

5.4

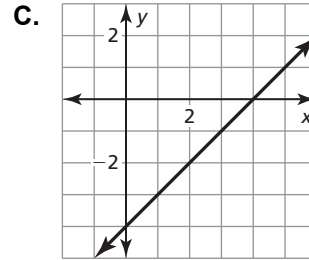
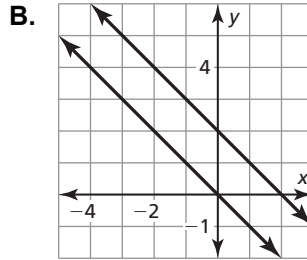
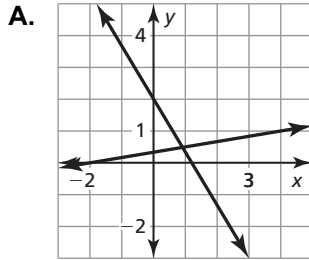
Practice A

In Exercises 1–3, match the system of linear equations with its graph. Then determine whether the system has *one solution*, *no solution*, or *infinitely many solutions*.

1. $x + y = 0$
 $3x + 3y = 6$

2. $5x + 3y = 6$
 $x - 6y = -2$

3. $-2x + 2y = -8$
 $x - y = 4$



In Exercises 4–6, solve the system of linear equations.

4. $y = 5x + 1$
 $y = 5x - 1$

5. $y = 3x + 7$
 $y = -3x + 7$

6. $-x - 4y = 10$
 $x + 4y = -10$

In Exercises 7–9, use only the slopes and *y*-intercepts of the graphs of the equations to determine whether the system of linear equations has *one solution*, *no solution*, or *infinitely many solutions*. Explain.

7. $y = 2x - 5$
 $4x - 2y = 10$

8. $y = -5x + 3$
 $15x + 3y = -3$

9. $-x + 2y = 4$
 $2x + y = 3$

10. Describe and correct the error in solving the system of linear equations.

\times $y = -2x + 5$
 $2x + y = 5$

The lines have different slopes.
So, the system has one solution.

11. You downloaded 2 DVDs and 10 songs for \$18. Your friend downloaded 3 DVDs and 15 songs for \$27. Write a system of linear equations that represents this situation. Can you determine the price of each DVD and each song? Explain.