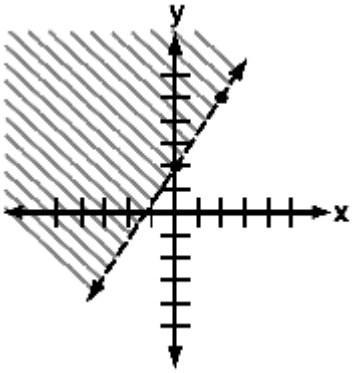
Name: Date:

Common Core Algebra Inequalities Review

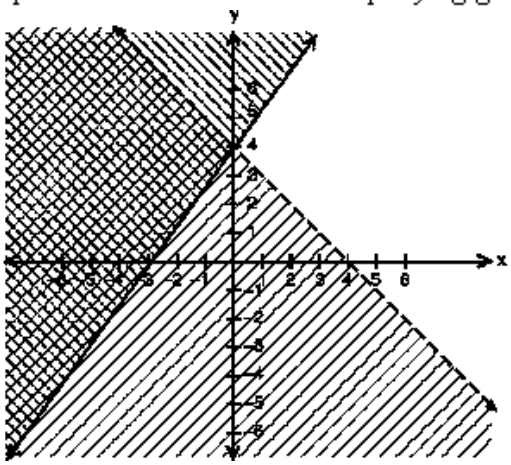
1. Which inequality is shown in the accompanying diagram?



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

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

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

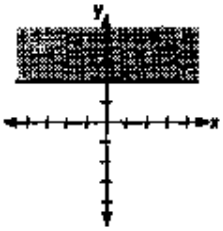


(1) (0,4) (3) (−4,1)

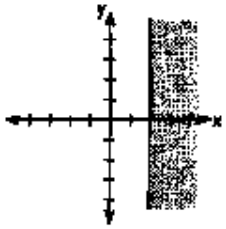
(2) (2,4) (4) (4,− 1)

3. Which graph represents the inequality $x \geq 2$?

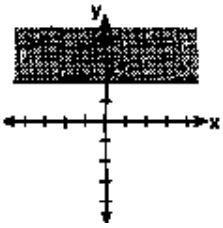
(1)



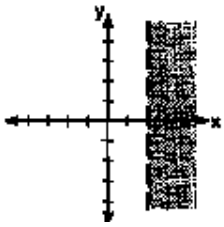
(3)



(2)



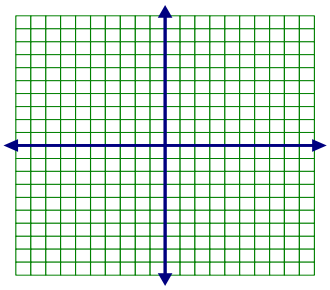
(4)



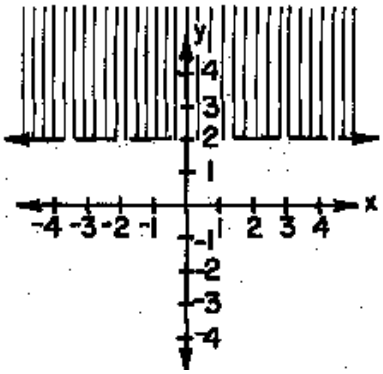
4. In the graph of $y \leq -x$, which quadrant is completely shaded?

(1) I (3) III

(2) II (4) IV



5. The graph of which inequality is shown in the accompanying diagram?



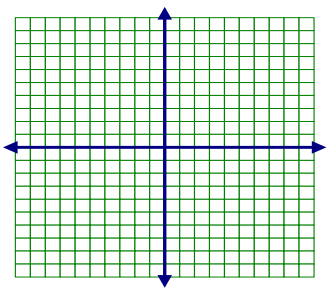
(1) $y > 2$ (3) $y \geq 2$

(2) $x > 2$ (4) $x \geq 2$

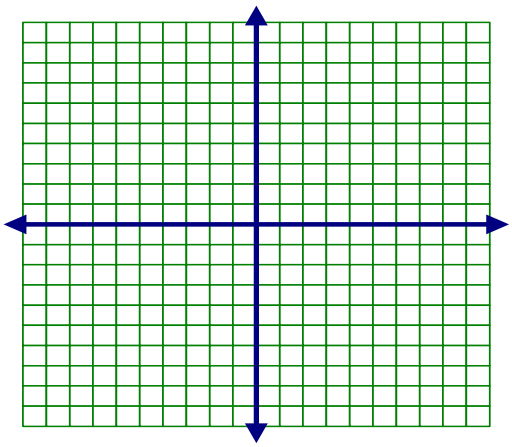
6. Which ordered pair is *not* in the solution set of $x - 2y \leq 6$?

