

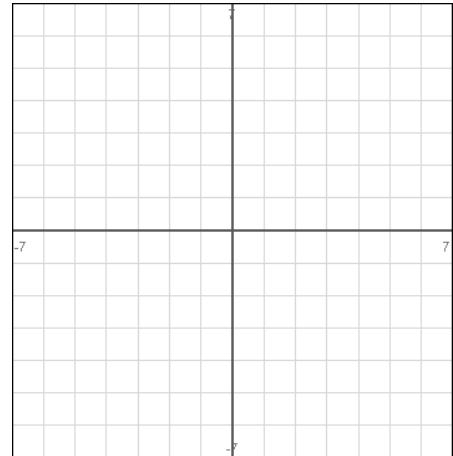
Solving Systems of Inequalities

Step 1: Rewrite each inequality in slope-intercept form.

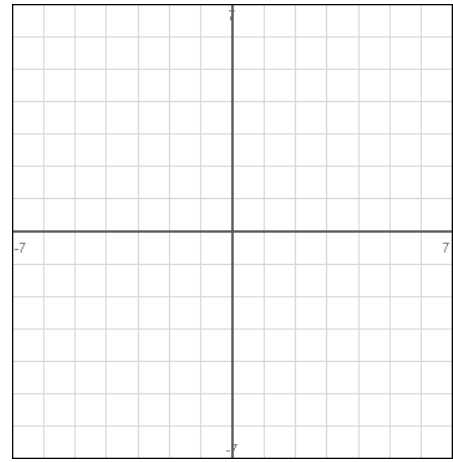
Step 2: Graph the inequalities and find the intersection of their shaded regions.

Directions: Solve each system of inequalities by graphing.

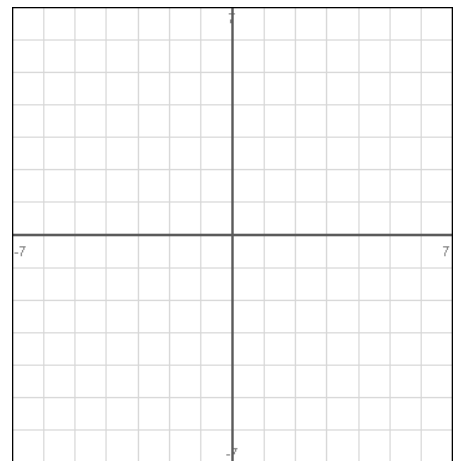
1. $y + 3x \geq 6$
 $y < 2x - 4$



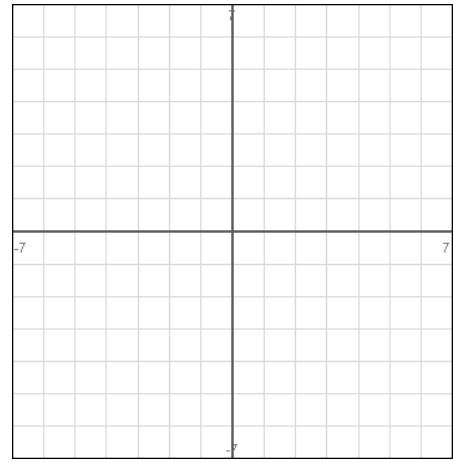
2. $2x + y \leq 6$
 $x + y - 2 > 0$



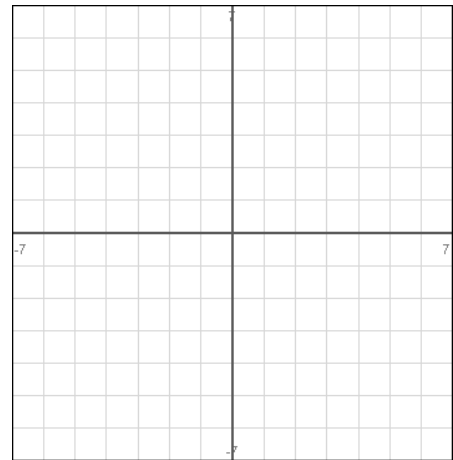
3. $x < 2$
 $y \geq 3$



4. $y \geq x$
 $y \leq x - 4$



5. $2x - \frac{1}{4}y \leq 1$
 $4x + 8y \geq 4$



Directions: Determine if the given point is a solution to the system of inequalities.

6. $(3, -2)$

$$y \leq 4x + 1$$

$$2x - 3y > 20$$

7. $(-1, 4)$

$$3x - y < 7$$

$$y + 2 \geq x$$