

Gaussian Elimination ... Set 1

Gaussian Elimination: Solve each system by Gaussian Elimination.

1. Interchange two equations.

2. Multiply one of the equations by a nonzero constant.

3. Add a multiple of one equation to another equation.

$$\begin{aligned} 11) \quad & 2x + 2y - 3z = 5 \\ & -2x + 5y + 2z = 10 \\ & -6y + z = -13 \end{aligned}$$

$$\begin{aligned} 12) \quad & -3x + 6y - 3z = 21 \\ & -3x - 3y - 4z = 9 \\ & 3x - 5y - 2z = 11 \end{aligned}$$

$$\begin{aligned} 13) \quad & -5x - 6y - 5z = 7 \\ & -5x + 2y - 5z = -9 \\ & 2x - y + 5z = 1 \end{aligned}$$

$$\begin{aligned} 14) \quad & 4x - 6y + z = 7 \\ & -4x + 5y + 3z = 3 \\ & y + 4z = 14 \end{aligned}$$

$$\begin{aligned} 15) \quad & -x + 2y - 4z = 1 \\ & -x - 5y + 3z = 15 \\ & x - 6y - 6z = 7 \end{aligned}$$

$$\begin{aligned} 16) \quad & 2x - 5y - 4z = 8 \\ & -2x + 2y - 6z = -12 \\ & 3y + 10z = 4 \end{aligned}$$

$$\begin{aligned} 17) \quad & -3x - 3y - 5z = 13 \\ & -3x - y - 3z = -1 \\ & 3x + y + 5z = -3 \end{aligned}$$

$$\begin{aligned} 18) \quad & 5x - 3y - 2z = 4 \\ & 5x + y + 5z = -1 \\ & -5x + 6y - 5z = 29 \end{aligned}$$

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

$$\begin{aligned} 20) \quad & -x - y + 4z = -24 \\ & -x - 2y + 5z = -27 \\ & x + 2y - 4z = 22 \end{aligned}$$