Matrix algebra – addition and multiplication
Exercise 2.7

Evaluate $A + B, \ A - B$ and $5A - 3B$ when

$$A = \begin{pmatrix} 0 & 1 & -1 \\ 2 & 3 & 7 \end{pmatrix} \text{ and } B = \begin{pmatrix} 1 & -1 & 5 \\ 0 & 1 & 9 \end{pmatrix}$$

Solution Exercise 2.7

$$A + B = \begin{pmatrix} 1 & 0 & 4 \\ 2 & 4 & 16 \end{pmatrix}$$

$$A - B = \begin{pmatrix} -1 & 2 & -6 \\ 2 & 2 & -2 \end{pmatrix}$$

$$5A - 3B = \begin{pmatrix} -3 & 8 & -20 \\ 10 & 12 & 8 \end{pmatrix}$$