

$$\begin{aligned} \boxed{11} \quad \det A &= a_{11}A_{11} + a_{21}A_{21} + a_{31}A_{31} = a_{11}M_{11} - a_{21}M_{21} + a_{31}M_{31} \\ &= (5) \det \begin{bmatrix} -2 & 0 \\ 4 & 0 \end{bmatrix} - (0) \det \begin{bmatrix} 1 & 6 \\ 4 & 0 \end{bmatrix} + (0) \det \begin{bmatrix} 1 & 6 \\ -2 & 0 \end{bmatrix} \\ &= (5)(0 - 0) - 0 + 0 = 0. \quad \text{Since } \det A = 0, A^{-1} \text{ does not exist.} \end{aligned}$$