PRACTICE 3c

Let $A = \begin{bmatrix} 1 & 1 & 4 \\ -2 & 1 & 6 \end{bmatrix}$, $B = \begin{bmatrix} 5 & 4 \\ -2 & 3 \\ 0 & -1 \end{bmatrix}$, $C = \begin{bmatrix} 1 & 3 & 1 \\ -2 & 1 & 4 \\ 1 & 0 & -3 \end{bmatrix}$, and $D = \begin{bmatrix} 6 & -2 & 2 \\ 1 & 1 & 3 \\ 2 & -3 & -4 \end{bmatrix}$.

(1) Find A^T, B^T, C^T and D^T

(2) Verify that $(A^T)^T = A$

(3) Verify that $(3B)^T = 3B^T$

(4) Verify that $(C + D)^T = C^T + D^T$.