## **Practice 7-3**

## Solving Systems Using Elimination

Solve by elimination. Show your work.

1. 
$$x + 2y = 7$$
  
 $3x - 2y = -3$ 

**4.** 
$$2x + 5y = -1$$
  
 $x + 2y = 0$ 

**7.** 
$$9x - 3y = 24$$
  
 $7x - 3y = 20$ 

**10.** 
$$4x - y = 6$$
  
 $3x + 2y = 21$ 

**13.** 
$$2x - 3y = -11$$
  
 $3x + 2y = 29$ 

**16.** 
$$-2x + 3y = -9$$
  
 $x + 3y = 3$ 

**19.** 
$$-2x + 3y = 25$$
  
 $-2x + 6y = 58$ 

**22.** 
$$-x + 8y = -32$$
  
 $3x - y = 27$ 

**25.** 
$$6x + 3y = 0$$
  $-3x + 3y = 9$ 

**28.** 
$$4x - 7y = -15$$
  $-4x - 3y = -15$ 

**31.** 
$$x + 8y = 28$$
  $-3x + 5y = 3$ 

**34.** 
$$-6x + 12y = 120$$
  
 $5x - 6y = -48$ 

**40.** 
$$2x + 8y = -42$$
  
 $-x + 8y = -63$ 

**43.** 
$$8x - 2y = 58$$
  $6x - 2y = 40$ 

**2.** 
$$3x + y = 20$$
  
 $x + y = 12$ 

**5.** 
$$3x + 6y = 6$$
  
 $2x - 3y = 4$ 

**8.** 
$$2x + 7y = 5$$
  
 $2x + 3y = 9$ 

**11.** 
$$x + 2y = 9$$
  $3x + 2y = 7$ 

**14.** 
$$8x - 9y = 19$$
  
 $4x + y = -7$ 

**17.** 
$$4x - 3y = 11$$
  
 $3x - 5y = -11$ 

**20.** 
$$3x + 8y = 81$$
  
 $5x - 6y = -39$ 

**23.** 
$$2x + 7y = -7$$
  
 $5x + 7y = 14$ 

**26.** 
$$7x + 3y = 25$$
  $-2x - y = -8$ 

**29.** 
$$5x + 7y = -1$$
  
 $4x - 2y = 22$ 

**32.** 
$$8x - 6y = -122$$
  
 $-4x + 6y = 94$ 

**35.** 
$$-x + 3y = 5$$
  
 $-x - 3y = 1$ 

**38.** 
$$6x - 8y = 40$$
  
 $5x + 8y = 48$ 

**41.** 
$$5x + 9y = 112$$
  
 $3x - 2y = 8$ 

**44.** 
$$7x - 9y = -57$$
  
 $-7x + 10y = 68$ 

**3.** 
$$5x + 7y = 77$$
  
 $5x + 3y = 53$ 

**6.** 
$$2x + y = 3$$
  $-2x + y = 1$ 

**9.** 
$$x + y = 30$$
  $x - y = 6$ 

**12.** 
$$3x + 5y = 10$$
  
 $x - 5y = -10$ 

**15.** 
$$2x + 6y = 0$$
  $-2x - 5y = 0$ 

**18.** 
$$3x + 7y = 48$$
  
 $5x - 7y = -32$ 

**21.** 
$$8x + 13y = 179$$
  
 $2x - 13y = -69$ 

**24.** 
$$x + 6y = 48$$
  $-x + y = 8$ 

**27.** 
$$3x - 8y = 32$$
  
 $-x + 8y = -16$ 

**30.** 
$$6x - 3y = 69$$
  
 $7x - 3y = 76$ 

**33.** 
$$2x + 9y = 36$$
  
 $2x - y = 16$ 

**36.** 
$$10x - 4y = 6$$
  
 $10x + 3y = 13$ 

**39.** 
$$3x + y = 27$$
  
 $-3x + 4y = -42$ 

**42.** 
$$-3x + 2y = 0$$
  
 $-3x + 5y = 9$ 

**45.** 
$$9x + 3y = 2$$
  $-9x - y = 0$ 

- **46.** Shopping at Savers Mart, Lisa buys her children four shirts and three pairs of pants for \$85.50. She returns the next day and buys three shirts and five pairs of pants for \$115.00. What is the price of each shirt and each pair of pants?
- **47.** Grandma's Bakery sells single-crust apple pies for \$6.99 and double-crust cherry pies for \$10.99. The total number of pies sold on a busy Friday was 36. If the amount collected for all the pies that day was \$331.64, how many of each type were sold?