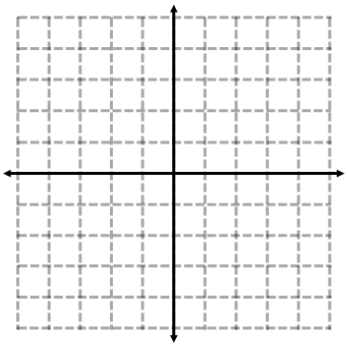
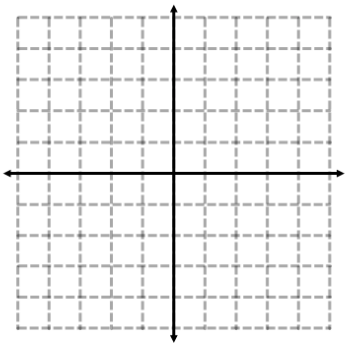
Do Now: 1. Graph $y \le 2x + 1$

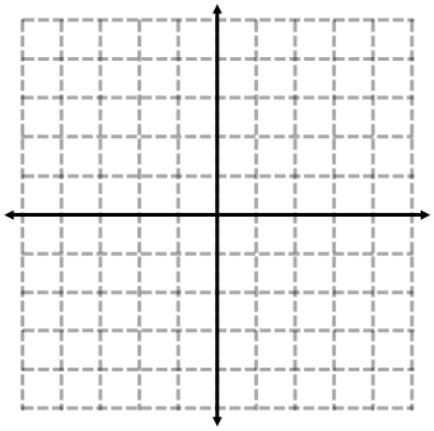


2. Graph $y > -3x - 2$

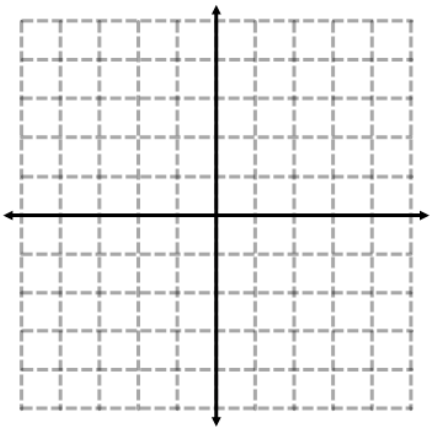


3. Graph the following systems of inequalities on the accompanying set of axes and label the solution set S:

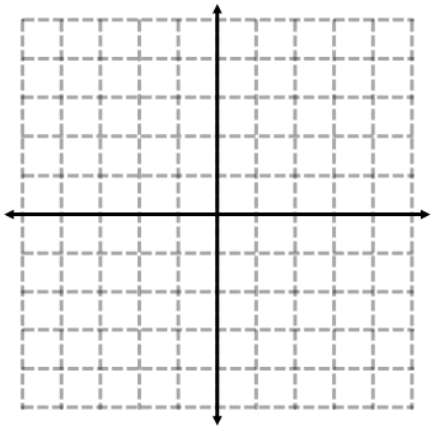
a. $\begin{cases} y \le 2x + 1 \\ y > -3x - 2 \end{cases}$



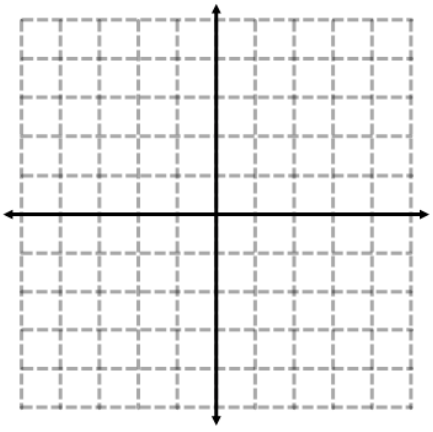
b. $\begin{cases} y \le \frac{2}{3}x \\ y \ge -x - 5 \end{cases}$



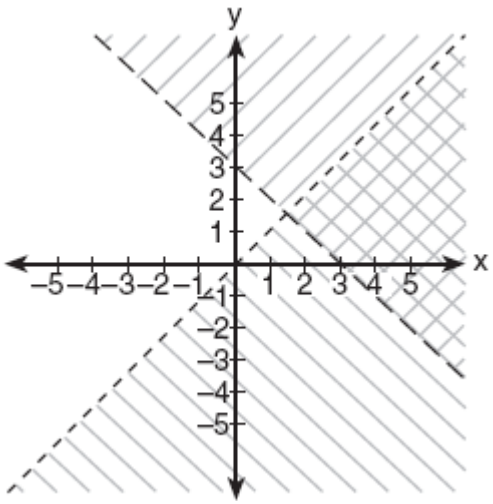
c. $\begin{cases} y \ge x \\ y > 3 \end{cases}$



d. $\begin{cases} x < 4 \\ y > 3 \end{cases}$

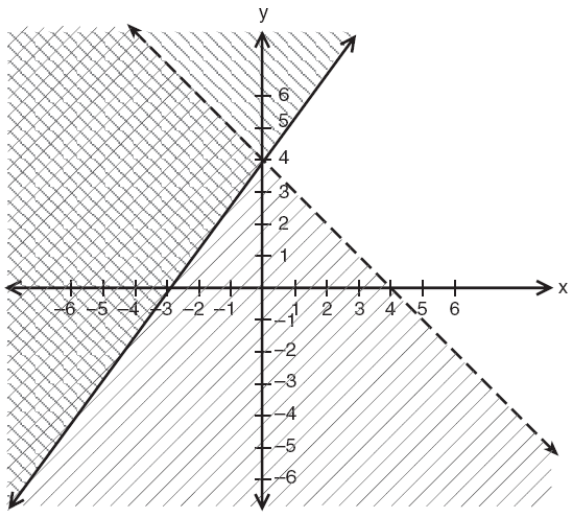


4. Which ordered pair is in the solution set of the system of inequalities shown in the accompanying graph?



(1) (0,0)
(2) (0,1)
(3) (1,5)
(4) (3,2)

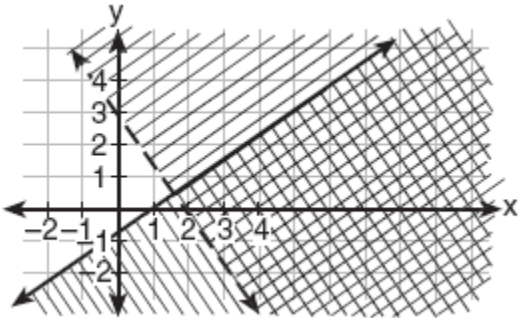
5. Which point is in the solution set of the system of inequalities shown in the accompanying graph?



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

6. Which coordinate point is in the solution set for the system of inequalities shown in the accompanying graph?

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



7. Graph the following system of inequalities on the accompanying set of axes and label the solution set *S*:

$y > x - 4$

$y + x \geq 2$