## 6-6  Practice

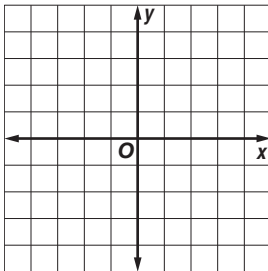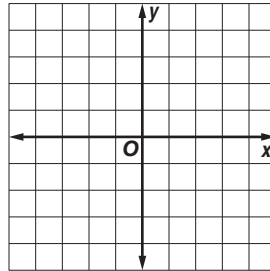### *Systems of Inequalities*

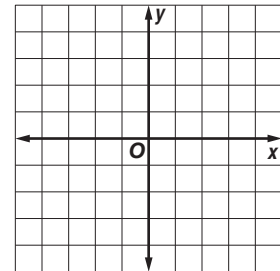**Solve each system of inequalities by graphing.**

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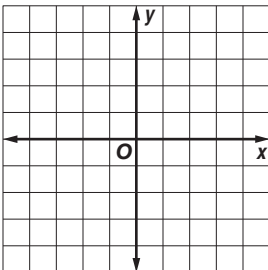   $y \leq x$

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

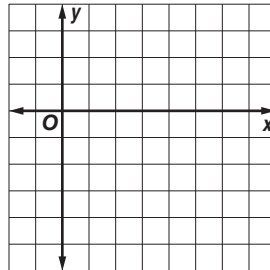**3.** $x + y \geq 1$
   $x + 2y > 1$
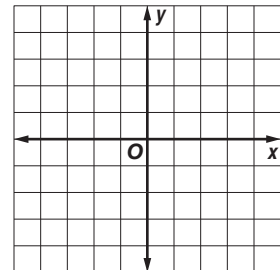
**4.** $y < 2x - 1$
   $y > 2 - x$

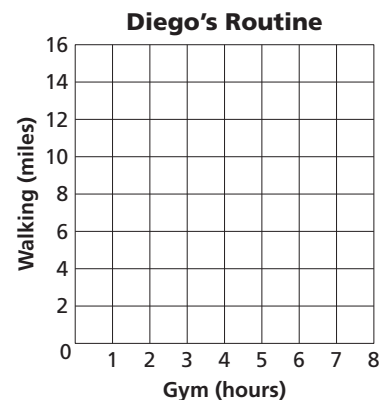**5.** $y > x - 4$
   $2x + y \leq 2$

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

**Lesson 6-6**

**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.   $x =$ hours at gym

   $y =$ miles walking

   **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**

**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.   $x =$ # of $4 stones

   $y =$ # of $6 stones

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

   **b.** List three possible solutions.

**Turquoise Stones**