

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

Find the following, or state "undefined".

a) $A + B =$

$$\begin{bmatrix} 1 & -1 & 4 \\ 2 & -1 & 4 \end{bmatrix}$$

b) AB *undefined*

c) $CB = \begin{bmatrix} 2 & 3 \\ 1 & 5 \end{bmatrix} \begin{bmatrix} 2 & -3 & 1 \\ 4 & -1 & 0 \end{bmatrix} = \begin{bmatrix} 16 & -9 & 2 \\ 22 & -8 & 1 \end{bmatrix}$

d) $2C = \begin{bmatrix} 4 & 6 \\ 2 & 10 \end{bmatrix}$

e) $A^T = \begin{bmatrix} -1 & -2 \\ 2 & 0 \\ 3 & 4 \end{bmatrix}$