

## Practice

**Solving Systems of Equations Algebraically****Solve each system of equations by using substitution.**

1. 
$$\begin{aligned} 2x + y &= 4 \\ 3x + 2y &= 1 \end{aligned}$$

2. 
$$\begin{aligned} x - 9 &= 3y \\ x + 2y &= -1 \end{aligned}$$

3. 
$$\begin{aligned} x + 3y &= 8 \\ \frac{1}{3}x + y &= 9 \end{aligned}$$

4. 
$$\begin{aligned} 2x - 3y &= 6 \\ -\frac{2}{3}x + y &= -2 \end{aligned}$$

**Solve each system of equations by using elimination.**

5. 
$$\begin{aligned} 2x + y &= 1 \\ 3x - y &= 14 \end{aligned}$$

6. 
$$\begin{aligned} 2x - y &= -1 \\ 3x + 2y &= 30 \end{aligned}$$

7. 
$$\begin{aligned} 6x + 3y &= 6 \\ 8x + 5y &= 12 \end{aligned}$$

8. 
$$\begin{aligned} \frac{3x - y}{2} &= 5 \\ \frac{4x - y}{4} &= 4 \end{aligned}$$

**Solve each system of equations. Use either substitution or elimination.**

9. 
$$\begin{aligned} 8x + 3y + 5 &= 0 \\ 10x + 6y + 13 &= 0 \end{aligned}$$

10. 
$$\begin{aligned} \frac{2x}{5} - \frac{3y}{4} &= -2 \\ \frac{x}{2} + \frac{y}{4} &= 7 \end{aligned}$$

11. 
$$\begin{aligned} \frac{x}{4} - \frac{y}{3} &= 1 \\ \frac{1}{3}x - \frac{4y}{9} &= \frac{4}{3} \end{aligned}$$

12. 
$$\begin{aligned} 4x - 2y &= 5 \\ 2x &= y - 1 \end{aligned}$$