

Assignment

Date _____

Period _____

Solve each system by elimination.

$$\begin{aligned} 1) \quad & -x + 5y - z = 7 \\ & 2x - 4y - z = -14 \\ & 2x + 4y - 5z = -14 \end{aligned}$$

Infinitely many solutions

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

No solution

$$\begin{aligned} 2) \quad & 3a - 6b + 3c = -9 \\ & 2a - b - c = 23 \\ & -2a + 4b - 2c = 4 \end{aligned}$$

No solution

$$\begin{aligned} 4) \quad & -2x - 6y - 4z = -14 \\ & x + 5y + 3z = 15 \\ & 5x + 3y + 4z = -13 \end{aligned}$$

Infinitely many solutions

$$\textcircled{1} \left(-\frac{3z}{2} - 7, -\frac{z}{2}, z \right)$$

$$\textcircled{4} \left(\frac{z}{2} - 5, \frac{z}{2} + 4, z \right)$$