

LA Assignment 1. (due date: 10/12/25)

given $A = \begin{bmatrix} 1 & 1 \\ 4 & -1 \end{bmatrix}$ $B = \begin{bmatrix} 5 \\ 5 \end{bmatrix}$

$C = \begin{bmatrix} 3 & 2 \\ 5 & 3 \end{bmatrix}$ $D = \begin{bmatrix} 2 & 2 \end{bmatrix}$

$E = \begin{bmatrix} 3 & 2 & -1 \\ 6 & 3 & 2 \\ 1 & 4 & 2 \end{bmatrix}$

find if possible.

Q1) find A^{-1}

Q2) find $\det(A)$

Q3) find $\text{Adj}(C)$

Q4) find E^T

Q5) solve $AX=B$

Q6) find D^T

Q7) find BD

Q8) find DB

Q9) find AC

Q10) find ~~$\det(E)$~~ $\det(E)$