

Question		Answer	Marks	AO	Guidance
2		$a^2 + b^2 = 36$ $\frac{b}{a} = \sqrt{3}$ $a^2 + 3a^2 = 36 \text{ or } \frac{b^2}{3} + b^2 = 36$ $a = 3, b = 3\sqrt{3}$ <p><b>Alternative method</b></p> $(a =) 6 \cos 60$ $a = 3$ $(b =) 6 \sin 60$ $b = 3\sqrt{3}$	M1* M1* M1 dep* A1	3.1a 1.2 1.1 1.1	Attempt at Pythagoras =36 oe, may see $\sqrt{a^2 + b^2} = 6$ oe or $\frac{b}{a} = \tan 60$ or $\frac{b}{a} = 1.73$ , condone $\frac{a}{b}$ May see equivalent statements in sin or cos. Substitute both expressions (dependent on <b>both</b> previous M marks) – must reach an equation in $a$ or $b$ only. A0 for negative answers (if not disregarded) Accept $b = \sqrt{27}$ If no (or insufficient) working then SC <b>B1B1</b> (max 2/4) for each correct answer (must be exact).
			M1  A1  M1  A1		Allow this mark for $6\cos$ or $6\sin$ of $30, 60, 120^\circ$ Must see this step oe.  Allow this mark for $6\cos$ or $6\sin$ of $30, 60, 120^\circ$ provided it is consistent with their other expression (i.e. not the same). Must see this step oe.  If no (or insufficient) working then SC <b>B1B1</b> (max 2/4) for each correct answer (must be exact).