Total to given that v 22 v 50, where a that b are the position vectors	
$\mathbf{a} = \begin{pmatrix} 5 \\ 3 \end{pmatrix}$ and $\mathbf{b} = \begin{pmatrix} -1 \\ 6 \end{pmatrix}$.	
(a) Determine the magnitude of v.	[3]

You are given that $\mathbf{v} = 2\mathbf{a} + 3\mathbf{b}$ where \mathbf{a} and \mathbf{b} are the position vectors

(b) Determine the angle between \mathbf{v} and the vector $\begin{pmatrix} 1 \\ 0 \end{pmatrix}$.