

SCALAR MULTIPLICATION OF MATRICES

Answer the questions in the spaces provided for your answers.
Give answers correct to 1 dp where appropriate.

1. If $A = \begin{pmatrix} 2 & -3 \\ 4 & 1 \end{pmatrix}$ and $B = \begin{pmatrix} -1 & 5 \\ 7 & 3 \end{pmatrix}$, calculate

(a) $\frac{1}{2}A = \begin{pmatrix} & \\ & \end{pmatrix}$

(c) $2A + B = \begin{pmatrix} & \\ & \end{pmatrix}$

(b) $3B = \begin{pmatrix} & \\ & \end{pmatrix}$

2. If $A = \begin{pmatrix} 3 & -4 \\ 7 & 6 \end{pmatrix}$ and $B = \begin{pmatrix} -2 & 1 \\ 0 & 5 \end{pmatrix}$, evaluate

(a) $2A = \begin{pmatrix} & \\ & \end{pmatrix}$

(e) $3A + 2B = \begin{pmatrix} & \\ & \end{pmatrix}$

(b) $3B = \begin{pmatrix} & \\ & \end{pmatrix}$

(f) $3A - 2B = \begin{pmatrix} & \\ & \end{pmatrix}$

(c) $2A + 3B = \begin{pmatrix} & \\ & \end{pmatrix}$

(d) $2A - 3B = \begin{pmatrix} & \\ & \end{pmatrix}$