Topic Test Mark Scheme

Geometry and Measure recap and review - Higher

Q	Answer	Mark	Comments
1	(3, 0)	B1	
2	(1, 3)	B1	
3	(2, 1)	B1	
4	Enlargement	B1	
	(SF) $\frac{1}{2}$	B1	
	Centre (1, 1)	B1	
5	$\frac{x}{360} \times \pi \times 2 \times 4$	M1	oe
	$(\frac{x}{360} \times \pi \times 2 \times 4)$ + 4 + 4 = 12	M1dep	oe
	[57.2, 57.3]	A1	

Q	Answer	Mark	Comments
6	$\frac{1}{2}\times\frac{4}{3}\times\pi\times r^3$	M1	oe
	$(3r)^2 - r^2$ or $8r^2$	M1	oe
	$\sqrt{8r^2}$ or $\sqrt{8}r$	M1dep	oe
	$\frac{1}{3}\times\pi\times r^2\times$ their $\sqrt{8r^2}$	M1dep	oe
	$\frac{2\sqrt{2}}{3}\pi r^3 + \frac{2}{3}\pi r^3$	A1	
7	π × 20 × 15 or 300π or 942.47..	M1	
	their 9.4247.. × 3.60 or 33.93	M1dep	
	1000 ÷ 33.93 or 29.47..	M1dep	
	29	A1	
8	(cos A =) $\frac{5^2 + 6^2 - 7^2}{2 \times 5 \times 6}$	M1	
	$\frac{-8}{60}$ or answer negative so obtuse	A1	