Question			Answer	Marks	AO	Guidance
3	(a)		$\left\|\overrightarrow{OA}\right\| = \sqrt{7^2 + 1^2} = \sqrt{50}\ [= 5\sqrt{2}]$	B1	1.1a	Accept 7.1 or better
			Direction – makes angle θ (with the x-axis) where $\tan\theta = \frac{1}{7}$ so	M1	1.1	Allow $\tan\theta = 7$ explicit for method mark **M1** implied by **A1** being awarded
			$\left[\theta = \tan^{-1}\frac{1}{7}\right] = 8.13°$	A1	1.1	Accept awrt 8.1° (8.130102…) Accept 81.9° only if indicated as the angle to y-axis
				[3]		
	(b)		$\overrightarrow{AB} = \begin{pmatrix}-5\\5\end{pmatrix}$			
			$\left\|\overrightarrow{AB}\right\| = \sqrt{(-5)^2 + 5^2} = \sqrt{50}$	M1	1.1	Allow for attempt to find $\left\|\overrightarrow{OB}\right\| = \sqrt{40}$ instead
			$\left\|\overrightarrow{AB}\right\| = \left\|\overrightarrow{OA}\right\|$ so the triangle is isosceles	A1	2.2a	Conclusion from correct values
			Alternative method			
			$\angle BOA = 63.4°$ $\angle OBA = 63.4°$	M1		Attempt to calculate at least two angles in the triangle by any valid method.
			$\angle BOA = \angle OBA$ so the triangle is isosceles	A1		Conclusion from correct values
				[2]		