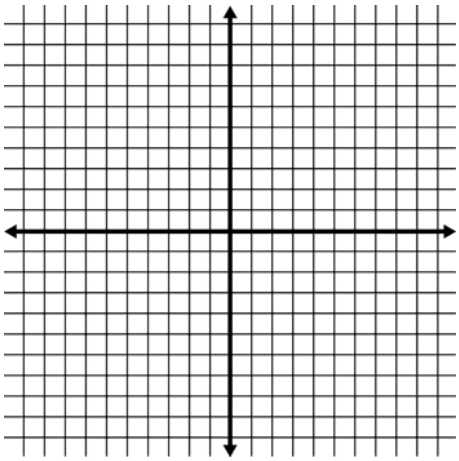
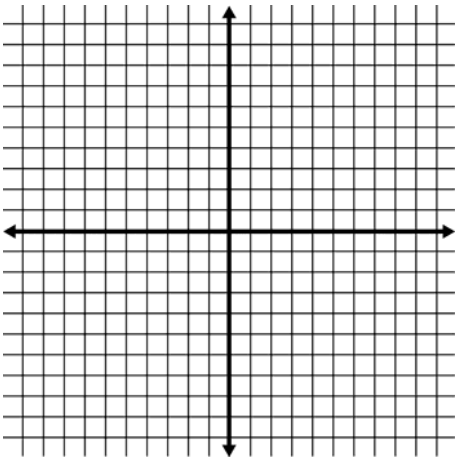
Algebra 1 Keystone Module 1 Name:

Graphing Inequalities and System of Inequalities

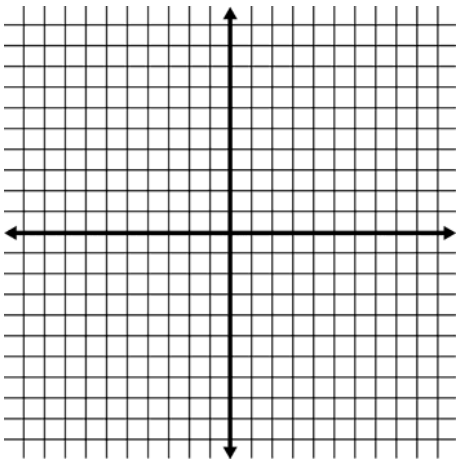
1.) $y \geq -\frac{1}{2}x - 3$



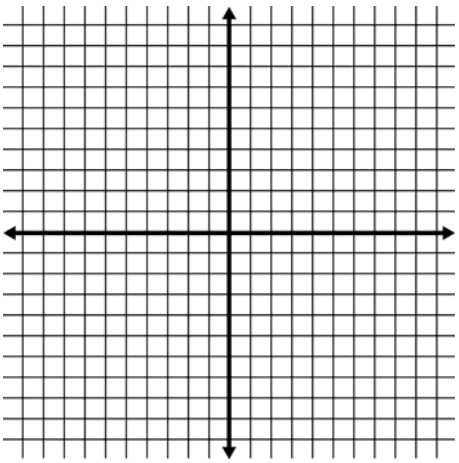
2.) $-5x - 10y < -5$



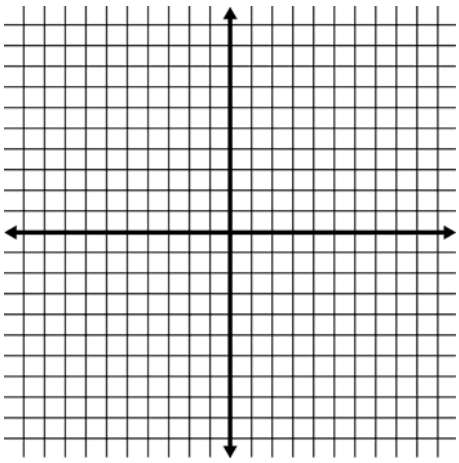
3.) $\begin{cases} x < 2 \\ y > -1 \end{cases}$



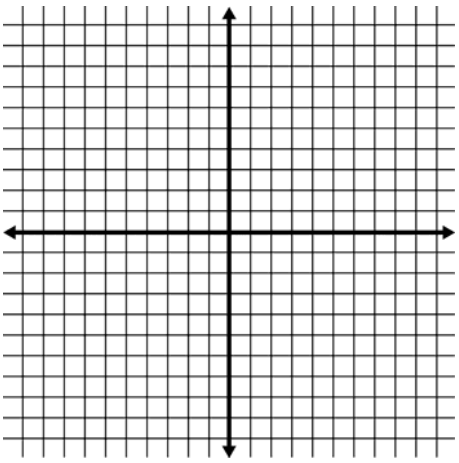
4.) $\begin{cases} y < 2x - 3 \\ y \geq -x + 2 \end{cases}$



