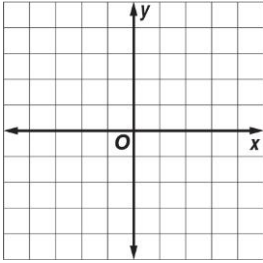# In-Class Practice, Objective 6-2
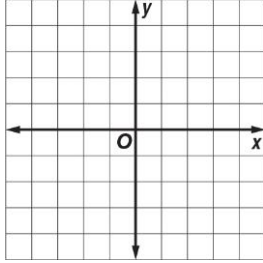## *Systems of Inequalities*

Solve each system of inequalities by graphing.
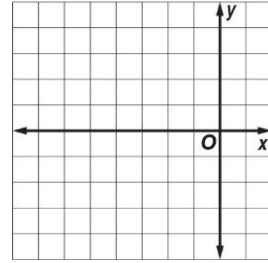
1. $x > -1$
$y \le -3$

2. $y > 2$
$x < -2$

3. $y > x + 3$
$y \le -1$

4. $x < 2$
$y - x \le 2$

5. $x + y \le -1$
$x + y \ge 3$
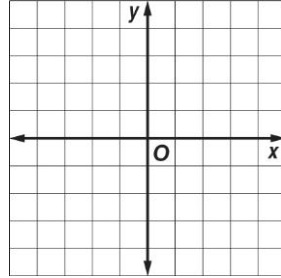
6. $y - x > 4$
$x + y > 2$

7. $y > x + 1$
$y \ge -x + 1$

8. $y \ge -x + 2$
$y < 2x - 2$

9. $y < 2x + 4$
$y \ge x + 1$

Write a system of inequalities for each graph.

10.

11.

12.

In-Class Practice, Objective 6-2
Systems of Inequalities

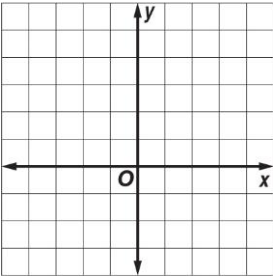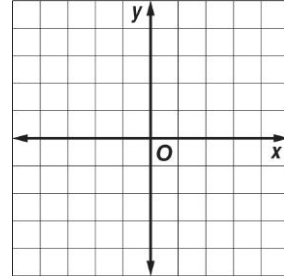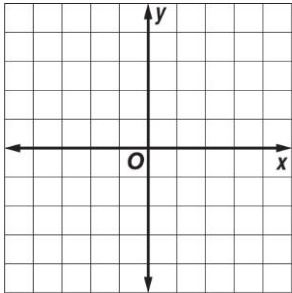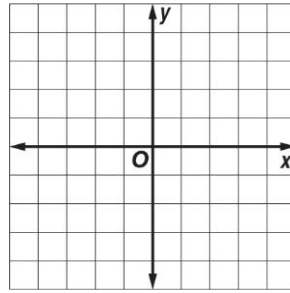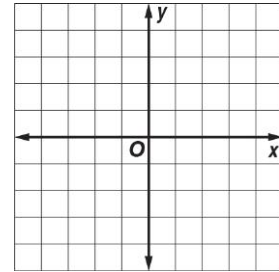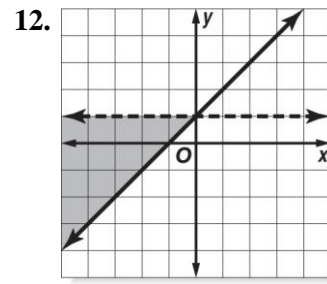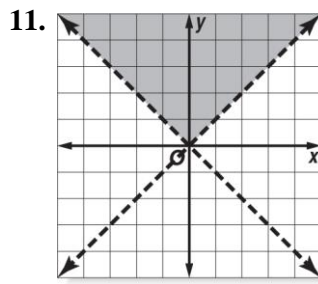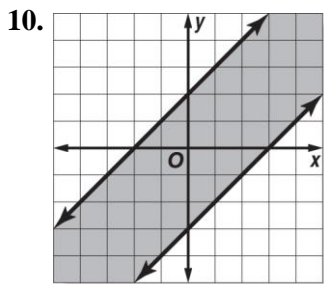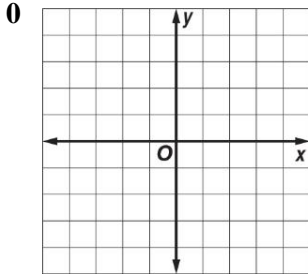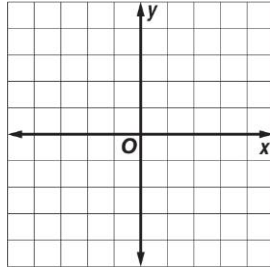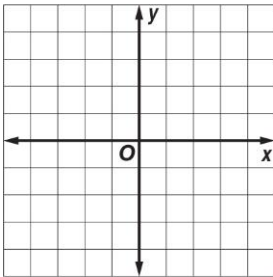**Solve each system of inequalities by graphing.**

1. $y > x - 2$
   $y \leq x$

0

2. $y \geq x + 2$
   $y > 2x + 3$

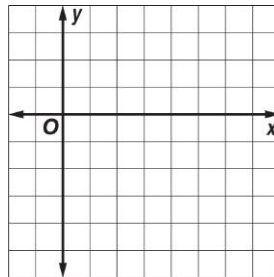**3.** $x + y \geq 1$
   $x + 2y > 1$
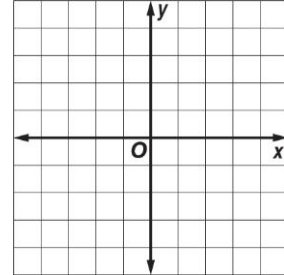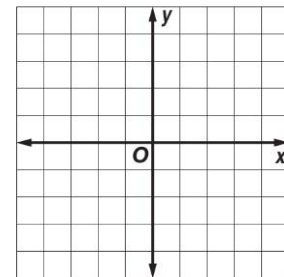
4. $y < 2x - 1$
 $y > 2 - x$

5. $y > x - 4$
   $2x + y \leq 2$

6. $2x - y \geq 2$
   $x - 2y \geq 2$

7. FITNESS Diego started an exercise program in which each week he works out at the gym between 4.5 and 6 hours and walks between 9 and 12 miles.

   a. Make a graph to show the number of hours Diego works out at the gym and the number of miles he walks per week.

   b. List three possible combinations of working out and walking that meet Diego's goals.

Diego's Routine

Walking (miles) vs. Gym (hours)
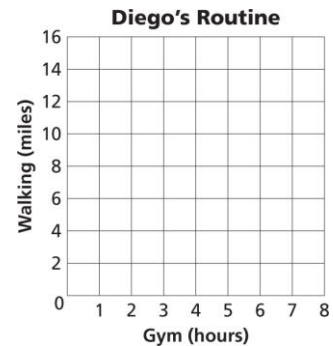
8. SOUVENIRS Emily wants to buy turquoise stones on her trip to New Mexico to give to at least 4 of her friends. The gift shop sells stones for either $4 or $6 per stone. Emily has no more than $30 to spend.

   a. Make a graph showing the numbers of each price of stone Emily can purchase.

   b. List three possible solutions.

Turquoise Stones

$6 Stones vs. $4 Stones