

LESSON 6.1 Skills Practice

Transform both equations in each system of equations so that each coefficient is an integer.

7.
$$\begin{cases} \frac{1}{2}x + \frac{3}{2}y = 4 \\ \frac{2}{3}x - \frac{1}{3}y = 7 \end{cases}$$

8.
$$\begin{cases} -\frac{1}{3}x + \frac{1}{2}y = 5 \\ \frac{3}{4}x - \frac{1}{4}y = 10 \end{cases}$$

9.
$$\begin{cases} \frac{5}{4}x - 3 = \frac{1}{6}y \\ \frac{2}{5}x + \frac{1}{5}y = \frac{9}{5} \end{cases}$$

10.
$$\begin{cases} 0.5x + 1.2y = 2 \\ 3.3x - 0.7y = 3 \end{cases}$$

11.
$$\begin{cases} 0.2x - 0.4y = 2 \\ -0.1x - 0.5y = 1.1 \end{cases}$$

12.
$$\begin{cases} 0.3y = 2 - 0.8x \\ 1.1x = 3y - 0.4 \end{cases}$$

Solve each system of equations by substitution. Determine whether the system is consistent or inconsistent.

$$13. \begin{cases} y = 2x - 3 \\ x = 4 \end{cases}$$

$$14. \begin{cases} 2x + y = 9 \\ y = 5x + 2 \end{cases}$$

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

$$16. \begin{cases} \frac{1}{2}x + \frac{3}{2}y = -7 \\ \frac{1}{3}y = 2x - 10 \end{cases}$$

$$17. \begin{cases} 0.8x - 0.2y = 1.5 \\ 0.1x + 1.2y = 0.8 \end{cases}$$

$$18. \begin{cases} 0.3y = 0.6x + 0.3 \\ 1.2x + 0.6 = 0.6y \end{cases}$$