

Q1. (2020)

Q	Answer	Mark	Comments
29	$0.5 \times 8 \times 10 \times \sin 114$ or [36.5, 36.542]	M1	oe
	$8^2 + 10^2 - 2 \times 8 \times 10 \times \cos 114$ or [229, 229.1]	M1	oe eg $164 - 160 \times \cos 114$
	$\sqrt{8^2 + 10^2 - 2 \times 8 \times 10 \times \cos 114}$ or [15.1, 15.14] or [7.55, 7.57]	M1dep	oe dep on 2nd M1
	$0.5 \times \pi \times (0.5 \times \text{their}[15.1, 15.14])^2$ or $0.5 \times \pi \times \text{their}[7.55, 7.57]^2$ or [89.49, 90.03]	M1dep	dep on 2nd and 3rd M1
	[125.99, 126.572]	A1	
	Additional Guidance		
	Diameter must come from using the cosine rule		
	2nd mark is not dependent on the first		