ADDITION AND SUBTRACTION OF MATRICES

1. Given that $A = \begin{pmatrix} 5 & 3 \\ 2 & 1 \end{pmatrix}$, $B = \begin{pmatrix} 4 & -2 \\ 1 & 3 \end{pmatrix}$ and $C = \begin{pmatrix} 1 & -7 \\ 6 & 0 \end{pmatrix}$, determine:

(a) $A + B = \begin{pmatrix} & \\ & \end{pmatrix}$

(b) $B - A = \begin{pmatrix} & \\ & \end{pmatrix}$

(c) $A - B = \begin{pmatrix} & \\ & \end{pmatrix}$

(d) $A + B + C = \begin{pmatrix} & \\ & \end{pmatrix}$

2. If $A = \begin{pmatrix} -6 & 2 \\ 1 & 5 \end{pmatrix}$, $B = \begin{pmatrix} 3 & -2 \\ 0 & 4 \end{pmatrix}$ and $C = \begin{pmatrix} -5 & 8 \\ 2 & 1 \end{pmatrix}$, evaluate:

(a) $A - C = \begin{pmatrix} & \\ & \end{pmatrix}$

(b) $A - C + B = \begin{pmatrix} & \\ & \end{pmatrix}$

(c) $A + B - C = \begin{pmatrix} & \\ & \end{pmatrix}$

(d) $B + C - A = \begin{pmatrix} & \\ & \end{pmatrix}$

LIVEWORKSHEETS