

# 5-6 Practice

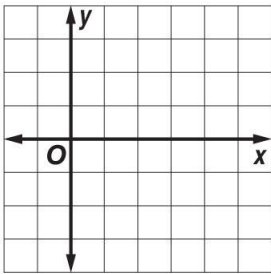
## Graphing Inequalities in Two Variables

Determine which ordered pairs are part of the solution set for each inequality.

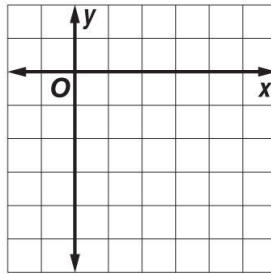
1.  $3x + y \geq 6$ ,  $\{(4, 3), (-2, 4), (-5, -3), (3, -3)\}$
2.  $y \geq x + 3$ ,  $\{(6, 3), (-3, 2), (3, -2), (4, 3)\}$
3.  $3x - 2y < 5$ ,  $\{(4, -4), (3, 5), (5, 2), (-3, 4)\}$

Graph each inequality.

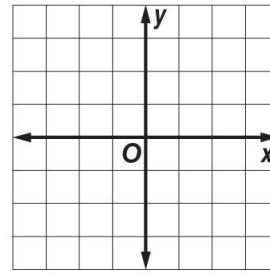
4.  $2y - x < -4$



5.  $2x - 2y \geq 8$

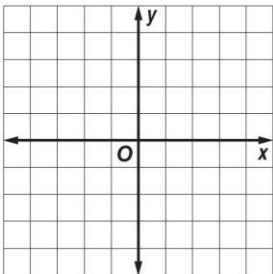


6.  $3y > 2x - 3$

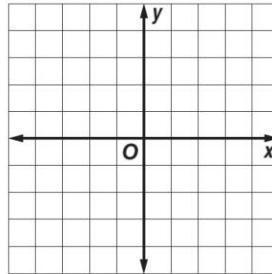


Use a graph to solve each inequality.

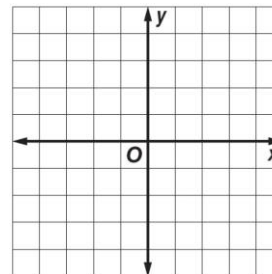
7.  $-5 \leq x - 9$



8.  $6 > \frac{2}{3}x + 5$



9.  $\frac{1}{2} > -2x + \frac{7}{2}$



**10. MOVING** A moving van has an interior height of 7 feet (84 inches). You have boxes in 12 inch and 15 inch heights, and want to stack them as high as possible to fit. Write an inequality that represents this situation.

**11. BUDGETING** Satchi found a used bookstore that sells pre-owned DVDs and CDs. DVDs cost \$9 each, and CDs cost \$7 each. Satchi can spend no more than \$35.

- a. Write an inequality that represents this situation.
- b. Does Satchi have enough money to buy 2 DVDs and 3 CDs?