Question Number	Scheme	Marks
	Allow use of column vectors throughout.	
4(a)	$\tan\alpha = 1/3 \quad \Rightarrow \quad \alpha = 18.4^{\text{O}}$	M1 A1
	Bearing is $288°$ (nearest degree)	A1
		(3)
(b)	$(21\mathbf{i}+5\mathbf{j})+t(-6\mathbf{i}+2\mathrm{j})$	B1
		(1)
(c)	$21-6t=-(5+2t)$	M1 A1
	$t=6.5$	A1
		(3)
		7
	Notes	
(a)		
M1	An equation in a relevant angle. e.g. $\tan\theta=\pm\frac{2}{6}$ or $\pm\frac{6}{2}$ or $\sin\theta=\pm\frac{2}{\sqrt{2^2+6^2}}$	
A1	A correct angle from their equation e.g. $\pm 18.4^{\text{o}}$, $\pm\ 71.6^{\text{o}}$, $\pm 108.4^{o}$, ...	
A1	288^{o} (nearest degree)	
(b)		
B1	$(21\mathbf{i}+5\mathbf{j})+t(-6\mathbf{i}+2\mathrm{j})$ oe	
(c)		
M1	M1 for $21-6t=\pm(5+2t)$ or equivalent if they have a wrong answer to (b). Must be in t only.	
A1	A correct equation in t only.	
A1	6.5 oe	