\begin{cases} 4x + 3y \le 24 \\ 6x + 9y \le 18 \end{cases}$$

Circle the points that are solutions to the system of inequalities.

7. 
$$\begin{cases} x + y > 4 \\ 2x + 3y \le 12 \end{cases}$$

 $8. \begin{cases} y \le \frac{1}{2}x - 3 \\ y \le 4x - 3 \end{cases}$ 

a. (0,4)

a. (-2,2)

b. (4,1)

b. (2,1)

c. (2,1)

c. (3,-1)

Circle the points that are solutions to the system of equations.

9. 
$$\begin{cases} y = \frac{1}{2}x - 3 \\ y = 4x - 3 \end{cases}$$

10.  $\begin{cases} y = 3x + 7 \\ y = -3x - 5 \end{cases}$ 

a. (0,3)

a. (0,0)

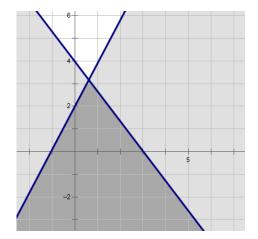
b. (1,1)

b. (-2,1)

c. (10,2)

c. (-1, 4)

11. Write the system of inequalities that matches the following graph



12. When graphing an inequality what does the dotted line mean?

Solve the following systems of equations by substitution. Write your answer as a coordinate point.

13. 
$$\begin{cases} x = y - 1 \\ -3x + 2y = -1 \end{cases}$$

14. 
$$\begin{cases} -7x - 2y = -13 \\ x - 2y = 11 \end{cases}$$

15. What is the solution to a system of equations?

16. What is the solution to a system in inequalities?