

Name: \_\_\_\_\_

**Algebra 2**

Date: \_\_\_\_\_ Bell: \_\_\_\_\_

**Unit 1: Systems of Equations & Inequalities**

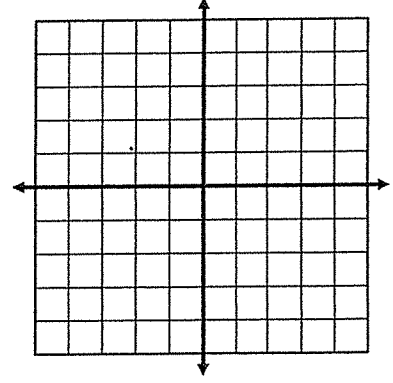
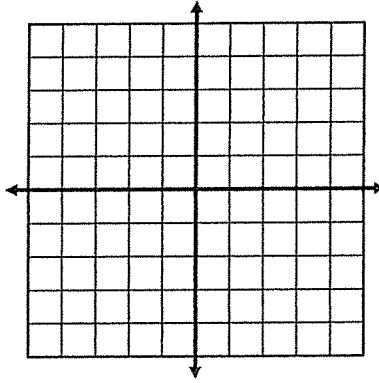
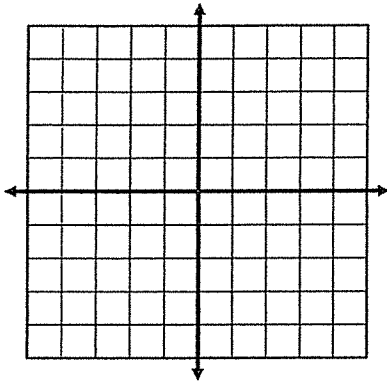
**Linear Inequalities & Systems of Inequalities**

**Graph the following linear inequalities. Show work when getting  $y$  alone.**

1.  $y \leq -2x + 1$

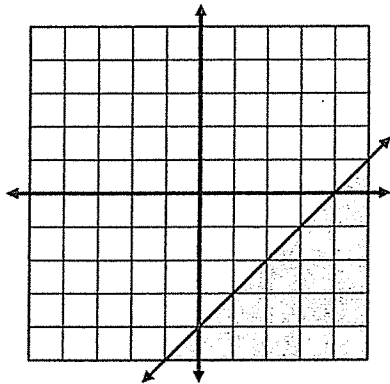
2.  $2x - 5y < 20$

8.  $x - 3y < 0$



**Select the inequality that best represents the graph.**

4.



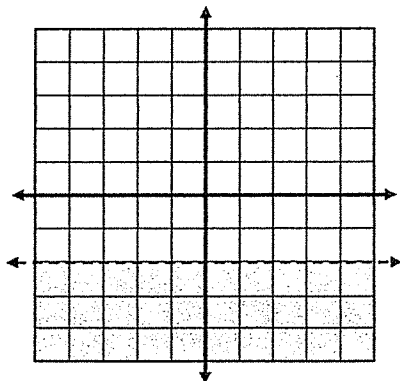
A.  $x + y \leq -4$

B.  $x + y \geq -4$

C.  $x - y \leq 4$

D.  $x - y \geq 4$

5.



A.  $x < -2$

B.  $y < -2$

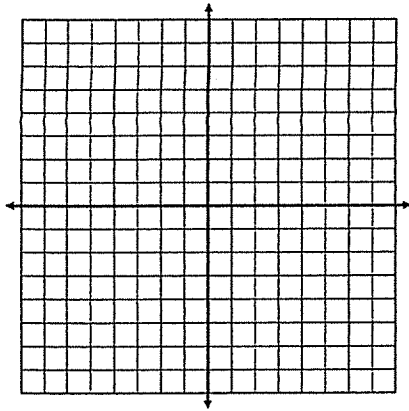
C.  $x > -2$

D.  $y > -2$

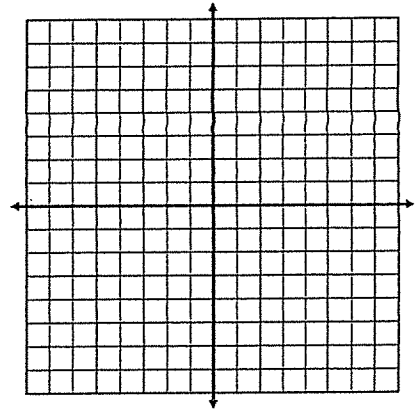
SHOW WORK WHEN GETTING Y ALONE!

Graph the following systems of linear inequalities.

6.  $x + y > 8$   
 $x > 5$

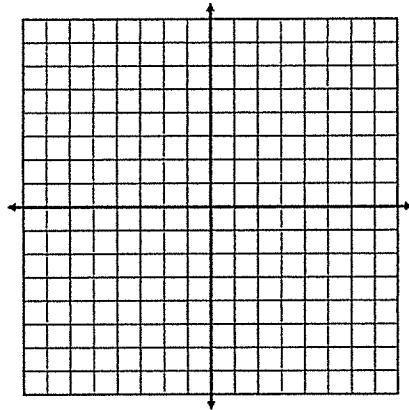


7.  $4x + y \geq 4$   
 $3x - 2y > 14$



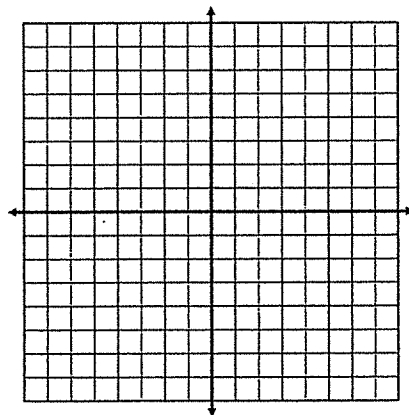
Use the graph to determine which ordered pair is a solution to the system of inequalities.

8.  $y < 2x + 1$   
 $y \leq -3x + 4$



- A. (1, -4)
- B. (1, 5)
- C. (-3, 4)
- D. (3, 0)

9.  $x - 2y > -8$   
 $x + y \geq 1$



- A. (-5, 3)
- B. (0, 5)
- C. (3, -5)
- D. (4, 0)