

$$\left| \begin{array}{ccc} 1 & 2 & 3 \\ 2 & 1 & 3 \\ 3 & 1 & 2 \end{array} \right| \xrightarrow[\begin{array}{c} -2R_1+R_2\rightarrow R_2 \\ -3R_1+R_3\rightarrow R_3 \end{array}]{\hspace{1cm}} \left| \begin{array}{ccc} 1 & 2 & 3 \\ 0 & -3 & -3 \\ 0 & -5 & -7 \end{array} \right|$$