Q	Marking instructions	AO	Marks	Typical solution
5	Obtains $\frac{1}{2}\times 18^2\times\frac{\pi}{6}$ or $\frac{1}{2}\times 18^2\sin\frac{\pi}{6}$ Allow 0.5 instead of $\sin\frac{\pi}{6}$ Accept use of degrees eg $\frac{30}{360}\times\pi\times 18^2$ or $\frac{1}{2}\times 18^2\sin 30$	3.1a	M1	$\frac{1}{2}\times 18^2\times\frac{\pi}{6}-\frac{1}{2}\times 18^2\sin\frac{\pi}{6}$ $=27\pi-81$ $=27(\pi-3)\text{ cm}^2$
	Obtains $\frac{1}{2}\times 18^2\times\frac{\pi}{6}$ **and** $\frac{1}{2}\times 18^2\sin\frac{\pi}{6}$ Allow 0.5 instead of $\sin\frac{\pi}{6}$ Accept use of degrees as above	1.1b	A1	
	Completes reasoned argument to obtain $27(\pi-3)\text{ cm}^2$ Must see $27\pi-81$ or $162\left(\frac{\pi}{6}-\frac{1}{2}\right)$ Accept use of degrees as above **ISW** Condone missing units	2.1	R1	
	Question 5 Total		**3**	