

Before inserting a column $a := \begin{pmatrix} 1 & 2 \\ 0 & -1 \\ 1 & 1 \end{pmatrix}$ and after $a := \begin{pmatrix} 1 & \textcolor{red}{\blacksquare} & 2 \\ 0 & \blacksquare & -1 \\ 1 & \blacksquare & 1 \end{pmatrix}$