

Algebra 3 Assignment # 2

Use Matrix Elimination to solve:

$$\begin{aligned} &x - 2y + 3z = -2 \\ \text{(1)} \quad &-4x + 10y + 2z = -2 \\ &3x + y + 10z = 7 \end{aligned}$$

$$\begin{aligned} &-x + 2y + 3z = 11 \\ \text{(2)} \quad &2x - 3y = -6 \\ &3x - 3y + 3z = 3 \end{aligned}$$

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

$$\begin{aligned} &-2x + y + 2z = 14 \\ \text{(4)} \quad &5x + z = -10 \\ &x - 2y - 3z = -14 \end{aligned}$$

Answers:

1. $x=5$; $y=2$; $z=-1$
2. $x=3$; $y=4$; $z=2$
3. NS
4. $x=-3$; $y=-2$; $z=5$