

可逆矩阵

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$$\left[\begin{array}{ccc|c} 1 & -4 & -6 & 1 \\ -1 & -4 & 3 & 1 \\ -1 & 1 & -3 & 1 \end{array} \right]$$

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$$\rightarrow \left[\begin{array}{ccc|c} 1 & -4 & -6 & 1 \\ 0 & -8 & -3 & 2 \\ 0 & -3 & -9 & 2 \end{array} \right] \times -\frac{1}{8}$$

$$\rightarrow \left[\begin{array}{ccc|c} 1 & -4 & -6 & 1 \\ 0 & 1 & \frac{3}{8} & -\frac{2}{8} \\ 0 & -3 & -9 & 2 \end{array} \right] \rightarrow \left[\begin{array}{ccc|c} 1 & 0 & -\frac{9}{2} & 0 \\ 0 & 1 & \frac{3}{8} & -\frac{2}{8} \\ 0 & 0 & -\frac{63}{8} & \frac{5}{4} \end{array} \right]$$

$$\rightarrow \left[\begin{array}{ccc|c} 1 & 0 & 0 & -\frac{5}{7} \\ 0 & 1 & 0 & -\frac{4}{21} \\ 0 & 0 & 1 & -\frac{10}{63} \end{array} \right]$$