Question	Scheme	Marks	AOs
2(a)	Uses $s = r\theta \Rightarrow 3 = r \times 0.4$	M1	1.2
	$\Rightarrow OD = 7.5$ cm	A1	1.1b
		(2)	
(b)	Uses angle $AOB = (\pi - 0.4)$ or uses radius is $(12 - \text{'}7.5\text{'})$ cm	M1	3.1a
	Uses area of sector $= \dfrac{1}{2}r^2\theta = \dfrac{1}{2} \times (12 - 7.5)^2 \times (\pi - 0.4)$	M1	1.1b
	$= 27.8\text{cm}^2$	A1ft	1.1b
		(3)	
		(5 marks)	

Notes:

(a)

M1: Attempts to use the correct formula $s = r\theta$ with $s = 3$ and $\theta = 0.4$

A1: $OD = 7.5$ cm (An answer of 7.5cm implies the use of a correct formula and scores both marks)

(b)

M1: $AOB = \pi - 0.4$ may be implied by the use of $AOB =$ awrt 2.74 or uses radius is $(12 - \text{their '}7.5\text{'})$

M1: Follow through on their radius $(12 - \text{their } OD)$ and their angle

A1ft: Allow awrt 27.8 cm^2. (Answer 27.75862562). Follow through on their $(12 - \text{their '}7.5\text{'})$

Note: Do not follow through on a radius that is negative.