

求下列方陣之反矩陣

$$A = \begin{bmatrix} 3 & 2 \\ 6 & 4 \end{bmatrix}$$

(Key) 單元矩陣

$$[A | I_n] = \left[ \begin{array}{cc|cc} 3 & 2 & 1 & 0 \\ 6 & 4 & 0 & 1 \end{array} \right]$$

最簡列梯形

$$\left[ \begin{array}{cc|cc} 3 & 2 & 1 & 0 \\ 6 & 4 & 0 & 1 \end{array} \right] \times \frac{1}{3}$$

$$= \left[ \begin{array}{cc|cc} 1 & \frac{2}{3} & \frac{1}{3} & 0 \\ 6 & 4 & 0 & 1 \end{array} \right] \begin{array}{l} \leftarrow \\ \leftarrow \end{array} \times -6$$

$$\begin{array}{l} \frac{2}{3} \times -6 \\ = -4 \end{array}$$

$$= \left[ \begin{array}{cc|cc} 1 & \frac{2}{3} & \frac{1}{3} & 0 \\ 0 & 0 & -2 & 1 \end{array} \right]$$

無法得單元矩陣

說明 A 為反矩陣

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