$\underline{A}$ vom Typ $(2,\underline{2})$ ✓

$\underline{B}$ vom Typ $(\underline{2},2)$

$$\begin{pmatrix} b_{11} & b_{12} \\ b_{21} & b_{22} \end{pmatrix}$$

$$\begin{pmatrix} a_{11} & a_{12} \\ a_{21} & a_{22} \end{pmatrix} \quad \begin{pmatrix} c_{11} & c_{12} \\ c_{21} & c_{22} \end{pmatrix}$$

$$a_{11} \cdot b_{11} + a_{12} \cdot b_{21} = c_{11}$$
$$a_{11} \cdot b_{12} + a_{12} \cdot b_{22} = c_{12}$$

$$a_{21} \cdot b_{11} + a_{22} \cdot b_{21} = c_{21}$$
$$a_{21} \cdot b_{12} + a_{22} \cdot b_{22} = c_{22}$$

$\underline{A}$ vom Typ $(3,\underline{3})$

$\underline{B}$ vom Typ $(\underline{3},2)$ ✓

$$\begin{pmatrix} b_{11} & b_{12} \\ b_{21} & b_{22} \\ b_{31} & b_{32} \end{pmatrix}$$

$$\begin{pmatrix} a_{11} & a_{12} & a_{13} \\ a_{21} & a_{22} & a_{23} \\ a_{31} & a_{32} & a_{33} \end{pmatrix} \quad \begin{pmatrix} c_{11} & c_{12} \\ c_{21} & c_{22} \\ c_{31} & c_{32} \end{pmatrix}$$

$$a_{11} \cdot b_{11} + a_{12} \cdot b_{21} + a_{13} \cdot b_{31} = c_{11}$$
$$a_{11} \cdot b_{12} + a_{12} \cdot b_{22} + a_{13} \cdot b_{32} = c_{12}$$

$$a_{21} \cdot b_{11} + a_{22} \cdot b_{21} + a_{23} \cdot b_{31} = c_{21}$$
$$a_{21} \cdot b_{12} + a_{22} \cdot b_{22} + a_{23} \cdot b_{32} = c_{22}$$

$$a_{31} \cdot b_{11} + a_{32} \cdot b_{21} + a_{33} \cdot b_{31} = c_{31}$$
$$a_{31} \cdot b_{12} + a_{32} \cdot b_{22} + a_{33} \cdot b_{32} = c_{32}$$