

Question 4 – 4:

4(a)	$\frac{(12-2) \times 180}{12} [= 150] \text{ oe}$ or $180 - \frac{360}{12} [= 150]$	1	Accept $\frac{(2 \times 12 - 4) \times 90}{12} [= 150]$
4(b)(i)	$\frac{3}{\cos 75} \text{ oe}$ or $\frac{6 \sin 75}{\sin 30}$	M2	M1 for $\frac{3}{AO} = \cos 75 \text{ oe}$ or $\frac{r}{\sin 75} = \frac{6}{\sin 30}$
	11.59...	A1	
4(b)(ii)(a)	72.8 or 72.9 or 72.82 to 72.89...	2	M1 for $2 \times \pi \times 11.6$
4(b)(ii)(b)	12.1 or 12.06 to 12.08	2	M1 for $[6 +] \text{ their (b)(ii)(a)} \div 12 \text{ oe}$
4(c)	806 or 807 or 805.9 to 807.4	3	B2 for 402.9... to 403.7 OR M2 for $\frac{1}{2} \times 6 \times 11.6 \times \sin 75 \times 12 \times 2 \text{ oe}$ or M1 for $\frac{1}{2} \times 6 \times 11.6 \times \sin 75 [\times k] \text{ oe}$