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

$$A \qquad B \qquad C$$