

Honors Pre-Calc
7.3 Practice
No Calculator

Name _____

Date _____ Block _____

Solve the system using Gaussian Elimination.

$$\begin{array}{l} x - y + z = 0 \\ 1. \quad 2x - 3z = -1 \\ \quad \quad -x - y + 2z = -1 \end{array}$$

$$\begin{array}{l} 2x + y - 3z = 0 \\ 2. \quad 2x + 2y - z = 2 \\ \quad \quad 3x - 2y + z = -7 \end{array}$$

Find the Reduced Row Echelon Form to solve.

$$\begin{array}{l} 4x - 5y - 6z = -1 \\ 3. \quad x - 2y - 5z = -12 \\ \quad \quad 2x - y = 7 \end{array}$$

$$\begin{array}{l} x + y + z = 4 \\ 4. \quad x - 2y + z = 7 \\ \quad \quad x + 3y + 2z = 4 \end{array}$$

$$\begin{array}{l} x + y + 3z = 2 \\ 5. \quad 3x + 4y + 10z = 5 \\ \quad \quad x + 2y + 4z = 3 \end{array}$$

$$\begin{array}{l} x + 2z = 1 \\ 6. \quad 3x + 2y + 4 = 7 \\ \quad \quad 2x + y + 3z = 4 \end{array}$$

Solve the system using Cramer's Rule.

$$\begin{array}{l} 7. \quad 2x + y = 9 \\ \quad \quad 2x + 3y = 19 \end{array}$$

$$\begin{array}{l} x + 2y - z = -4 \\ 8. \quad x + 4y - 2z = -6 \\ \quad \quad 2x + 3y + z = 3 \end{array}$$

$$\begin{array}{l} x - y + 2z = 6 \\ 9. \quad -2x + 3y - z = -7 \\ \quad \quad 3x + 2y + 2z = 5 \end{array}$$

Solve the system of equations by using an inverse matrix:

$$\begin{array}{l} 10. \quad x + 2y = -2 \\ \quad \quad 3x - 4y = 9 \end{array}$$

$$\begin{array}{l} 11. \quad 2x - 3y = -13 \\ \quad \quad 4x + y = -5 \end{array}$$

$$\begin{array}{l} 12. \quad 6x + 5y = 13 \\ \quad \quad 5x + 4y = 10 \end{array}$$