(1) (2,−2) (3) (0,0)

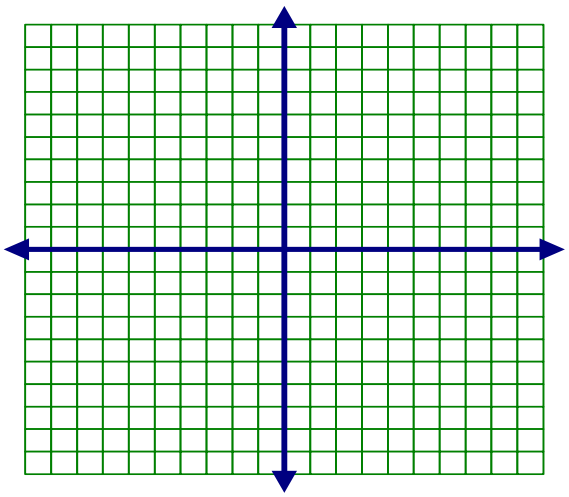
(2) (5,1) (4) (1,−6)



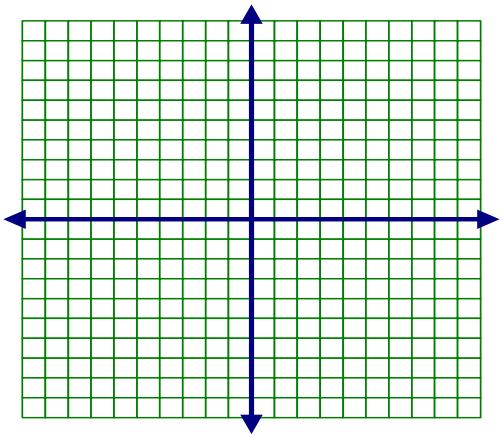
7. Graph the inequality $y \le -x + 7$ **State the coordinates of a point** in the solution set.



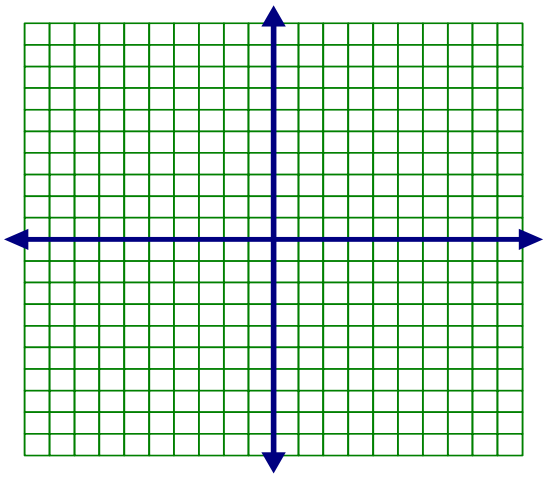
8. Graph the inequality $x - y < 10$. **State the coordinates of a point** in the solution set.



9. Graph the inequality $x + 2y \leq 8$. **State the coordinates of a point** in the solution set.



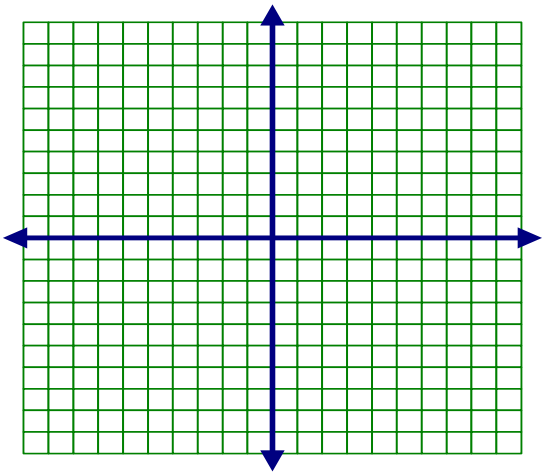
10. Graph the inequality $y > x - 3$ **.State the coordinates of a point** in the solution set.



11. Solve the following system of inequalities graphically: **State the coordinates of a point** in the solution set.

$$y \le x - 3$$

$$y > x - 7$$



12. Solve the following system of inequalities graphically: **State the coordinates of a point** in the solution set.

$$x + y \le 7$$

$$x + 2y \le 8$$