

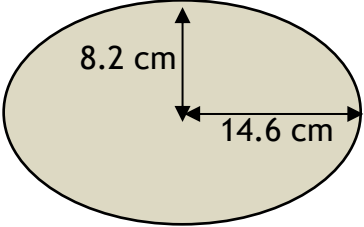
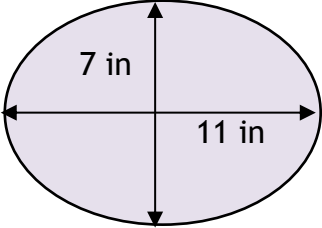
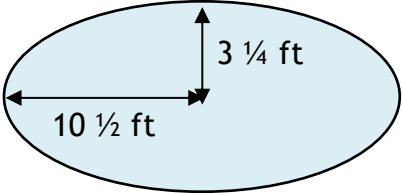
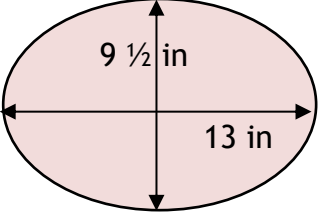
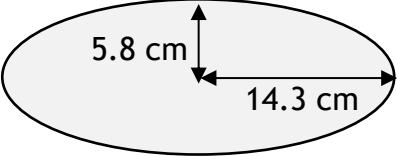
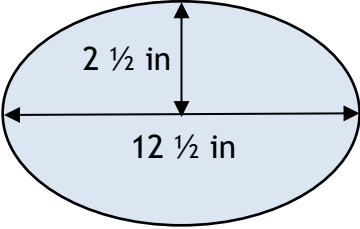
Name

Date



AREA OF AN OVAL SHEET 2

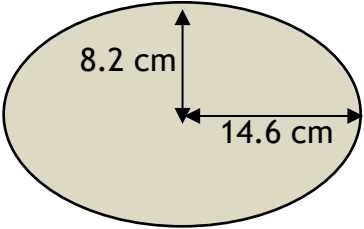
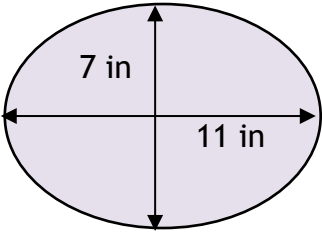
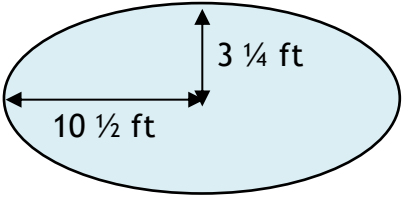
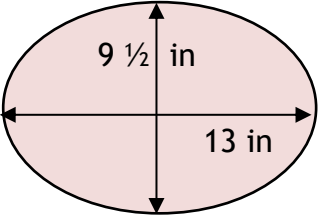
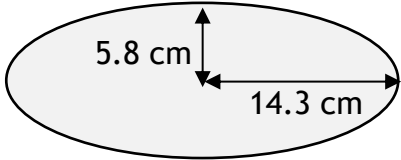
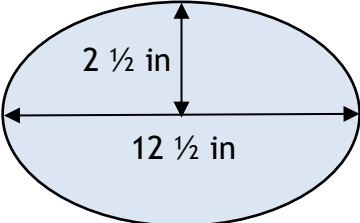
Use the measurements of the radii and diameters to find the area of these ovals, giving your answers to 1 decimal place.

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



AREA OF AN OVAL SHEET 2 ANSWERS

Use the measurements of the radii and diameters to find the area of these ovals, giving your answers to 1 decimal place.

	WORKING OUT	AREA
1) 	<p>Area of an oval = πab, where a is the length of the major radius and b is the length of the minor radius.</p> <p>$= \pi \times 14.6 \times 8.2 = 119.72\pi$</p> <p>$= 376.1 \text{ cm}^2$ to 1 decimal place</p>	376.1 cm ²
2) 	<p>Diameters are 11 in and 7 in.</p> <p>So radii are $11 \div 2 = 5 \frac{1}{2}$ in and $7 \div 2 = 3 \frac{1}{2}$ in</p> <p>Area of an oval = πab</p> <p>$= \pi \times 5 \frac{1}{2} \times 3 \frac{1}{2} = 19 \frac{1}{4} \pi$</p> <p>$= 60.5 \text{ in}^2$ to 1 decimal place</p>	60.5 in ²
3) 	<p>Area of an oval = πab</p> <p>$= \pi \times 10 \frac{1}{2} \times 3 \frac{1}{4} = 34 \frac{1}{8} \pi$</p> <p>$= 107.2 \text{ ft}^2$ to 1 decimal place</p>	107.2 ft ²
4) 	<p>Diameters are 13 in and $9 \frac{1}{2}$ in.</p> <p>So radii are $13 \div 2 = 6 \frac{1}{2}$ in and $9 \frac{1}{2} \div 2 = 4 \frac{3}{4}$ in</p> <p>Area of an oval = πab</p> <p>$= \pi \times 6 \frac{1}{2} \times 4 \frac{3}{4} = 30 \frac{3}{8} \pi$</p> <p>$= 97.0 \text{ in}^2$ to 1 decimal place</p>	97.0 in ²
5) 	<p>Area of an oval = πab</p> <p>$= \pi \times 14.3 \times 5.8 = 82.94 \pi$</p> <p>$= 260.6 \text{ cm}^2$ to 1 decimal place</p>	260.6 cm ²
6) 	<p>Major diameter is $12 \frac{1}{2}$ in.</p> <p>So major radius is $12 \frac{1}{2} \div 2 = 6 \frac{1}{4}$ in</p> <p>Area of an oval = πab</p> <p>$= \pi \times 6 \frac{1}{4} \times 2 \frac{1}{2} = 15 \frac{5}{8} \pi$</p> <p>$= 49.1 \text{ in}^2$ to 1 decimal place</p>	49.1 in ²