

Let $\mathbf{A} = \begin{bmatrix} 1 & 3 \\ 2 & 5 \end{bmatrix}$ and $\mathbf{B} = \begin{bmatrix} 1 & 1 & 3 \\ 2 & 1 & 4 \end{bmatrix}$, get \mathbf{AB} and \mathbf{BA} . [103 東海電機六]

$$[\text{解}] \mathbf{AB} = \begin{bmatrix} 1 & 3 \\ 2 & 5 \end{bmatrix} \begin{bmatrix} 1 & 1 & 3 \\ 2 & 1 & 4 \end{bmatrix} = \begin{bmatrix} 7 & 4 & 15 \\ 12 & 7 & 26 \end{bmatrix}$$

$$\mathbf{BA} = \begin{bmatrix} 1 & 1 & 3 \\ 2 & 1 & 4 \end{bmatrix} \begin{bmatrix} 1 & 3 \\ 2 & 5 \end{bmatrix} \text{無法計算}$$



南臺科技大學

Southern Taiwan University of Science and Technology