

## Solve Systems of Equations 5

**Solve each system by substitution.**

1)  $y = -6x + 15$   
 $-18x - 3y = -45$

2)  $y = -5x - 15$   
 $3x + 2y = -9$

**Solve each system by elimination.**

3)  $-12x - 7y = 13$   
 $3x + 4y = 8$

4)  $16x + 10y = 12$   
 $8x + 5y = -2$

5)  $-11x + 15 = 3y$   
 $-6x = 7y - 35$

6)  $3y + 7x = -23$   
 $8y = -10x + 8$

$$\begin{aligned} 7) \quad & 4a + 3b + 3c = -6 \\ & 5a + 3b + 6c = -6 \\ & a + 2b + 3c = -10 \end{aligned}$$

$$\begin{aligned} 8) \quad & -x - y + 2z = -1 \\ & 2x - 2y - 3z = 6 \\ & -3x + 3y + 6z = -15 \end{aligned}$$

$$\begin{aligned} 9) \quad & 6x - 6y - 2z = 16 \\ & 3x + 3y + 4z = 19 \\ & 3x - y - z = 10 \end{aligned}$$

$$\begin{aligned} 10) \quad & -2x - 5y + 5z = 22 \\ & -4x + 2y - 6z = 4 \\ & 5x - 3y - 6z = 25 \end{aligned}$$

## Answers to Solve Systems of Equations 5 (ID: 1)

- |                                 |                |                    |                  |
|---------------------------------|----------------|--------------------|------------------|
| 1) Infinite number of solutions | 2) $(-3, 0)$   | 3) $(-4, 5)$       |                  |
| 4) No solution                  | 5) $(0, 5)$    | 6) $(-8, 11)$      | 7) $(3, -5, -1)$ |
| 8) $(-5, -2, -4)$               | 9) $(4, 1, 1)$ | 10) $(-1, -6, -2)$ |                  |