

$$\text{Adj } A = B^T = \begin{bmatrix} 11 & -9 & 1 \\ -7 & 9 & -2 \\ 2 & -3 & 1 \end{bmatrix}$$

$$A^{-1} = \text{adj}A / |A|$$

$$\text{adj}A = \begin{bmatrix} 11 & -9 & 1 \\ -7 & 9 & -2 \\ 2 & -3 & 1 \end{bmatrix}$$

$$|A| = 11 - 2(7) + 3(2) = 3 \neq 0$$

$$A^{-1} = \text{adj}A / |A| = \begin{bmatrix} 11/3 & -9/3 & 1/3 \\ -7/3 & 9/3 & -2/3 \\ 2/3 & -3/3 & 1/3 \end{bmatrix} = \begin{bmatrix} 11/3 & -3 & 1/3 \\ -7/3 & 3 & -2/3 \\ 2/3 & -1 & 1/3 \end{bmatrix}$$

$$6 - (-2) + (-1)(4+2)$$

$$6 + 2 - 6$$

$$\begin{bmatrix} 3 & 1 & -1 \\ 2 & -2 & 0 \\ 1 & 2 & -1 \end{bmatrix}$$