

- 6** Relative to an origin O , the position vector of A is $3\mathbf{i} + 2\mathbf{j} - \mathbf{k}$ and the position vector of B is $7\mathbf{i} - 3\mathbf{j} + \mathbf{k}$.
- (i) Show that angle OAB is a right angle. [4]
- (ii) Find the area of triangle OAB . [3]