

### 3.2 Systems of Inequalities

Algebra 1

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

**CA #1**

Circle all the ordered pairs  $(x, y)$  that are solutions to the given inequality.

1.  $4x - y \geq 5$

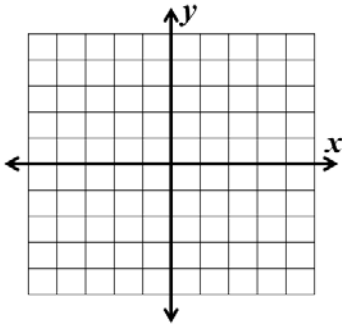
(0, 0)    (2, 3)    (2, 0)    (0, -2)    (-1, 3)

2.  $2x - y > -3$

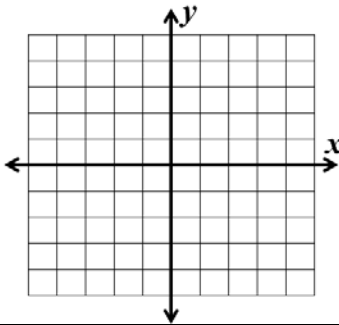
(0, 0)    (0, 3)    (1, 1)    (2, -4)    (-3, -1)

Graph the following inequalities.

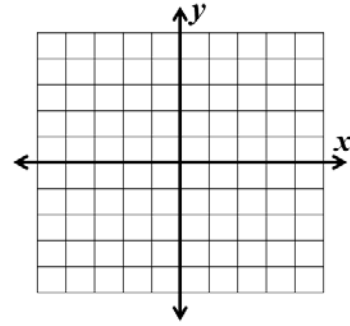
3.  $x < 2$



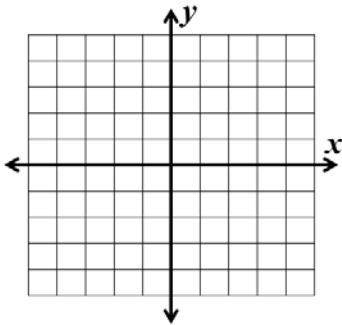
4.  $y \geq -\frac{7}{2}x - 3$



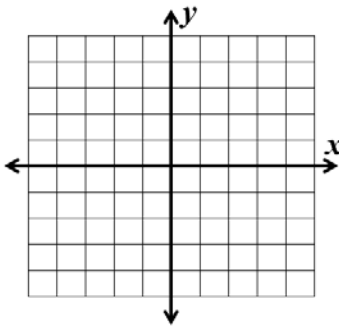
5.  $7x + 4y > 16$



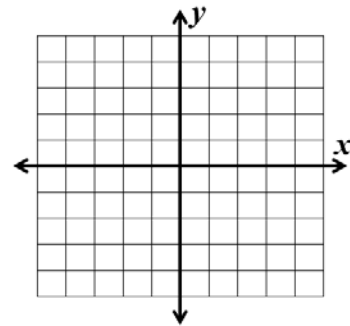
6.  $y \leq \frac{5}{4}x + 1$



7.  $y \geq 2$

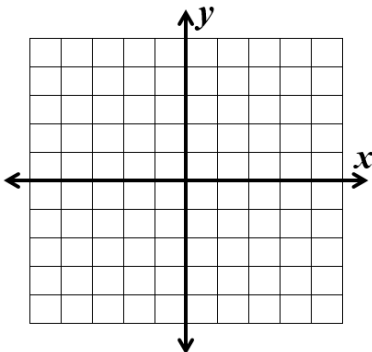


8.  $4x - 5y > -5$

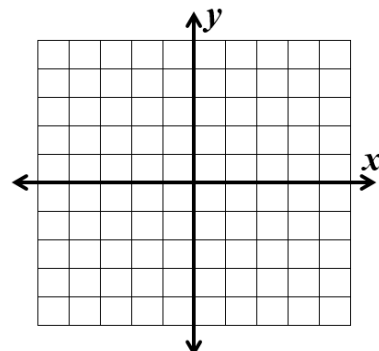


Graph the following systems of inequalities.

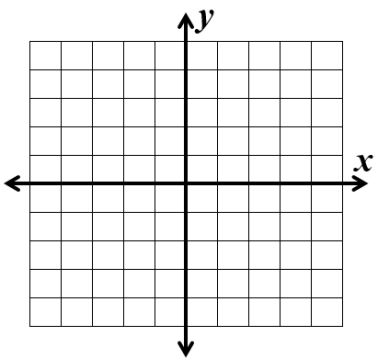
9.  $\begin{cases} y > -x + 2 \\ x \leq 1 \end{cases}$



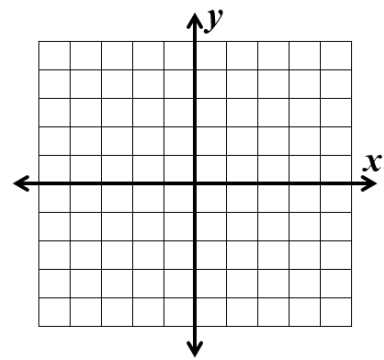
10.  $\begin{cases} y < \frac{3}{2}x + 2 \\ y > -\frac{1}{2}x - 2 \end{cases}$



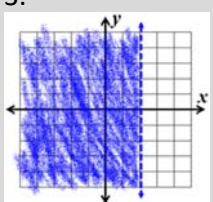
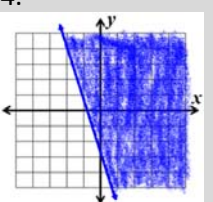
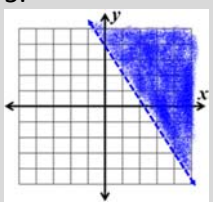
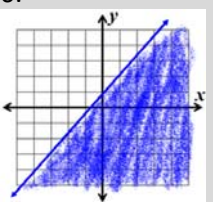
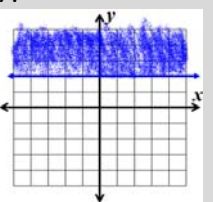
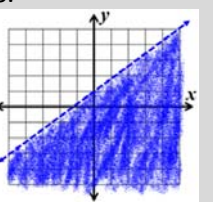
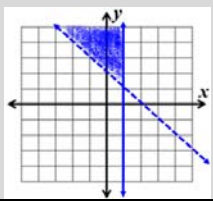
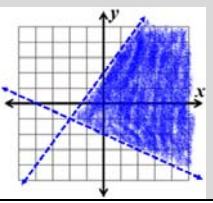
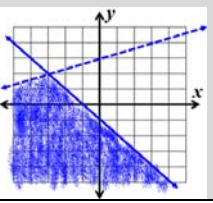
$$11. \begin{cases} x - 3y > -9 \\ x + y \leq -1 \end{cases}$$



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



Answers to 3.2 CA #1

1. (2, 3), (2, 0)	2. (0, 0), (1, 1), (2, -4)	3. 	4. 
5. 	6. 	7. 	8. 
9. 	10. 	11. 	12. 