

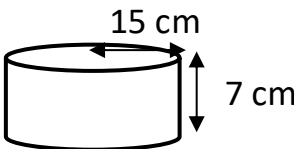
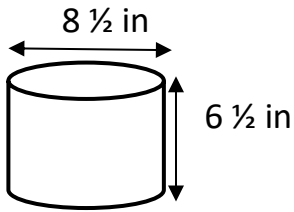
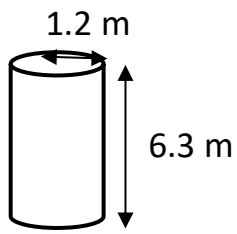
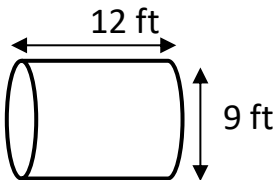
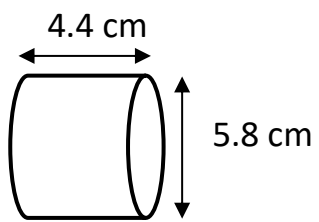
Name

Date



SURFACE AREA OF A CYLINDER SHEET 2

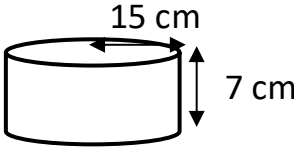
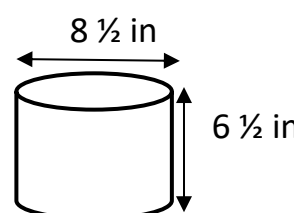
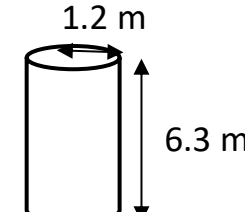
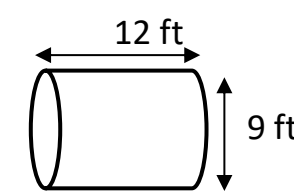
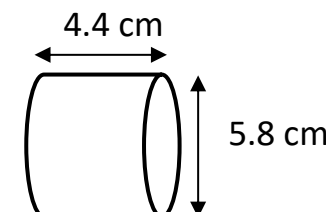
Use the measurements to find the area of these closed cylinders. Give your answers to 2 decimal places.

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



SURFACE AREA OF A CYLINDER SHEET 2 ANSWERS

Use the measurements to find the area of these closed cylinders. Give your answers to 2 decimal places.

	WORKING OUT	AREA
1) 	<p>Cylinder area = $2\pi r(r + h)$ $= 2\pi (15) (15 + 7) = 2\pi (15) (22) = 2\pi (330)$ $= 660\pi = 2073.45 \text{ cm}^2$ to 2 decimal places</p>	2073.45 cm ²
2) 	<p>The diameter is $8 \frac{1}{2}$ inches, so the radius is $8 \frac{1}{2} \div 2 = 4 \frac{1}{4}$ inches. Cylinder area = $2\pi r(r + h)$ $= 2\pi (4 \frac{1}{2}) (4 \frac{1}{2} + 6 \frac{1}{2}) = 2\pi (4 \frac{1}{2}) (11)$ $= 2\pi (49 \frac{1}{2}) = 99\pi = 311.02 \text{ in}^2$ to 2 decimal places</p>	311.02 in ²
3) 	<p>Cylinder area = $2\pi r(r + h)$ $= 2\pi (1.2) (1.2 + 6.3) = 2\pi (1.2) (7.5)$ $= 2\pi (9) = 18\pi = 56.55 \text{ m}^2$ to 2 decimal places</p>	56.55 m ²
4) 	<p>The diameter is 9 foot, so the radius is $9 \div 2 = 4 \frac{1}{2}$ foot. Cylinder area = $2\pi r(r + h)$ $= 2\pi (4 \frac{1}{2}) (4 \frac{1}{2} + 12) = 2\pi (4 \frac{1}{2}) (16 \frac{1}{2}) =$ $2\pi (74 \frac{1}{4}) = 148 \frac{1}{2} \pi = 466.53 \text{ ft}^2$ to 2 decimal places</p>	466.53 ft ²
5) 	<p>The diameter is 5.8 cm, so the radius is $5.8 \div 2 = 2.9$ cm Cylinder area = $2\pi r(r + h)$ $= 2\pi (2.9) (2.9 + 4.4) = 2\pi (2.9) (7.3) = 2\pi (21.17)$ $= 42.34\pi = 133.02 \text{ cm}^2$ to 2 decimal places</p>	133.02 cm ²