8.4. Matriz inversa

$$A^{-1} = \frac{1}{|A|} \cdot (A^d)^t$$

$$A = \begin{pmatrix} 2 & 3 & 0 \\ 1 & 3 & 4 \\ 1 & 2 & 1 \end{pmatrix} \longrightarrow |A| = -1 \neq$$

$$A^d = \begin{pmatrix} A_{11} & A_{12} & A_{13} \\ A_{21} & A_{22} & A_{23} \\ A_{31} & A_{32} & A_{33} \end{pmatrix} = \begin{pmatrix} -5 & +3 \\ -3 & 2 \\ 12 & -8 \end{pmatrix}$$

$$A_{11} = + \begin{vmatrix} 3 & 4 \\ 2 & 1 \end{vmatrix} = -5 \qquad A_{12} =$$

$$A_{21} = -\alpha_{21} = - \begin{vmatrix} 3 & 0 \\ 2 & 1 \end{vmatrix} = -3 \qquad A_{22} =$$

$$A_{31} = \alpha_{31} = \begin{vmatrix} 3 & 0 \\ 3 & 4 \end{vmatrix} = 12 \qquad A_{32}$$

$\neq 0 \Rightarrow A$ es invertible

$$\begin{pmatrix} -1 \\ -1 \\ 3 \end{pmatrix} \rightarrow (A^d)^t = \begin{pmatrix} -5 & -3 & 12 \\ 3 & 2 & -8 \\ -1 & -1 & 3 \end{pmatrix}$$

$$-\alpha_{12} = -\begin{vmatrix} 1 & 4 \\ 2 & 1 \end{vmatrix} = 3 \qquad A_{13} = \begin{vmatrix} 1 & 3 \\ 1 & 2 \end{vmatrix} =$$

$$\alpha_{22} = \begin{vmatrix} 2 & 0 \\ 1 & 1 \end{vmatrix} = 2 \qquad A_{23} = -\begin{vmatrix} 2 & 3 \\ 2 & 2 \end{vmatrix}$$

$$= -\alpha_{32} = -\begin{vmatrix} 2 & 0 \\ 1 & 4 \end{vmatrix} = -8 \qquad A_{33} = \begin{vmatrix} 2 & 3 \\ 2 & 3 \end{vmatrix}$$

- 1

c - 1

= 3

$$A^{-1} = \frac{1}{-1} \cdot \begin{pmatrix} -5 & -3 & 12 \\ 3 & 2 & -8 \\ -1 & -1 & 3 \end{pmatrix} =$$

$$\begin{pmatrix} 5 & 3 & -12 \\ -3 & -2 & 8 \\ 1 & 1 & -3 \end{pmatrix}$$