

## REDEMPTION [Gauss-Jordan Elimination]

**Solve each system of linear equations using Gauss-Jordan elimination.**

1)  $-2x - 4y = 2$

$2x - 2y = 16$

2)  $-3x + 3y = 6$

$-x - 4y = -18$

3)  $-x - y - z = 6$

$x - 2z = 6$

$-4x - 4y - 4z = 4$

4)  $-3x - 3y = 9$

$-4x - y + 3z = -6$

$-5x - 4y + z = 9$

5)  $-5x + 3y - 3z = 8$

$x - 5y - 3z = 16$

$-x + 2y = -4$

## REDEMPTION [Gauss-Jordan Elimination]

**Solve each system of linear equations using Gauss-Jordan elimination.**

$$\begin{aligned} 1) \quad -2x - 4y &= 2 \\ 2x - 2y &= 16 \end{aligned}$$

$$(5, -3)$$

$$\begin{aligned} 2) \quad -3x + 3y &= 6 \\ -x - 4y &= -18 \end{aligned}$$

$$(2, 4)$$

$$\begin{aligned} 3) \quad -x - y - z &= 6 \\ x - 2z &= 6 \\ -4x - 4y - 4z &= 4 \end{aligned}$$

No solution.

$$\begin{aligned} 4) \quad -3x - 3y &= 9 \\ -4x - y + 3z &= -6 \\ -5x - 4y + z &= 9 \end{aligned}$$

$$(z+3, -z-6, z)$$

$$\begin{aligned} 5) \quad -5x + 3y - 3z &= 8 \\ x - 5y - 3z &= 16 \\ -x + 2y &= -4 \end{aligned}$$

$$(-4, -4, 0)$$