

Marks are indicated in brackets after each question number

2015 Paper 2 Question 10, (4)

$$\text{Arc Length} = \frac{\text{angle}}{360} \times \pi d$$

$$28.4 = \frac{64}{360} \times \pi \times 2r \quad \text{since diameter} = 2 \times \text{radius}$$

$$2r = \frac{28.4 \times 360}{64\pi}$$

$$r = \frac{28.4 \times 360}{128\pi}$$

$$r = 25 \text{ cm}$$

2016 Paper 1 Question 3, (3)

$$\text{Area} = \frac{45}{360} \times \pi \times 20^2$$

$$= \frac{1}{8} \times 400 \times 3.14$$

$$= 50 \times 3.14$$

$$= \frac{100 \times 3.14}{2}$$

$$= \frac{314}{2}$$

$$= 157 \text{ cm}^2$$

2017 Paper 2 Question 14, (3)

$$\text{Arc length} = \frac{\text{angle}}{360} \times \pi \times d$$

$$31.5 = \frac{AOB}{360} \times \pi \times 12.8$$

Rearranging gives

$$AOB = \frac{31.5 \times 360}{12.8\pi}$$

$$AOB = 282^\circ$$