## **Graphing Single Inequalities**

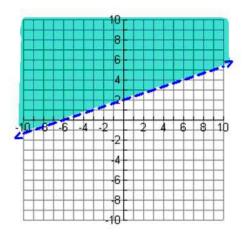
\_\_\_\_\_1. Which inequality represents the graph to the right:

**a.** 
$$y \ge -\frac{1}{3}x + 2$$

b. 
$$y < -\frac{1}{3}x + 2$$

c. 
$$y \le \frac{1}{3}x + 2$$

d. 
$$y > \frac{1}{3}x + 2$$



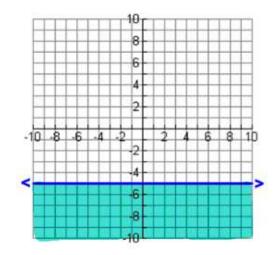
\_\_\_\_\_2. Which inequality represents the graph to the right:

a. 
$$y \le -5$$

b. 
$$y > -5$$

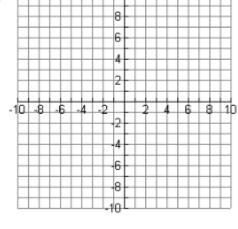
c. 
$$x > -5$$

d. 
$$x \le -5$$

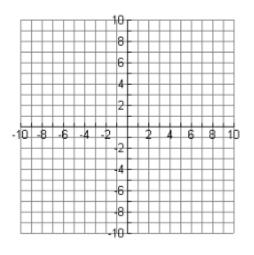


Graph each inequality below:

3. 
$$x > -4$$



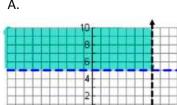
4. 
$$3x - y < -9$$



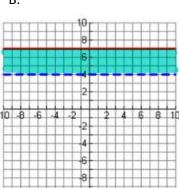
## **Graphing Systems of Inequalities**

Match each system of equations to its graph below.

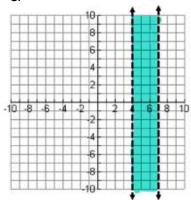
\_\_5.  $y \le 7$ 



В.



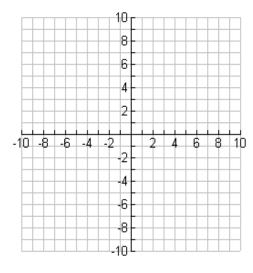
C.



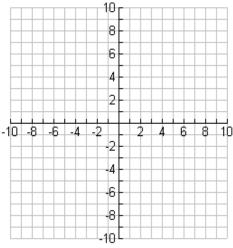
\_\_\_\_\_7. 
$$x < 7$$

Graph each system of linear inequalities below and shade the appropriate region.

y > 18.  $y \le x + 3$ 

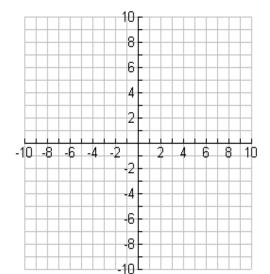


$$2x - y \le 6$$
$$2x + 3y < -12$$



Graph each system of linear inequalities below and shade the appropriate region.

10. 
$$x+2y < 6$$
  
 $y < -2x+7$   
 $y \ge \frac{1}{4}(x-2)-1$ 



## **Identify Solutions to Linear Systems**

11. Without graphing, determine if (-2, -3) is a solution to the following system.

Answer \_\_\_\_\_

$$x+y<4$$

$$y \ge -5x-2$$

$$y \le \frac{1}{2}(x-2)+4$$

12. Which point is a solution to the system graphed below?

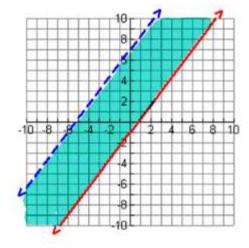
a. (3, 2)

b. (-3, -2)

c. (4, -4)

d. (-2, 6)

Answer: \_\_\_\_\_



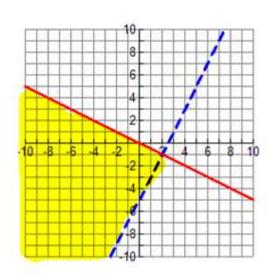
13. Which point(s) are solutions to the system graphed below?

A. (-2, -3)

B. (-1, 2)

C.(2,1)

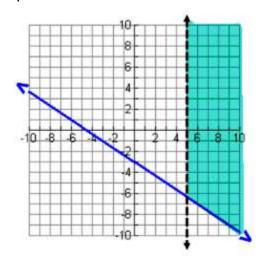
D. (-4,0)



Answer(s): \_\_\_\_\_

## Writing Systems of Linear Inequalities

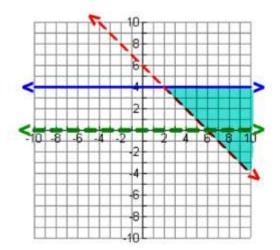
14. Write the system of 2 linear inequalities graphed below:



Answer \_\_\_\_\_

Answer \_\_\_\_\_

15. Write the system of 3 linear inequalities graphed below:



Answer \_\_\_\_\_

Answer \_\_\_\_\_

Answer \_\_\_\_\_

16. Write the system of 4 linear inequalities graphed below.

Answer \_\_\_\_\_

Answer \_\_\_\_\_

Answer \_\_\_\_\_

Answer \_\_\_\_\_

