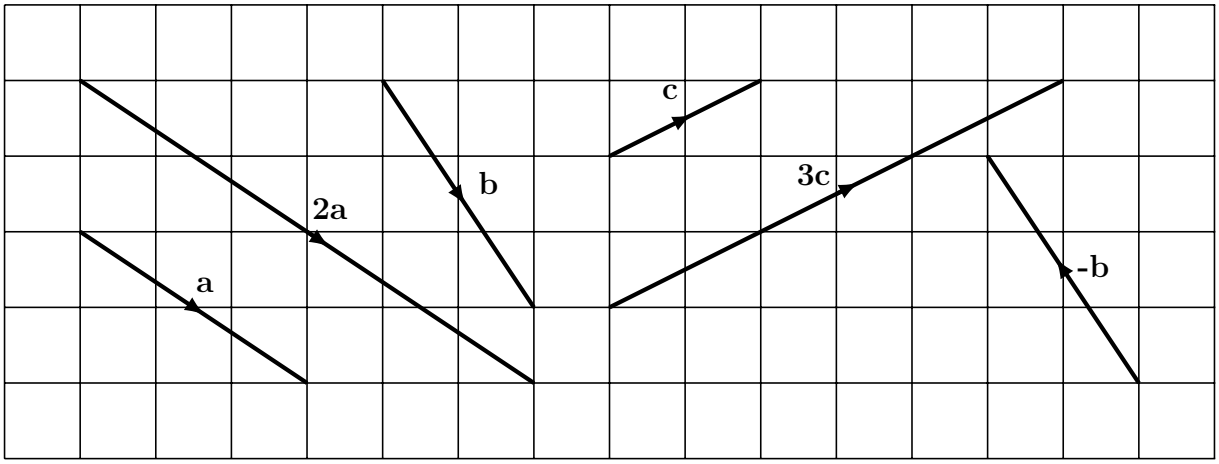
1. Here are some vectors.



Write down the column vectors for

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

(iv) $\mathbf{2a} = \begin{pmatrix} ..... \\ ..... \end{pmatrix}$ (v) $\mathbf{-b} = \begin{pmatrix} ..... \\ ..... \end{pmatrix}$ (vi) $\mathbf{3c} = \begin{pmatrix} ..... \\ ..... \end{pmatrix}$

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translate and vector (7) Answers

1(i) $\begin{pmatrix} 3 \\ -2 \end{pmatrix}$ (ii) $\begin{pmatrix} 2 \\ -3 \end{pmatrix}$ (iii) $\begin{pmatrix} 2 \\ 1 \end{pmatrix}$ (iv) $\begin{pmatrix} 6 \\ -4 \end{pmatrix}$ (v) $\begin{pmatrix} -2 \\ 3 \end{pmatrix}$ (vi) $\begin{pmatrix} 6 \\ 3 \end{pmatrix}$

2(i) $\begin{pmatrix} 3 \\ 3 \end{pmatrix}$ (ii) $\begin{pmatrix} 3 \\ -1 \end{pmatrix}$ (iii) $\begin{pmatrix} -2 \\ -1 \end{pmatrix}$ (iv) $\begin{pmatrix} 7 \\ -2 \end{pmatrix}$ (v) $\begin{pmatrix} 3 \\ -3 \end{pmatrix}$ (vi) $\begin{pmatrix} 2 \\ 1 \end{pmatrix}$

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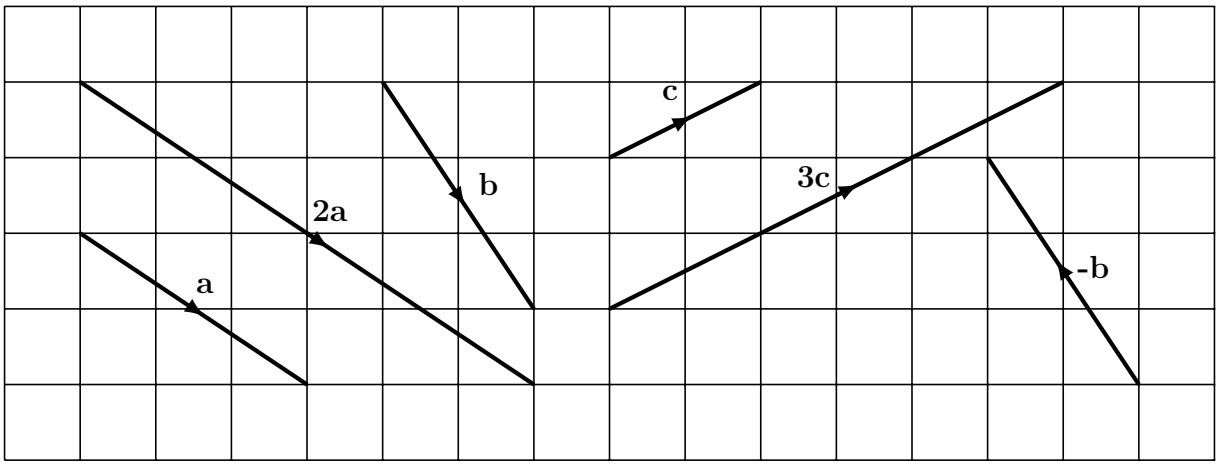
1. Here are some vectors.

