

SECTION C5: GRAPHING SYSTEMS OF LINEAR INEQUALITIES

Homework: _____

Dotted Lines:

Solid Lines:

Shade **above** the line:

Shade **below** the line

Steps on Graphing Systems of Linear Inequalities

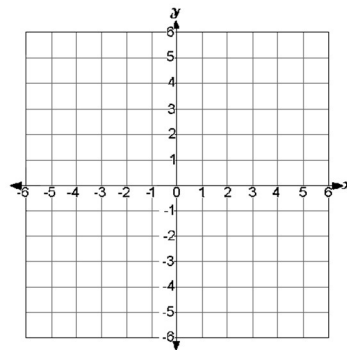
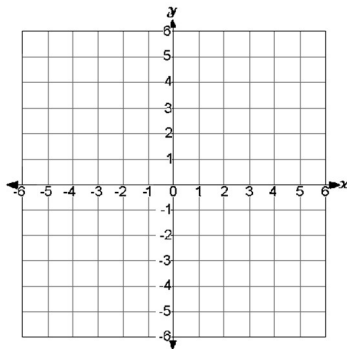
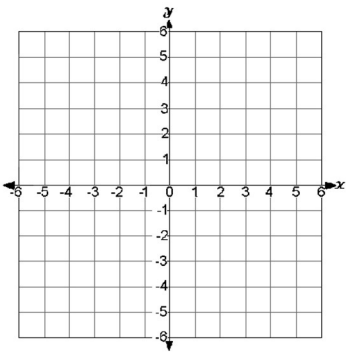
1. Solve each equation for y
 - a. Remember to flip the inequality if you divide by a negative!!!
2. Determine the m & b for each equation
3. Graph and shade the 1st line (dashed or solid?)
4. Graph and shade the 2nd line (dashed or solid?)

Solution: The solution region for a linear inequality is in the _____. To determine if a point is a solution, just plot it and see if it is in the _____

1. $y > -x - 2$
 $y < -5x + 2$

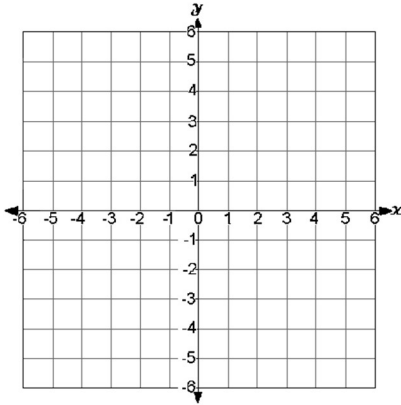
2. $y \leq \frac{1}{2}x + 2$
 $2x + y < -3$

3. $x > -2$
 $-3x - 2y > 2$

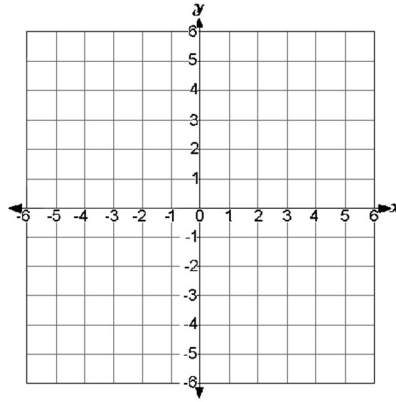


Graph each system of inequalities on a coordinate plane to determine the solution area.

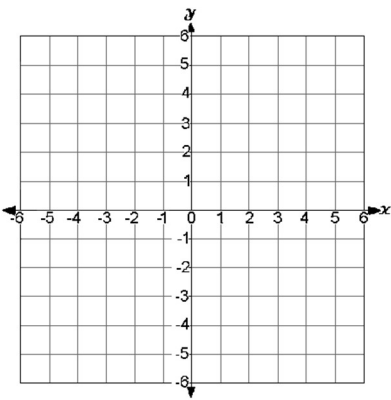
4. $y > -3$
 $3y \leq 5x + 6$



5. $y \leq \frac{2}{3}x + 3$
 $3y \geq -4x - 9$



6. $x \leq -3$
 $3y \leq 5x + 6$



7. $y \leq x + 3$
 $x - y < 4$

