

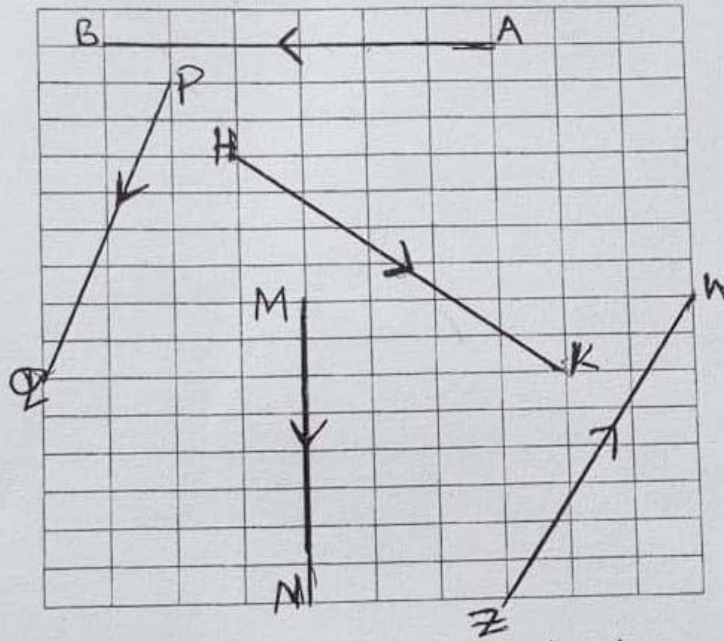
Instructions:

Attempt all questions.

1. Given that $\mathbf{a} = \begin{pmatrix} 2 \\ 3 \end{pmatrix}$, $\mathbf{b} = \begin{pmatrix} 5 \\ 3 \end{pmatrix}$, $\mathbf{c} = \begin{pmatrix} 7 \\ 2 \end{pmatrix}$, $\mathbf{d} = \begin{pmatrix} -6 \\ -3 \end{pmatrix}$, find the following;

- (i) $\mathbf{a} + \mathbf{b}$ (ii) $\mathbf{a} + \mathbf{c}$ (iii) $\mathbf{b} + \mathbf{d}$ (iv) $\mathbf{a} - \mathbf{c}$ (v) $\mathbf{d} - \mathbf{b}$

2.



Write down the vectors represented on the diagram above by arrows

3. On a squared paper, draw and show the arrow diagrams to represent the vectors below;

- (i) $\mathbf{p} = \begin{pmatrix} -3 \\ -5 \end{pmatrix}$ (ii) $\mathbf{q} = \begin{pmatrix} -1 \\ 3 \end{pmatrix}$ (iii) $\mathbf{r} = \begin{pmatrix} -2 \\ 6 \end{pmatrix}$ (iv) $\mathbf{s} = \begin{pmatrix} -4 \\ 1 \end{pmatrix}$

END