

Question		Answer	Marks	AOs	Guidance
6	(a)		<p>B1</p> <p>B1</p> <p>[2]</p>	<p>1.1 a</p> <p>1.1</p>	<p>Correct shape and symmetry for cosine graph.</p> <p>Correct maximum and minimum values</p>
6	(b)	<p>DR</p> $2\cos\theta = 3\sin^2\theta$ $2\cos\theta = 3(1 - \cos^2\theta)$ $3\cos^2\theta + 2\cos\theta - 3 = 0$ $\cos\theta = \frac{-1 + \sqrt{10}}{3}$ $\theta = 43.9^\circ, 316.1^\circ$ $\cos\theta = \frac{-1 - \sqrt{10}}{3} < -1 \text{ gives no solution}$	<p>B1</p> <p>M1</p> <p>M1</p> <p>A1</p> <p>A1</p> <p>E1</p> <p>[6]</p>	<p>1.2</p> <p>3.1 a</p> <p>1.1</p> <p>1.1</p> <p>1.1</p> <p>2.4</p>	<p>Correct use of identity must be seen</p> <p>Rearranging to zero must be seen, condone one error</p> <p>Solve quadratic</p> <p>Or state that graph in part (i) only shows two solutions</p>