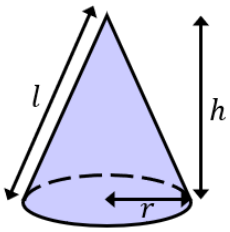
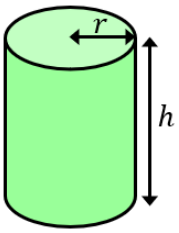
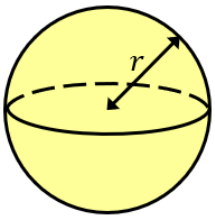
Volume of Cylinders, Cones and Spheres



Volume of Cone $= \frac{1}{3}\pi r^2 h$



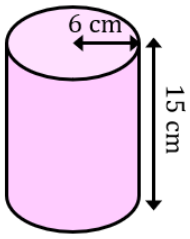
Volume of Cylinder $= \pi r^2 h$



Volume of Sphere $= \frac{4}{3}\pi r^3$

(a)

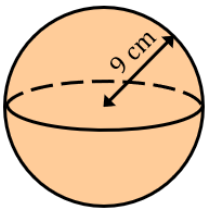
Find the volume, giving your answer in terms of π



540π cm^3

(b)

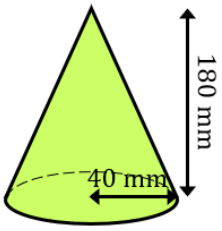
Find the volume, giving your answer to the nearest cm^3



3054 cm^3

(c)

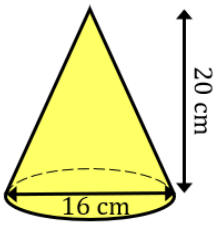
Find the volume, giving your answer to 3 significant figures



302000 mm^3

(d)

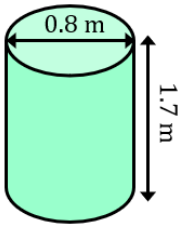
Find the volume, giving your answer to 3 significant figures



1340 cm^3

(e)

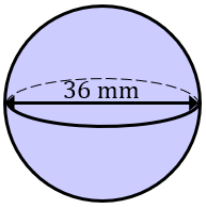
Find the volume, giving your answer to 2 decimal places



0.85 m^3

(f)

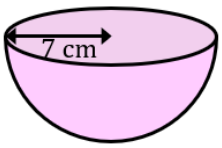
Find the volume, leaving your answer in terms of π



7776π mm^3

(g)

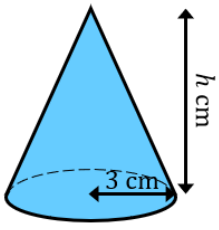
Find the volume of the hemisphere to the nearest cm^3



718 cm^3

(h)

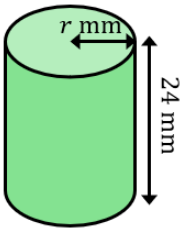
The cone has a volume of 39π cm^3. Find the height h.



13 cm

(i)

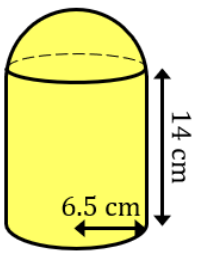
The cylinder has a volume of 6100 mm^2. Find its radius to the nearest mm.



9 mm

(j)

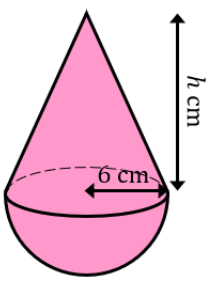
A shape is made by joining a hemisphere to a cylinder. Both have a radius of 6.5 cm. Find the total volume of the shape.



2433 cm^3

(k)

A shape is made by joining a cone to a hemisphere, where both shapes have the same radius. The total volume is 402π cm^3. Find the height of the cone.



21.5 cm