

SOLVE SIMULTANEOUS LINEAR EQUATION USING GAUSSIAN ELIMINATION METHOD

Solve
$$\begin{array}{rcl} x + y - z & = & 1 \\ 2x - y + 2z & = & 0 \\ x + 2y - 2z & = & 2 \end{array}$$
 by using Gaussian Elimination Method.

$$\left(\begin{array}{ccc|c} & & & \end{array} \right) \left(\begin{array}{c} \\ \\ \end{array} \right) = \left(\begin{array}{c} \\ \\ \end{array} \right)$$

$$\xrightarrow[\xrightarrow{R_3 - R_1}]{2R_1 - R_2} \left(\begin{array}{ccc|c} & & & \end{array} \right)$$

$$\xrightarrow{R_2 + 3R_3} \left(\begin{array}{ccc|c} & & & \end{array} \right)$$

$$\begin{array}{rcl} x + y - z & & \\ 3y - 4z & = & \\ -z & & \end{array}$$

$$z = \qquad y = \qquad x =$$