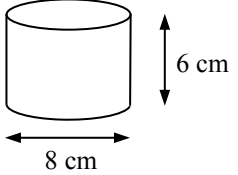
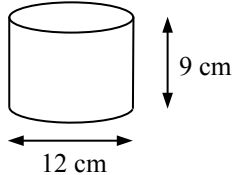
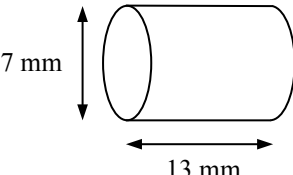
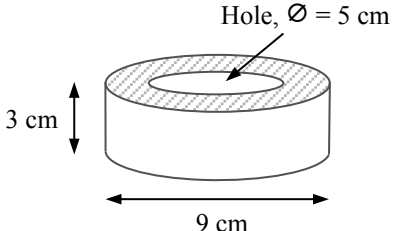
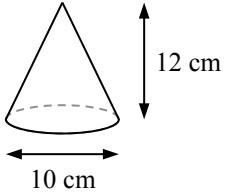
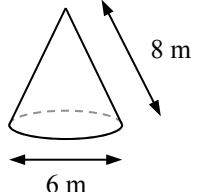
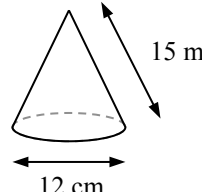
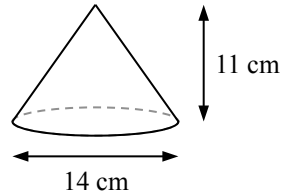
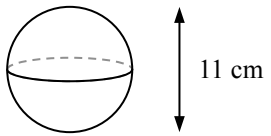
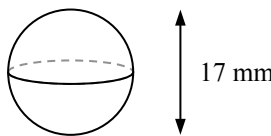
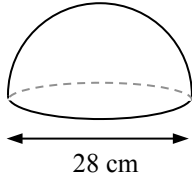
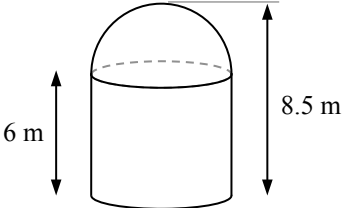




SPHERES, CONES AND CYLINDERS

SURFACE AREA AND VOLUME

Ref: G429. **2R1**

<p>A1 Calculate the curved surface area.</p> 	<p>A2 Calculate the volume.</p> 	<p>A3 Calculate the total surface area.</p> 	<p>A4 Calculate the volume.</p> 
<p>B1 Calculate the volume.</p> 	<p>B2 Calculate the curved surface area.</p> 	<p>B3 Calculate the volume.</p> 	<p>B4 Calculate the total surface area.</p> 
<p>C1 Calculate the surface area.</p> 	<p>C2 Calculate the volume.</p> 	<p>C3 Calculate the total surface area of the hemisphere.</p> 	<p>C4 Calculate the total surface area.</p> 

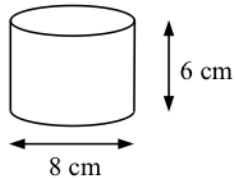


SPHERES, CONES AND CYLINDERS SURFACE AREA AND VOLUME

Ref: G429. **2R1**

A1 $A = 2\pi rh$

Calculate the **curved** surface area.

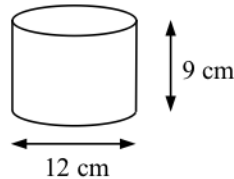


48π

151 cm^2

A2 $V = \pi r^2 h$

Calculate the volume.

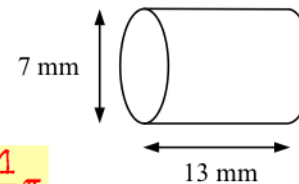


324π

1018 cm^3

A3 $A = 2\pi rh + 2\pi r^2$

Calculate the **total** surface area.

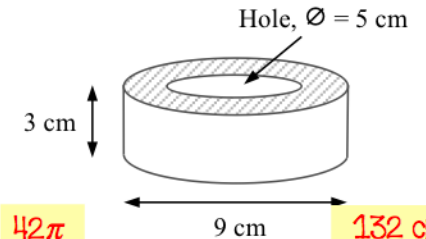


$\frac{231}{2}\pi$

363 mm^2

A4 $V = \pi R^2 h - \pi r^2 h$

Calculate the volume.

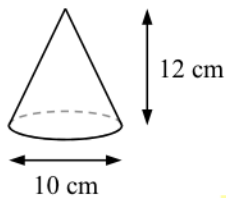


42π

132 cm^3

B1 $V = \frac{1}{3}\pi r^2 h$

Calculate the volume.

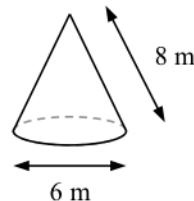


100π

314 cm^3

B2 $A = \pi rl$

Calculate the **curved** surface area.

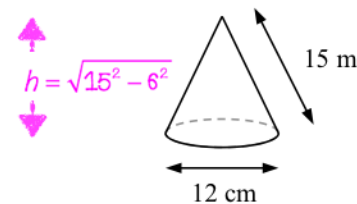


24π

75.4 m^2

B3 $V = \frac{1}{3}\pi r^2 h$

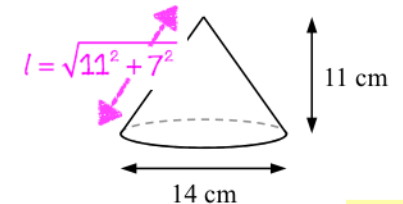
Calculate the volume.



518 cm^3

B4 $A = \pi rl + \pi r^2$

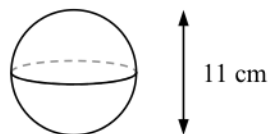
Calculate the **total** surface area.



441 cm^2

C1 $A = 4\pi r^2$

Calculate the surface area.

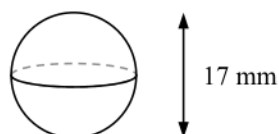


121π

380 cm^2

C2 $V = \frac{4}{3}\pi r^3$

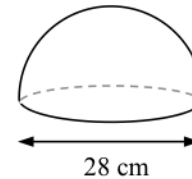
Calculate the volume.



2572 mm^3

C3 $A = 2\pi r^2 + \pi r^2$

Calculate the **total** surface area of the hemisphere.

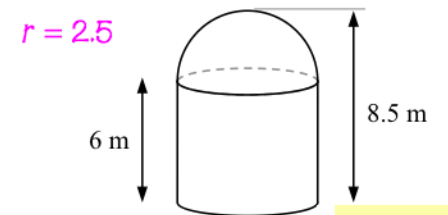


588π

1847 cm^2

C4 $A = 2\pi r^2 + 2\pi rh + \pi r^2$

Calculate the **total** surface area.



153 m^2