

Representing vectors



A **unit vector** is a vector of magnitude 1.

\mathbf{i} and \mathbf{j} are unit vectors in the x -axis and y -axis respectively. We can write all vectors in terms of \mathbf{i} and \mathbf{j} .

Example

If $\mathbf{a} = 3\mathbf{i}$, $\mathbf{b} = \mathbf{i} + \mathbf{j}$, $\mathbf{c} = \mathbf{i} - 2\mathbf{j}$ then:

- 1) Write \mathbf{a} in vector form.
- 2) Find $\mathbf{b} + 2\mathbf{c}$ in \mathbf{i}, \mathbf{j} form.