

Name: Key

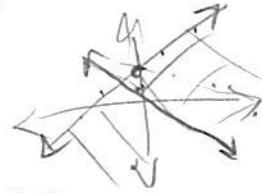
Date: _____

Quest Review Sheet

1. Which ordered pair is in the solution set of the following system of inequalities?

$$y < \frac{1}{2}x + 4$$

$$y \geq -x + 1$$



4

(1) (-5, 3)

(2) (3, -5)

(3) (0, 4)

(4) (4, 0)

2. In the graph of $y \leq -x$, which quadrant is completely shaded?

b

(1) I

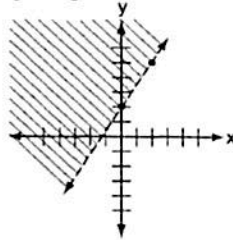
(2) II

(3) III

(4) IV



3. Which inequality is shown in the accompanying diagram?



1

(1) $y > \frac{3}{2}x + 2$

(2) $y \geq \frac{3}{2}x + 2$

(3) $y < \frac{3}{2}x + 2$

(4) $y \leq \frac{3}{2}x + 2$

4. How many solutions are there to the linear system shown in the graphs below?

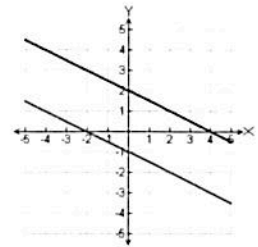
1

(1) no solution

(2) infinite

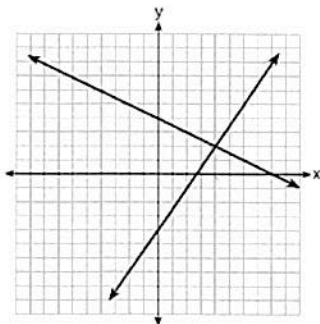
(3) (0,0)

(4) 1 point



5. A system of equations is graphed on the set of axes below.

2



The solution of this system is

(1) (0, 4)

(3) (2, 4)

(2) (4, 2)

(4) (8, 0)

6. Which point is in the solution set of the system of inequalities shown on the accompanying graph?

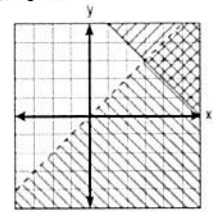
2

(1) (0,0)

(2) (5,2)

(3) (3,3)

(4) (2,3)



3. Which ordered pair is in the solution set of the system of inequalities shown in the accompanying graph?

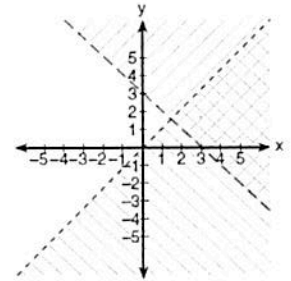
4

(1) (0,0)

(2) (1,5)

(3) (0,1)

(4) (3,2)



7. Which coordinate point is in the solution set for the system of inequalities shown in the accompanying graph?

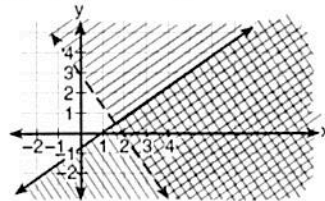
1

(1) (3,1)

(2) (1,-1)

(3) (2,2)

(4) (0,1)



8. Which point is in the solution set of the system of inequalities shown on the accompanying graph?

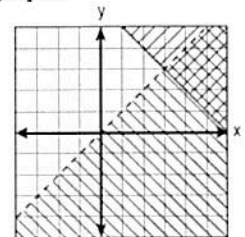
2

(1) (0,0)

(2) (5,2)

(3) (3,3)

(4) (2,3)



9. What is one solution of the following system of equations?

$$\begin{aligned} x + y &= 7 \\ x - y &= 3 \end{aligned}$$

$$\begin{aligned} 3 + 4 &= 7 \\ 3 - 4 &= -1 \end{aligned}$$

(1) (3,4)

$$\begin{aligned} 5 + 2 &= 7 \\ 5 - 2 &= 3 \end{aligned}$$

(2) (5,2)

$$\begin{aligned} 10 + 3 &= 7 \\ 10 - 3 &= 13 \end{aligned}$$

(3) (10,-3)

$$\begin{aligned} 8 - 1 &= 7 \\ 8 - (-1) &= 9 \end{aligned}$$

(4) (8,-1)

10. Which ordered pair is in the solution set of the system of inequalities shown in the accompanying graph?

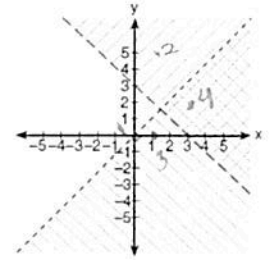
4

(1) (0,0)

(2) (1,5)

(3) (0,1)

(4) (3,2)

