3.2
1/1

If $C = \begin{bmatrix} 5 & 3 \\ 1 & 2 \end{bmatrix}$ and $D = \begin{bmatrix} 4 & 2 \\ 3 & 5 \end{bmatrix}$, find . . .

Ex 1: CD

Ex 2: DC

NOT commutative.

If $E = \begin{bmatrix} 5 & 1 & 0 \\ 1 & 0 & 4 \end{bmatrix}$

Ex 3: DC CE

Ex 4: EC

Ex 5: $E^T C$

Ex 6: EE^T

Ex 7: $E^T E$

If $A = \begin{bmatrix} 1 & 2 & 3 \end{bmatrix}$ and $B = \begin{bmatrix} 4 \\ 5 \\ 6 \end{bmatrix}$

Ex 8: AB

Ex 9: BA.

Ex 10: D^2

THE IDENTITY MATRIX.

Ex 11: Solve $\begin{bmatrix} 1 & 1 \\ 1 & -1 \end{bmatrix} \begin{bmatrix} x \\ y \end{bmatrix} = \begin{bmatrix} 2 \\ 0 \end{bmatrix}$