

$$\begin{bmatrix}
 a_{11} & a_{12} & \cdots & a_{1n} \\
 \vdots & \vdots & & \vdots \\
 a_{i1} & a_{i2} & \cdots & a_{in} \\
 \vdots & \vdots & & \vdots \\
 a_{m1} & a_{m2} & \cdots & a_{mn}
 \end{bmatrix}
 \begin{bmatrix}
 b_{11} & \cdots & b_{1j} & \cdots & b_{1r} \\
 b_{21} & \cdots & b_{2j} & \cdots & b_{2r} \\
 \vdots & & \vdots & & \vdots \\
 b_{n1} & \cdots & b_{nj} & \cdots & b_{nr}
 \end{bmatrix}
 =
 \begin{bmatrix}
 c_{11} & \cdots & c_{1j} & \cdots & c_{1r} \\
 \vdots & & \vdots & & \vdots \\
 c_{i1} & \cdots & c_{ij} & \cdots & c_{ir} \\
 \vdots & & \vdots & & \vdots \\
 c_{m1} & \cdots & c_{mj} & \cdots & c_{mr}
 \end{bmatrix}$$