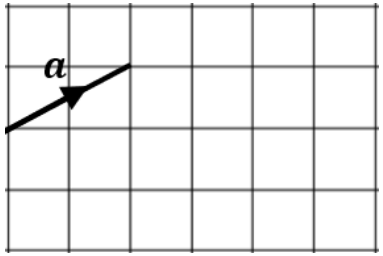
Multiplying Vectors

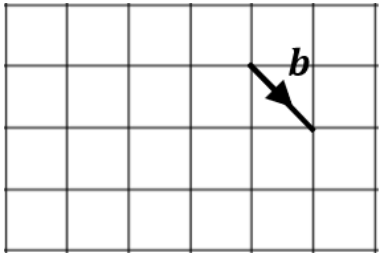
(a)

The vector $\boldsymbol{a}$ is shown. Draw the vector $2\boldsymbol{a}$.



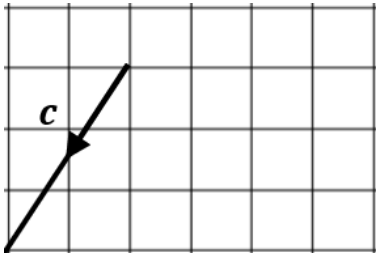
(b)

The vector $\boldsymbol{b}$ is shown. Draw the vector $3\boldsymbol{b}$.



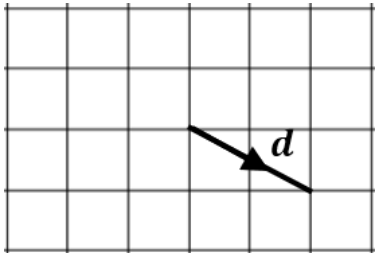
(c)

The vector $\boldsymbol{c}$ is shown. Draw the vector $-\boldsymbol{c}$.



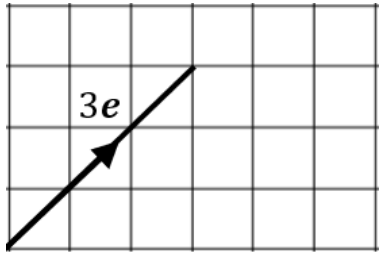
(d)

The vector $\boldsymbol{d}$ is shown. Draw the vector $-2\boldsymbol{d}$.



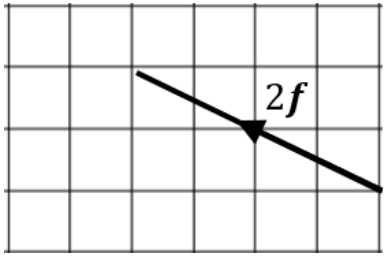
(e)

The vector $3\boldsymbol{e}$ is shown. Draw the vector $2\boldsymbol{e}$.

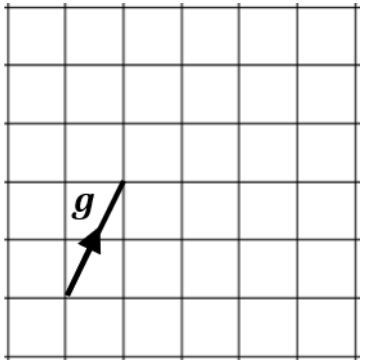


(f)

The vector $2\boldsymbol{f}$ is shown. Draw the vector $-\boldsymbol{f}$.



(g)



$$\boldsymbol{g} = \begin{pmatrix} 1 \\ 2 \end{pmatrix}$$

Draw and write down the column vector for

(i) $2\boldsymbol{g}$ (ii) $-\boldsymbol{g}$ (iii) $-3\boldsymbol{g}$

(i)

$$\boldsymbol{a} = \begin{pmatrix} -2 \\ 5 \end{pmatrix}$$

Find $4\boldsymbol{a}$

(j)

$$\boldsymbol{b} = \begin{pmatrix} 6 \\ -3 \end{pmatrix}$$

Find $-2\boldsymbol{b}$

(k)

$$\boldsymbol{c} = \begin{pmatrix} -3 \\ -12 \end{pmatrix}$$

Find $\frac{2}{3}\boldsymbol{c}$

(l)

$$-3\boldsymbol{d} = \begin{pmatrix} 3\sqrt{2} \\ -6 \end{pmatrix}$$

Find $\boldsymbol{d}$