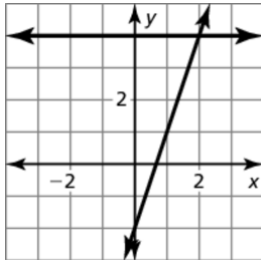


# 5.5

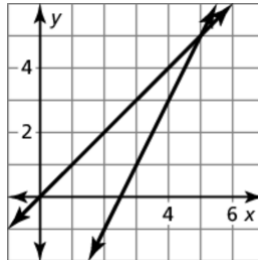
## Practice A

In Exercises 1 and 2, use the graph to solve the equation. Check your solution.

1.  $3x - 2 = 4$



2.  $x = 2x - 5$



In Exercises 3–6, solve the equation by graphing. Check your solution.

3.  $x - 6 = 3x$

4.  $-x = x - 4$

5.  $x - 4 = -2x + 2$

6.  $\frac{1}{3}x + 1 = x - 3$

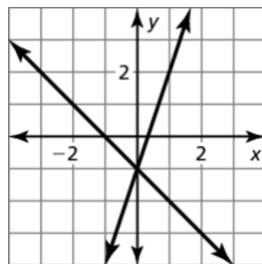
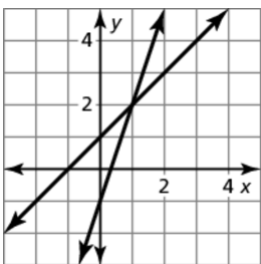
In Exercises 7 and 8, solve the equation by graphing. Determine whether the equation has *one solution*, *no solution*, or *infinitely many solutions*.

7.  $4x + 3 = 4x - 2$

8.  $3x + 6 = 3(x + 2)$

9. Use the graphs to solve the equation. Check your solutions.

$$|3x - 1| = |x + 1|$$



In Exercises 10 and 11, solve the equation by graphing. Check your solutions.

10.  $|x + 6| = |-2x|$

11.  $|x + 1| = |2x - 4|$

12. You need to rent a bowling lane. On Friday nights, you have two options. Option A is a \$20 lane rental plus \$3 per game. Option B is a \$35 lane rental with a maximum of 10 games. For what number of games is the total cost the same for each option?

# 5.6

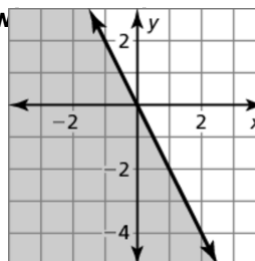
## Practice A

In Exercises 1–4, tell whether the ordered pair is a solution of the inequality.

- 1.  $x - y > 2$ ; (5, 4)
- 2.  $x + y \leq -3$ ; (-1, -4)
- 3.  $5x + y \leq 12$ ; (2, 2)
- 4.  $x - 3y > 6$ ; (3, -1)

In Exercises 5–10, tell whether the ordered pair is a solution of the inequality which is shown.

- 5. (1, 0)
- 6. (-1, -1)
- 7. (0, 0)
- 8. (-3, 1)
- 9. (2, -4)
- 10. (0, 3)

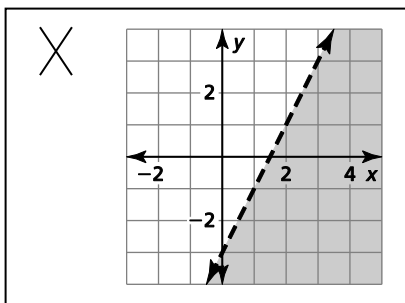


11. You have \$150 to spend on video games. The inequality  $7x + 32y \leq 150$  represents the number  $x$  of used video games and the number  $y$  of new video games that you can purchase. Can you purchase 10 used video games and 3 new video games? Explain.

In Exercises 12–17, graph the inequality in a coordinate plane.

- 12.  $y \geq 2$
- 13.  $x < -3$
- 14.  $y < -1$
- 15.  $y < 2x - 5$
- 16.  $y \geq -x + 3$
- 17.  $-3x + y \leq 1$

18. Describe and correct the error in graphing  $y > 2x - 3$ .



In Exercises 19 and 20, write an inequality that represents the graph.

