

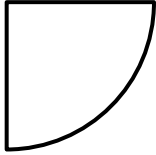
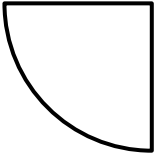
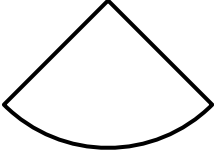
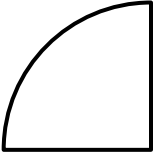
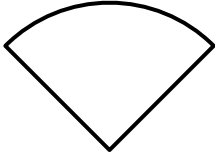
Name

Date



AREA OF $\frac{1}{4}$ CIRCLES SHEET 2

Use the radius or diameter measurement to find the area of these $\frac{1}{4}$ circles. Give your answers to 1dp.

		WORKING OUT
1)	 Radius = 12 cm	Area =
2)	 Diameter = 9 ft	Area =
3)	 Diameter = 5 $\frac{1}{2}$ in	Area =
4)	 Radius = 6.7 m	Area =
5)	 Diameter = 7.6 km	Area =

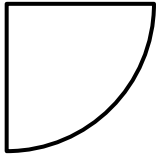
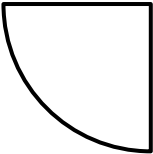
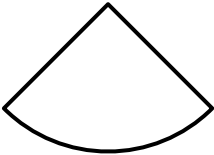
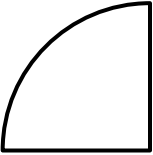
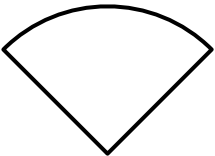
Name

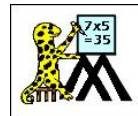
Date



AREA OF $\frac{1}{4}$ CIRCLES SHEET 2 ANSWERS

Use the radius or diameter measurement to find the area of these $\frac{1}{4}$ circles. Give your answers to 1dp.

		WORKING OUT
1)	 <p>Radius = 12 cm</p>	<p>Area = $\frac{1}{4} \times \pi \times 12^2 = \frac{1}{4} \times \pi \times 144 = 36 \pi$ = 113.1 to 1dp</p> <p>Area = 113.1 cm²</p>
2)	 <p>Diameter = 9 ft</p>	<p>Diameter = 9 ft so the Radius = $\frac{9}{2}$ ft</p> <p>Area = $\frac{1}{4} \times \pi \times (\frac{9}{2})^2 = \frac{1}{4} \times \pi \times (\frac{81}{4}) = (\frac{81}{16}) \pi$ = 15.9 to 1dp</p> <p>Area = 15.9 ft²</p>
3)	 <p>Diameter = 5 $\frac{1}{2}$ in</p>	<p>Diameter = 5 $\frac{1}{2}$ inches so Radius = $\frac{11}{4}$ inches</p> <p>Area = $\frac{1}{4} \times \pi \times (\frac{11}{4})^2 = \frac{1}{4} \times \pi \times (\frac{121}{16}) = (\frac{121}{64}) \pi$ = 5.9 to 1dp</p> <p>Area = 5.9 in²</p>
4)	 <p>Radius = 6.7 m</p>	<p>Area = $\frac{1}{4} \times \pi \times (6.7)^2 = \frac{1}{4} \times \pi \times 44.89 = 11.2225 \pi$ = 35.3 to 1dp</p> <p>Area = 35.3 m²</p>
5)	 <p>Diameter = 7.6 km</p>	<p>Diameter = 7.6 km so Radius = 3.8 km.</p> <p>Area = $\frac{1}{4} \times \pi \times (3.8)^2 = \frac{1}{4} \times \pi \times 14.44 = 3.61 \pi$ = 11.3 to 1dp</p> <p>Area = 11.3 km²</p>



		WORKING OUT	AREA
1)		$\text{Area} = \frac{1}{4} \times \pi \times 11^2 = \frac{1}{4} \times \pi \times 121 = (121/4) \pi$ $= 95.03 \text{ to 2dp}$	95.03 cm ²
2)		$\text{Area} = \frac{1}{4} \times \pi \times 9^2 = \frac{1}{4} \times \pi \times 81 = (81/4) \pi$ $= 63.62 \text{ to 2dp}$	63.62 in ²
3)		$\text{Area} = \frac{1}{4} \times \pi \times (3 \frac{1}{2})^2 = \frac{1}{4} \times \pi \times (49/4)$ $= (49/16) \pi = 9.62 \text{ to 2dp}$	9.62 ft ²
4)		$\text{Area} = \frac{1}{4} \times \pi \times (1.8)^2 = \frac{1}{4} \times \pi \times (3.24)$ $= 0.81 \pi = 2.54 \text{ to 2dp}$	2.54 m ²
5)		$\text{Area} = \frac{1}{4} \times \pi \times (5 \frac{1}{4})^2 = \frac{1}{4} \times \pi \times (441/16)$ $= (441/64) \pi = 21.65 \text{ to 2dp}$	21.65 in ²
6)		$\text{Area} = \frac{1}{4} \times \pi \times (3.4)^2 = \frac{1}{4} \times \pi \times (11.56)$ $= 2.89 \pi = 9.08 \text{ to 2dp}$	9.08 m ²

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