

Name: _____

Date: _____

5.06 Algebra HOMEWORK

Solving Systems of Linear Inequalities

1. Which of the following points is *not* in the solution set of the system of inequalities shown to the right?

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

(1) (4, 2)

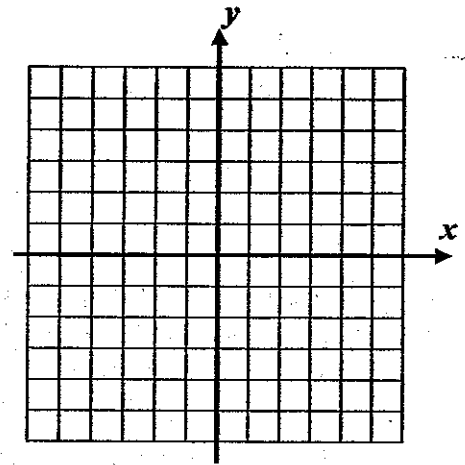
(3) (0, 3)

(2) (0, -2)

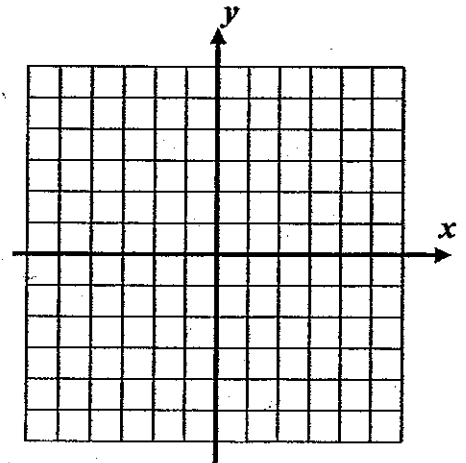
(4) (2, 1)

For problems 2 and 3, graph each system of inequalities and label the solution set S .

2. $y \geq 2x$ and $y > x - 1$.



3. $x - 2y \leq -4$ and $y < 3$.



Name: _____

Date: _____

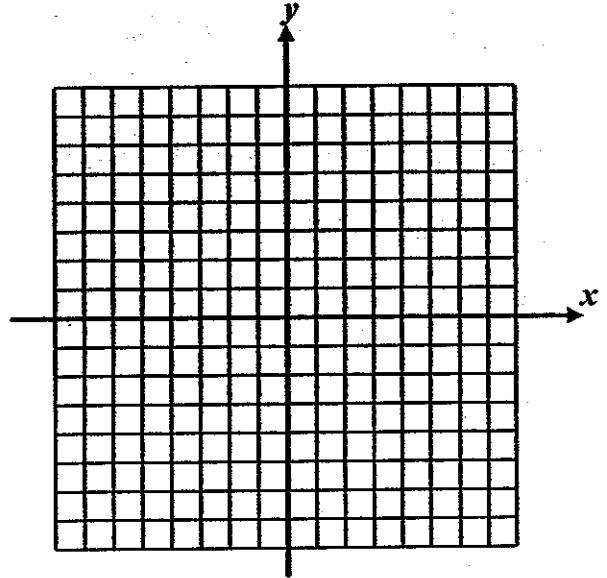
5.06 Algebra HOMEWORK

Solving Systems of Linear Inequalities

$$y < 2x - 3$$

4. Consider the system of linear inequalities: $y \geq \frac{-2}{3}x + 2$

(a) Graph this system and label its solution set S .



(b) Determine whether or not each of the following points lies in the solution set of this system of linear inequalities.

(0, 0)

(6, 2)

(0, -6)