

Op 1.0 p A.30

$$C = \begin{pmatrix} 2 & 4 & 0 \\ 4 & 6 & 3 \\ -6 & -10 & 0 \end{pmatrix}$$

$$\left(\begin{array}{ccc|ccc} 2 & 4 & 0 & 1 & 0 & 0 \\ 4 & 6 & 3 & 0 & 1 & 0 \\ -6 & -10 & 0 & 0 & 0 & 1 \end{array} \right)$$

$$\begin{array}{l} R_2 - 2R_1 \\ \sim \\ R_3 + 3R_1 \end{array} \left(\begin{array}{ccc|ccc} 2 & 4 & 0 & 1 & 0 & 0 \\ 0 & -2 & 3 & -2 & 1 & 0 \\ 0 & -2 & 0 & 3 & 0 & 1 \end{array} \right)$$

$$\begin{array}{l} R_1 + 2R_2 \\ \sim \\ R_3 + R_2 \\ R_1 - 2R_3 \\ \sim \\ R_2 - R_3 \\ \frac{1}{2}R_1 \\ \sim \\ -\frac{1}{2}R_2 \\ \frac{1}{3}R_3 \end{array} \left(\begin{array}{ccc|ccc} 2 & 0 & 6 & -3 & 2 & 0 \\ 0 & -2 & 3 & -2 & 1 & 0 \\ 0 & 0 & 3 & 1 & 1 & 1 \\ 2 & 0 & 0 & -5 & 0 & -2 \\ 0 & -2 & 0 & -3 & 0 & -1 \\ 0 & 0 & 3 & 1 & 1 & 1 \\ 1 & 0 & 0 & -5/2 & 0 & -1 \\ 0 & 1 & 0 & +3/2 & 0 & +1/2 \\ 0 & 0 & 1 & 1/3 & 1/3 & 1/3 \end{array} \right)$$

$$C^{-1} = \begin{pmatrix} -5/2 & 0 & -1 \\ 3/2 & 0 & 1/2 \\ 1/3 & 1/3 & 1/3 \end{pmatrix}$$