

Name

Date



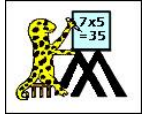
## AREA OF A SECTOR SHEET 3 (RADIANS)

Use the radius and angle measurement in radians to find the area of these sectors.

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

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# AREA OF A SECTOR SHEET 3 (RADIANS) ANSWERS

Use the radius and angle measurement to find the area of these sectors.

		WORKING OUT	AREA
1)		$\text{Area} = (1.8/2) \cdot 7^2 = 0.9 \cdot 49$ $= 44.1 \text{ cm}^2$	44.1 cm <sup>2</sup>
2)		$\text{Area} = (2/2) \cdot (8 \frac{1}{2})^2 = 1 \cdot (289/4) = 289/4$ $= 72.25 \text{ in}^2$	72.25 in <sup>2</sup>
3)		$\text{Area} = (2.8/2) \cdot (2 \frac{1}{2})^2 = 1.4 \cdot (25/4) = 35/4$ $= 8.75 \text{ ft}^2$	8.75 ft <sup>2</sup>
4)		$\text{Area} = (1/2) \cdot (2.6)^2 = \frac{1}{2} \cdot 6.76$ $= 3.38 \text{ m}^2$	3.38 m <sup>2</sup>
5)		$\text{Area} = (1 \frac{1}{2}/2) \cdot 5^2 = \frac{3}{4} \cdot 25 = 75/4$ $= 18.75 \text{ in}^2$	18.75 in <sup>2</sup>
6)		$\text{Area} = (4.7/2) \cdot 24^2 = 2.35 \cdot 576$ $= 1353.6 \text{ cm}^2$	1353.6 cm <sup>2</sup>