

2(a)	Makes clear attempt to use the cosine rule	AO3.1a	M1	$6^2 = 3^2 + 5^2 - 2 \times 3 \times 5 \cos \theta$
	Uses trig identity with 'their' $\cos \theta$	AO1.1a	M1	$\cos \theta = \frac{3^2 + 5^2 - 6^2}{30} = -\frac{1}{15}$
	Constructs rigorous argument leading to correct result AG Only award if they have a completely correct solution, which is clear, easy to follow and contains no slips	AO2.1	R1	$\therefore \sin \theta = \sqrt{1 - \left(-\frac{1}{15}\right)^2}$ $\sin \theta = \frac{4\sqrt{14}}{15} \quad (\text{AG})$
(b)	Writes down correct angle	AO2.2a	B1	1.64
(c)	Uses 'their' angle in $\frac{1}{2}r^2\theta$	AO1.1a	M1	$A = \frac{1}{2} \times 5^2 \times 1.64$
	Correct area FT use of incorrect obtuse angle provided both M1 marks awarded in part (a) and M1 awarded in (c)	AO1.1b	A1F	$= 20.5 \text{ m}^2$
Total			6	