



# Practice

## 7.2 The Substitution Method

Solve and check each system by using the substitution method.

1.  $\begin{cases} y = 2x \\ 2x + y = -12 \end{cases}$  \_\_\_\_\_

2.  $\begin{cases} y = x + 3 \\ 3x + y = 11 \end{cases}$  \_\_\_\_\_

3.  $\begin{cases} y = 2x + 1 \\ x + 3y = 31 \end{cases}$  \_\_\_\_\_

4.  $\begin{cases} x + y = 3 \\ 4x - 2y = 18 \end{cases}$  \_\_\_\_\_

5.  $\begin{cases} 2x - 3y = -25 \\ 3x + y = 1 \end{cases}$  \_\_\_\_\_

6.  $\begin{cases} x - 2y = -3 \\ 4x - 3y = 8 \end{cases}$  \_\_\_\_\_

7.  $\begin{cases} 2x + 5y = -7 \\ 3x - y = -2 \end{cases}$  \_\_\_\_\_

8.  $\begin{cases} 2x - y = -11 \\ 3x - 6y = 6 \end{cases}$  \_\_\_\_\_

9.  $\begin{cases} x - y = 4 \\ 2x - 3y = 6 \end{cases}$  \_\_\_\_\_

10.  $\begin{cases} 3x + y = -3 \\ x - 3y = 11 \end{cases}$  \_\_\_\_\_

11.  $\begin{cases} x - y = 10 \\ 2x + 3y = 5 \end{cases}$  \_\_\_\_\_

12.  $\begin{cases} 2x + y = 2 \\ 4x - 2y = -4 \end{cases}$  \_\_\_\_\_

13.  $\begin{cases} x = y - 4.2 \\ 2x - 3y = -9 \end{cases}$  \_\_\_\_\_

14.  $\begin{cases} -2x - y = 4 \\ x + y = -3 \end{cases}$  \_\_\_\_\_

15.  $\begin{cases} 4x - y = -2 \\ -8x + y = 3 \end{cases}$  \_\_\_\_\_

16.  $\begin{cases} 2x - 2y = 2 \\ 3x + y = -9 \end{cases}$  \_\_\_\_\_

Graph each system and estimate the solution. Then use the substitution method to get an exact solution.

17.  $\begin{cases} y = 2x \\ 2x + y = 7 \end{cases}$  \_\_\_\_\_

18.  $\begin{cases} x + y = 2 \\ x - 2y = 0 \end{cases}$  \_\_\_\_\_

