$$\begin{bmatrix} A_{1,1} & \cdots & A_{1,k} & \cdots & A_{1,n} \\ \vdots & \vdots & \vdots & \vdots \\ A_{i,1} & \cdots & A_{i,k} & \cdots & A_{i,n} \\ \vdots & \vdots & \vdots & \vdots & \vdots \\ B_{k,1} & \cdots & B_{k,j} & \cdots & B_{k,p} \\ \vdots & \vdots & \vdots & \vdots \\ B_{n,1} & \cdots & B_{n,j} & \cdots & B_{n,p} \end{bmatrix} = \begin{bmatrix} C_{1,1} & \cdots & C_{1,j} & \cdots & C_{1,p} \\ \vdots & \vdots & \vdots & \vdots \\ C_{i,1} & \cdots & C_{i,j} & \cdots & C_{i,p} \\ \vdots & \vdots & \vdots & \vdots \\ C_{m,1} & \cdots & C_{m,j} & \cdots & C_{m,p} \end{bmatrix}$$