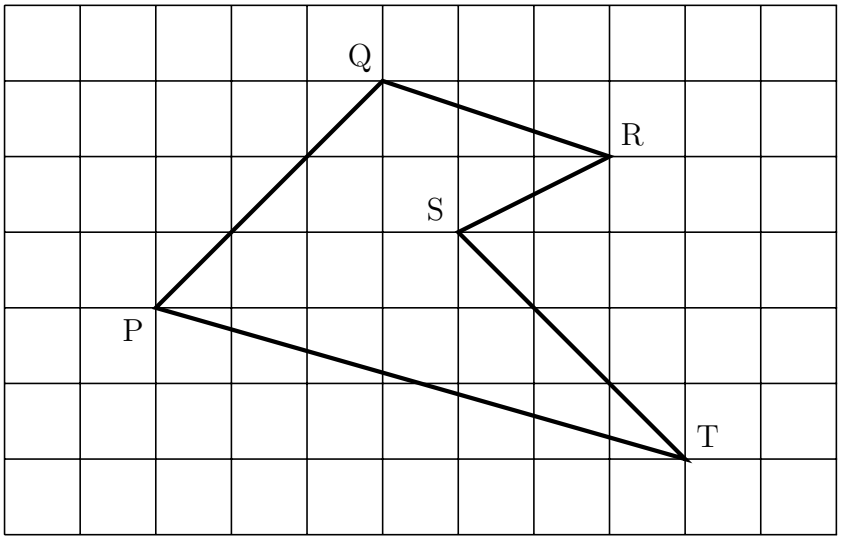


Write down the column vectors for

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

(iv) $\mathbf{2a} = \begin{pmatrix} ..... \\ ..... \end{pmatrix}$ (v) $\mathbf{-b} = \begin{pmatrix} ..... \\ ..... \end{pmatrix}$ (vi) $\mathbf{3c} = \begin{pmatrix} ..... \\ ..... \end{pmatrix}$

2. Here is an irregular pentagon.

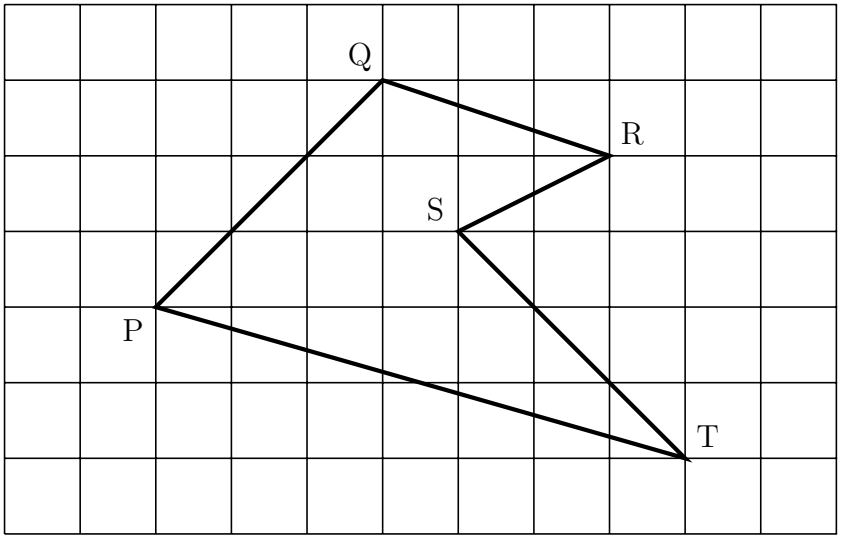


Write down the column vectors for

(i) $\overrightarrow{PQ} = \begin{pmatrix} ..... \\ ..... \end{pmatrix}$ (ii) $\overrightarrow{QR} = \begin{pmatrix} ..... \\ ..... \end{pmatrix}$ (iii) $\overrightarrow{RS} = \begin{pmatrix} ..... \\ ..... \end{pmatrix}$

(iv) $\overrightarrow{PT} = \begin{pmatrix} ..... \\ ..... \end{pmatrix}$ (v) $\overrightarrow{ST} = \begin{pmatrix} ..... \\ ..... \end{pmatrix}$ (vi) $\overrightarrow{SR} = \begin{pmatrix} ..... \\ ..... \end{pmatrix}$

2. Here is an irregular pentagon.



Write down the column vectors for

(i) $\overrightarrow{PQ} = \begin{pmatrix} ..... \\ ..... \end{pmatrix}$ (ii) $\overrightarrow{QR} = \begin{pmatrix} ..... \\ ..... \end{pmatrix}$ (iii) $\overrightarrow{RS} = \begin{pmatrix} ..... \\ ..... \end{pmatrix}$

(iv) $\overrightarrow{PT} = \begin{pmatrix} ..... \\ ..... \end{pmatrix}$ (v) $\overrightarrow{ST} = \begin{pmatrix} ..... \\ ..... \end{pmatrix}$ (vi) $\overrightarrow{SR} = \begin{pmatrix} ..... \\ ..... \end{pmatrix}$