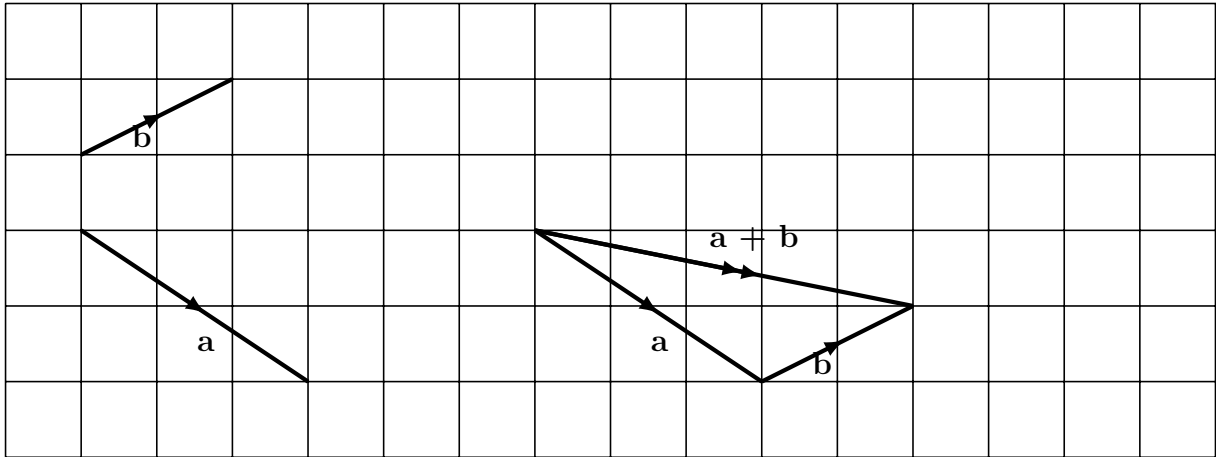


1. Here are some vectors.



(a) Complete these column vectors from the diagram.

(i) $\mathbf{a} = \begin{pmatrix} \dots \\ \dots \end{pmatrix}$ (ii) $\mathbf{b} = \begin{pmatrix} \dots \\ \dots \end{pmatrix}$ (iii) $\mathbf{a} + \mathbf{b} = \begin{pmatrix} \dots \\ \dots \end{pmatrix}$

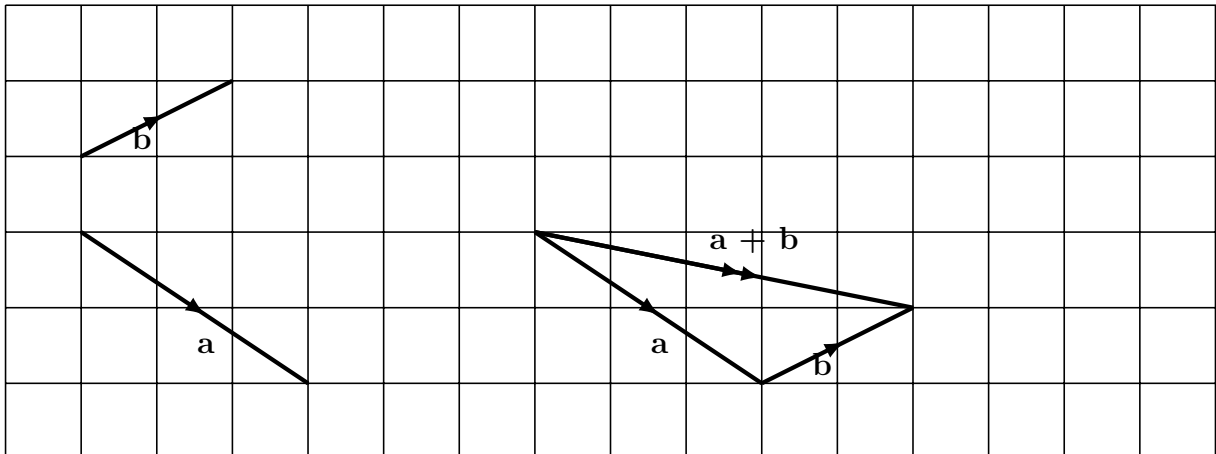
(b) Can you find a quicker way to work out $\mathbf{a} + \mathbf{b}$?

.....

translate and vector (11) Q1: (a)(i) $\begin{pmatrix} 3 \\ -2 \end{pmatrix}$ (ii) $\begin{pmatrix} 2 \\ 1 \end{pmatrix}$ (iii) $\begin{pmatrix} 5 \\ -1 \end{pmatrix}$

(b) add the top/bottom numbers from **a** and **b**, to find the top/bottom number of $\mathbf{a} + \mathbf{b}$

1. Here are some vectors.



(a) Complete these column vectors from the diagram.

(i) $\mathbf{a} = \begin{pmatrix} \dots \\ \dots \end{pmatrix}$ (ii) $\mathbf{b} = \begin{pmatrix} \dots \\ \dots \end{pmatrix}$ (iii) $\mathbf{a} + \mathbf{b} = \begin{pmatrix} \dots \\ \dots \end{pmatrix}$

(b) Can you find a quicker way to work out $\mathbf{a} + \mathbf{b}$?

.....

$$2. \quad \mathbf{p} = \begin{pmatrix} 2 \\ -1 \end{pmatrix} \quad \mathbf{q} = \begin{pmatrix} 5 \\ 3 \end{pmatrix}$$

Work out $\mathbf{p} + \mathbf{q}$ as a column vector.

$$\begin{pmatrix} \dots \\ \dots \end{pmatrix}$$

$$3. \quad \mathbf{a} = \begin{pmatrix} -1 \\ -3 \end{pmatrix} \quad \mathbf{b} = \begin{pmatrix} -2 \\ 1 \end{pmatrix}$$

Work out $\mathbf{a} + \mathbf{b}$ as a column vector.

$$\begin{pmatrix} \dots \\ \dots \end{pmatrix}$$

translate and vector (11) Q2. $\begin{pmatrix} 7 \\ 2 \end{pmatrix}$ Q3 $\begin{pmatrix} -3 \\ -2 \end{pmatrix}$

$$2. \quad \mathbf{p} = \begin{pmatrix} 2 \\ -1 \end{pmatrix} \quad \mathbf{q} = \begin{pmatrix} 5 \\ 3 \end{pmatrix}$$

Work out $\mathbf{p} + \mathbf{q}$ as a column vector.

$$\begin{pmatrix} \dots \\ \dots \end{pmatrix}$$

$$3. \quad \mathbf{a} = \begin{pmatrix} -1 \\ -3 \end{pmatrix} \quad \mathbf{b} = \begin{pmatrix} -2 \\ 1 \end{pmatrix}$$

Work out $\mathbf{a} + \mathbf{b}$ as a column vector.

$$\begin{pmatrix} \dots \\ \dots \end{pmatrix}$$