Question 8 – 5:

8(a)(i)	$\frac{53}{360}\times\pi\times9.5^2$	**M1**	
	41.74 to 41.75	**A1**	
8(a)(ii)	5.9[0] or 5.899 to 5.903..	**4**	**M3** for $\left[OA^2=\right]\ \frac{\frac{1}{3}\times41.7}{\frac{1}{2}\sin53}$ oe **M2** for $\frac{1}{2}\times OA^2\times\sin53=\frac{1}{3}\times41.7$ oe **M1** for $\frac{1}{2}\times OA\times OB\times\sin53=\frac{1}{3}\times41.7$ seen or better
8(b)	396 or 397 or 396.4 to 396.6	**6**	**M2** for $[r=]\left(\frac{60}{360}\times2\times\pi\times24\right)\div2\pi$ oe or better or **M1** for $2\pi r=\frac{60}{360}\times2\times\pi\times24$ oe **M2** for $\sqrt{24^2-a^2}$ or **M1** for $h^2+a^2=24^2$ **M1** for $\frac{1}{3}\pi\times their\ r^2\times their\ h$