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



6.) $\begin{cases} y > x - 2 \\ y < 2x + 1 \end{cases}$



7.) Determine whether the points listed below are solutions to the system.

a) $(0, 3)$ _____

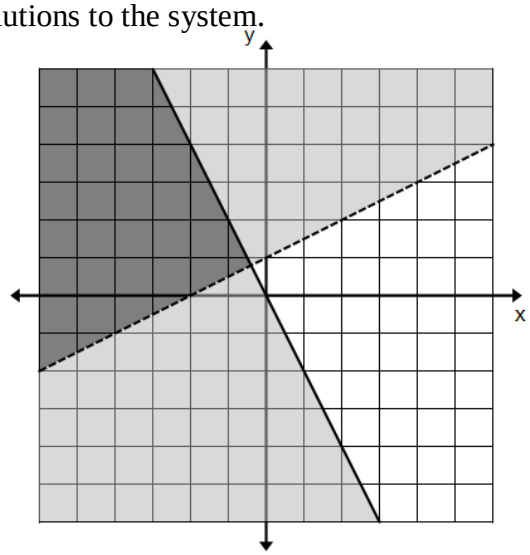
b) $(-3, 2)$ _____

c) $(2, 0)$ _____

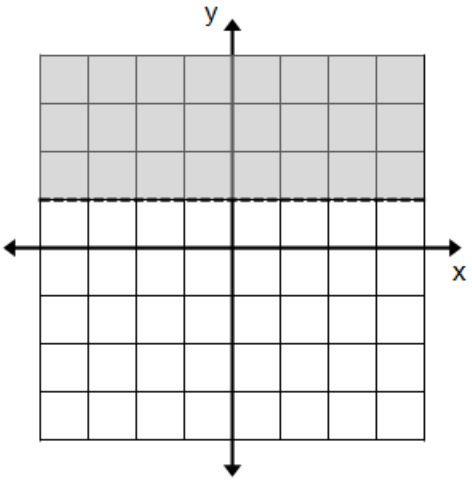
d) $(-2, 0)$ _____

e) $(-2, 4)$ _____

f) $(1, -2)$ _____



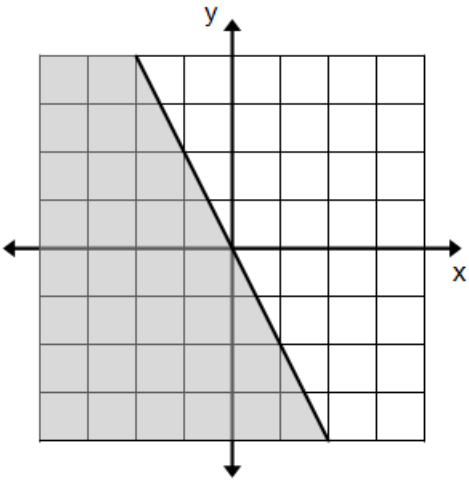
8.) Determine which inequality is graphed below:



a) $x > 1$ b) $y > 1$

c) $x \geq 1$ d) $y \geq 1$

9.) Determine which inequality is graphed below:

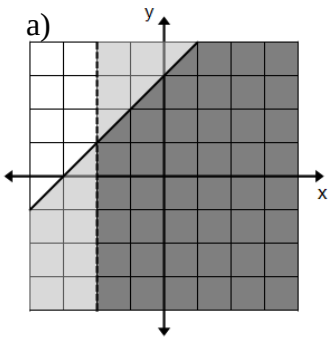


a) $y \leq 2x$ b) $y \geq -2x$

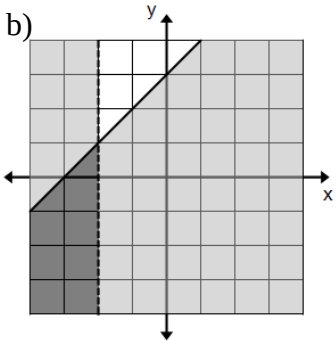
c) $y \leq -2x$ d) $y = 2x$

10.) Which graph below is the solution to: $\begin{cases} x < -2 \\ y \leq x + 3 \end{cases}$?

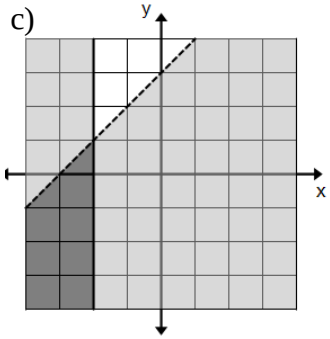
a)



b)



c)



d)