

2.1.2 (1) は計算が面倒なので省略

$$\begin{aligned}
 (2) \quad & \left(\begin{array}{ccc|ccc} 3 & 2 & 5 & 1 & 0 & 0 \\ -7 & 1 & 4 & 0 & 1 & 0 \\ 6 & 5 & -9 & 0 & 0 & 1 \end{array} \right) \rightarrow \left(\begin{array}{ccc|ccc} 1 & 3 & 4 & 5 & 0 & 0 \\ 0 & 1 & 4 & 0 & 1 & 0 \\ 6 & 5 & 5 & 0 & 0 & 1 \end{array} \right) \\
 & \rightarrow \left(\begin{array}{ccc|ccc} 1 & 3 & 4 & 5 & 0 & 0 \\ 0 & 1 & 4 & 0 & 1 & 0 \\ 0 & 1 & 2 & 5 & 0 & 1 \end{array} \right) \rightarrow \left(\begin{array}{ccc|ccc} 1 & 0 & 6 & 5 & 4 & 0 \\ 0 & 1 & 4 & 0 & 1 & 0 \\ 0 & 0 & 5 & 5 & 6 & 1 \end{array} \right) \\
 & \rightarrow \left(\begin{array}{ccc|ccc} 1 & 0 & 6 & 5 & 4 & 0 \\ 0 & 1 & 4 & 0 & 1 & 0 \\ 0 & 0 & 1 & 1 & 4 & 3 \end{array} \right) \rightarrow \left(\begin{array}{ccc|ccc} 1 & 0 & 0 & 6 & 1 & 3 \\ 0 & 1 & 0 & 3 & 6 & 2 \\ 0 & 0 & 1 & 1 & 4 & 3 \end{array} \right)
 \end{aligned}$$

よって逆行列は

$$\left(\begin{array}{ccc} 6 & 1 & 3 \\ 3 & 6 & 2 \\ 1 & 4 & 3 \end{array} \right)$$