

$$A = \begin{pmatrix} 4 & 3 & m \\ 2 & -1 & m \\ m & 1 & 2 \end{pmatrix} \quad |A| = 4m^2 - 2m - 20$$

$$4m^2 - 2m - 20 = 0$$

$$m = \frac{2 \pm \sqrt{(-2)^2 - 4 \cdot 4 \cdot (-20)}}{2 \cdot 4} = \frac{2 \pm 18}{8} =$$

$$= \begin{cases} -2 \\ \frac{5}{2} \end{cases}$$

A TIENE INVERSA SI $m \neq -2$ Y $m \neq \frac{5}{2}$

$$A = \begin{pmatrix} 4 & 3 & 2 \\ 2 & -1 & 2 \\ 2 & 1 & 2 \end{pmatrix}$$

$$A^{-1} = \frac{(A^t)^{Adj}}{|A|} = \frac{\begin{pmatrix} 4 & 2 & 2 \\ 3 & -1 & 1 \\ 2 & 2 & 2 \end{pmatrix}^{Adj}}{-8} = \frac{\begin{pmatrix} -4 & -4 & 8 \\ 0 & 4 & -4 \\ 4 & 2 & -10 \end{pmatrix}}{-8} =$$

$$A^{-1} = \begin{pmatrix} \frac{1}{2} & \frac{1}{2} & -1 \\ 0 & -\frac{1}{2} & \frac{1}{2} \\ -\frac{1}{2} & -\frac{1}{4} & \frac{5}{4} \end{pmatrix}$$