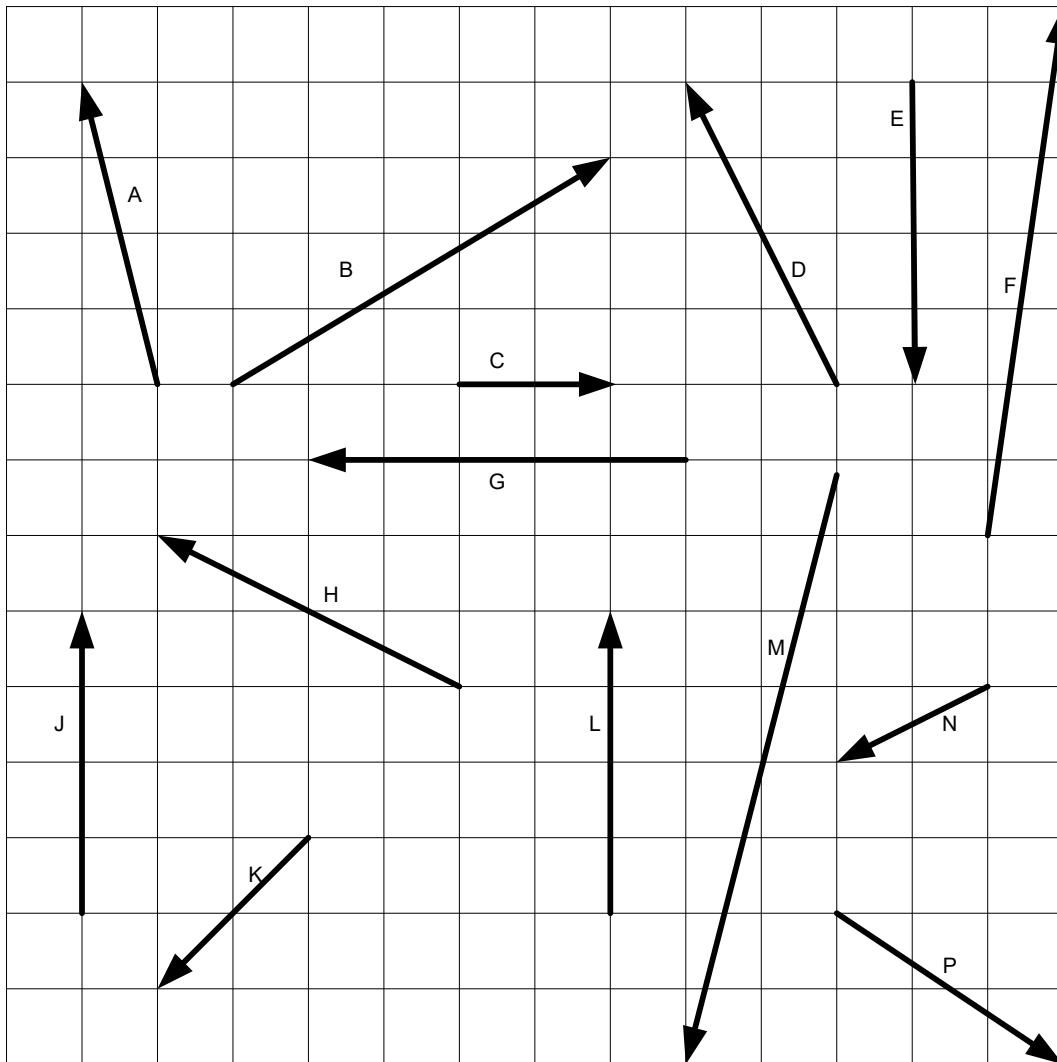


Translations and Vectors

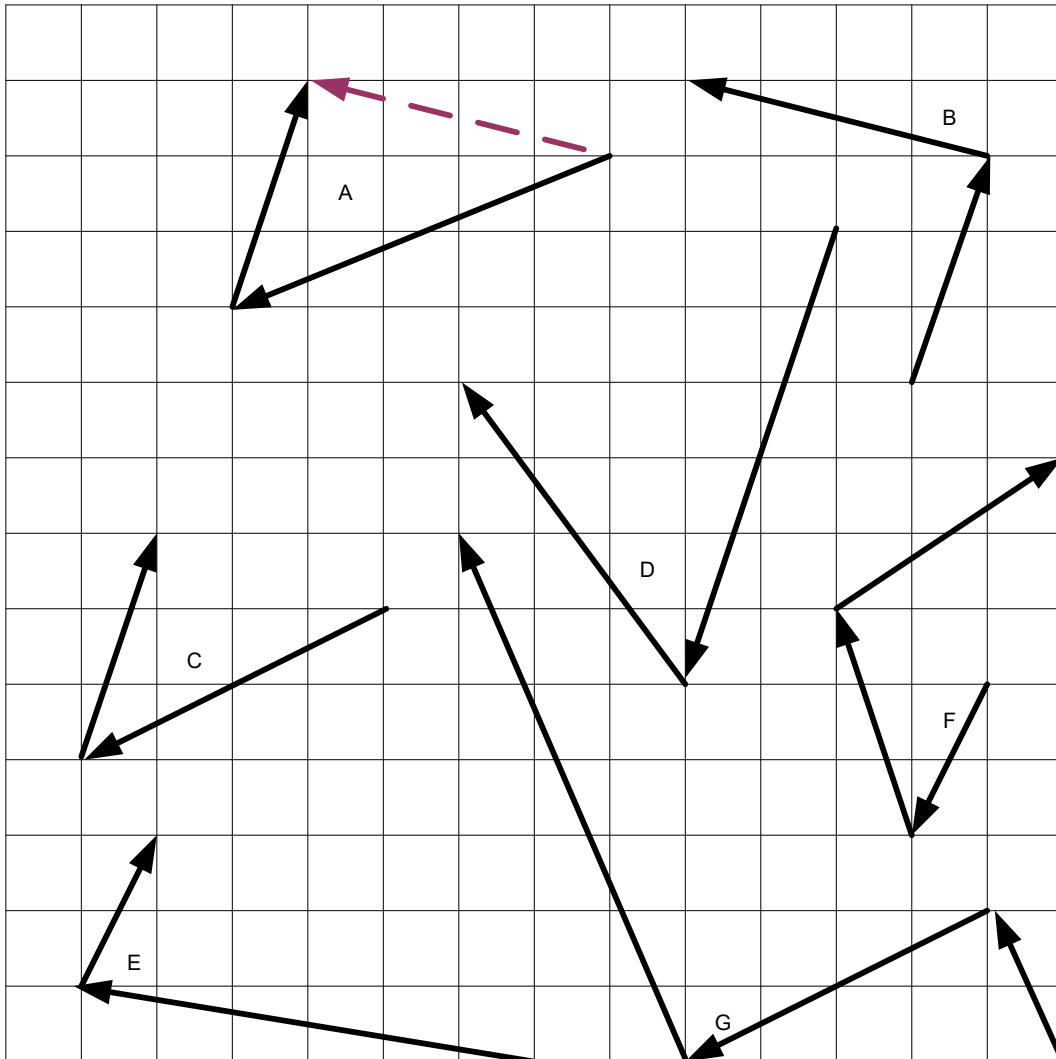


Look at the vector A. It indicates that an object has moved from one position to another. The way we write vector A is as shown. The line above the A indicates that it is a vector.

$$\vec{A} = \begin{pmatrix} -1 \\ 4 \end{pmatrix}$$

Calculate the other vectors in the diagram.

Addition of Vectors



The two lines indicate two vectors. These can be added together to make the shorter route indicated by the dotted line.

We can add vectors together like the example below.

$$\vec{A} = \begin{pmatrix} -5 \\ -2 \end{pmatrix} + \begin{pmatrix} 1 \\ 3 \end{pmatrix} = \begin{pmatrix} -4 \\ 1 \end{pmatrix}$$

Add the remainder of the vectors on the sheet.