

$$\left(\begin{array}{cc|c} 1 & 2 \\ 3 & 4 \end{array} \right) * \left(\begin{array}{cc} 5 & 6 \\ 7 & 8 \end{array} \right)$$

$$\left(\begin{array}{cc} 5 & 6 \\ 0 & 0 \end{array} \right) \xrightarrow{\quad} \left(\begin{array}{cc} 19 & 22 \\ 0 & 0 \end{array} \right) \xrightarrow{\quad} \left(\begin{array}{cc} 19 & 22 \\ 15 & 18 \end{array} \right) \xrightarrow{\quad} \left(\begin{array}{cc} 19 & 22 \\ 43 & 50 \end{array} \right)$$