Gauss Jordan

$$\begin{bmatrix} 6 & 2 & -4 \\ -2 & 2 & 0 \\ 4 & 0 & 8 \end{bmatrix} \begin{bmatrix} I_1 \\ I_2 \\ I_3 \end{bmatrix} = \begin{bmatrix} 0 \\ 10 \\ 0 \end{bmatrix}$$

Dari matriks diatas didapatkan matriks augmented

$$\begin{bmatrix} 6 & -2 & -4 & 0 \\ -2 & 2 & 0 & 10 \\ -4 & 0 & 8 & 0 \end{bmatrix}$$

OBE

$$\left[\begin{array}{ccc|c} 6 & -3 & -4 & 0 \\ -2 & 2 & 0 & 10 \\ -4 & 0 & 8 & 0 \end{array}\right] \quad b_1/6$$

$$\left[\begin{array}{ccc|c} 1 & -0.333 & -0.667 & 0 \\ -2 & 2 & 0 & 10 \\ -4 & 0 & 8 & 0 \end{array}\right] \begin{array}{l} \\ 2b_1 + b_2 \\ 4b_1 + b_3 \end{array}$$

$$\left[\begin{array}{ccc|c} 1 & -0.333 & -0.667 & 0 \\ 0 & 1.333 & -1.333 & 10 \\ 0 & -1.333 & 5.333 & 0 \end{array}\right] \begin{array}{l} \\ B_3 + B_2 \\ \end{array}$$

$$\left[\begin{array}{ccc|c} 1 & -0.333 & -0.667 & 0 \\ 0 & 1.333 & -1.333 & 10 \\ 0 & 0 & 4 & 10 \end{array}\right] \begin{array}{l} \\ B_2 / 1.333 \\ \end{array}$$

$$\begin{bmatrix} 1 & -0,333 & -0,667 & 0 \\ 0 & 1 & -1 & 7,5 \\ 0 & 0 & a & 10 \end{bmatrix} \quad B_3/a$$

$$\begin{bmatrix} 1 & -0,333 & -0,667 & 0 \\ 0 & 1 & -1 & 7,5 \\ 0 & 0 & 1 & 2,5 \end{bmatrix} \quad 0,667\,B_3 + B_1$$

$$\begin{bmatrix} 1 & -0,333 & 0 & 1,667 \\ 0 & 1 & -1 & 7,5 \\ 0 & 0 & 1 & 2,5 \end{bmatrix} \quad B_2 + B_3$$

$$\begin{bmatrix} 1 & -0,333 & 0 & 1,667 \\ 0 & 1 & 0 & 10 \\ 0 & 0 & 1 & 2,5 \end{bmatrix} \quad B_1 + 0,333\,B_2$$

$$\begin{bmatrix} 1 & 0 & 0 & 5 \\ 0 & 1 & 0 & 10 \\ 0 & 0 & 1 & 2,5 \end{bmatrix}$$

maka didapatkan $I_1 = 5A$, $I_2 = 10A$, $I_3 = 2,5A$