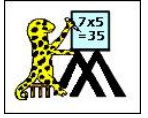


Name

Date



AREA OF A SECTOR SHEET 1

Use the radius and angle measurement to find the area of these sectors. Give your answers to 1 decimal place.

		WORKING OUT	AREA
1)			
2)			
3)			
4)			
5)			
6)			



AREA OF A SECTOR SHEET 1 ANSWERS

Use the radius and angle measurement to find the area of these sectors. Give your answers to 1 decimal place.

		WORKING OUT	AREA
1)		$\begin{aligned} \text{Area} &= (65/360) \cdot \pi \cdot 10^2 = 65/360 \cdot \pi \cdot 100 \\ &= (325/18) \pi \\ &= 56.7 \text{ to 1 decimal place} \end{aligned}$	56.7 cm^2 to 1 decimal place
2)		$\begin{aligned} \text{Area} &= (124/360) \cdot \pi \cdot 7^2 = 124/360 \cdot \pi \cdot 49 \\ &= (1519/90) \pi \\ &= 53.0 \text{ to 1 decimal place} \end{aligned}$	53.0 in^2 to 1 decimal place
3)		$\begin{aligned} \text{Area} &= (162/360) \cdot \pi \cdot (3 \frac{1}{2})^2 = 162/360 \cdot \pi \cdot (49/4) \\ &= (441/80) \pi \\ &= 17.3 \text{ to 1 decimal place} \end{aligned}$	17.3 ft^2 to 1 decimal place
4)		$\begin{aligned} \text{Area} &= (52/360) \cdot \pi \cdot (1.8)^2 = (52/360) \cdot \pi \cdot (3.24) \\ &= 0.468 \pi \\ &= 1.5 \text{ to 2dp} \end{aligned}$	1.5 m^2 to 1 decimal place
5)		$\begin{aligned} \text{Area} &= (104/360) \cdot \pi \cdot (5 \frac{1}{4})^2 \\ &= (104/360) \cdot \pi \cdot (441/16) = (637/80) \pi \\ &= 25.0 \text{ to 2dp} \end{aligned}$	25.0 in^2 to 1 decimal place
6)		$\begin{aligned} \text{Area} &= (34/360) \times \pi \times (72)^2 = (34/360) \times \pi \times (5184) \\ &= (2448/5) \pi \\ &= 1538.1 \text{ to 2dp} \end{aligned}$	1538.1 cm^2 to 1 decimal place