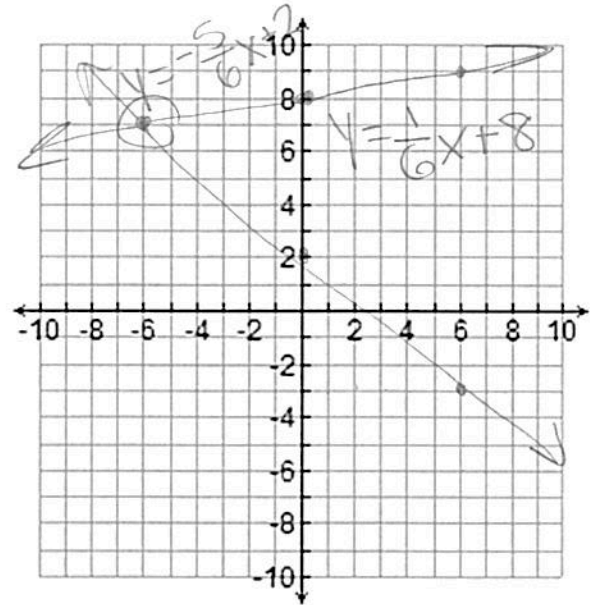


point in shading that overlaps

11. Graph the following equations on the provided graph.

$$y = -\frac{5}{6}x + 2$$

$$y = \frac{1}{6}x + 8$$

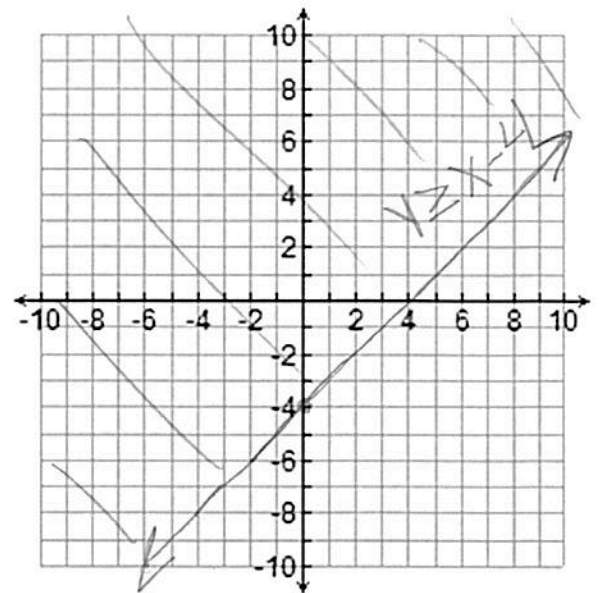


State the point of intersection.

$(-6, 7)$

12. Graph the following inequality on the graph provided.

$$y \geq x - 4$$



Would $(-4, -10)$ be a solution to this inequality?

NO

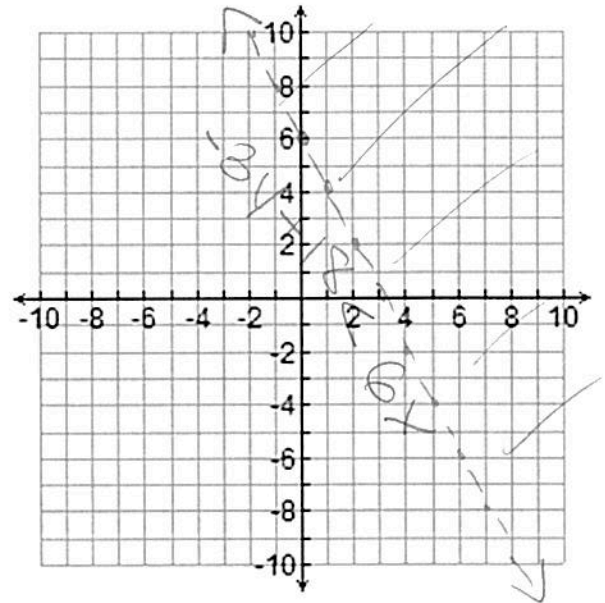
13. Graph the following inequality on the graph provided.

$$-3y + 18 < 6x$$

$$\frac{-3y + 18}{-3} < \frac{6x}{-3}$$

$$-3y < 6x - 18$$

$$y > -2x + 6$$



Would (-6,1) be a solution to this inequality?

NO

14. On the following set of coordinate axes, graph the following system of inequalities. State a point that is NOT in the solution set.

$$2x + y < 3$$

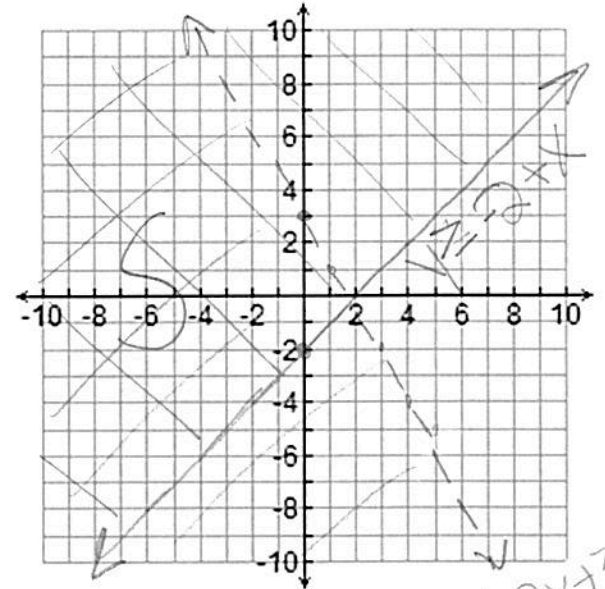
$$x - y \leq 2$$

$$\frac{x - y \leq 2}{-1} \quad \frac{-x}{-1}$$

$$y \geq -2 + x$$

$$\frac{2x + y < 3}{-2x} \quad \frac{y}{-2x} \quad \frac{-2x}{-2x}$$

$$y < -2x + 3$$



State the coordinates of a point NOT in the solution set.

(8, -1)