Volumes of Cones & Spheres

① The volume of a sphere is 296 cm³. Calculate the radius of the sphere, giving your answer to an appropriate degree of accuracy.

....

....

....

....

....

....

....

....

[2]

② The volume of a hemisphere is 7π cm³. Calculate the radius of the hemisphere.

....

....

....

....

....

....

....

....

....

....

....

....

....

[4]

Turn over.

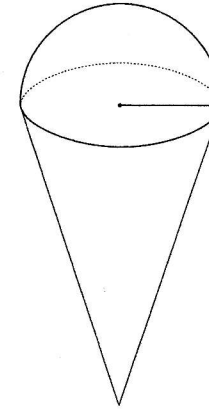③ A hemisphere is attached to a cone to make a solid as shown below.

Diagram not drawn to scale.

The hemisphere has radius 1·8 cm. The cone has base radius 1·8 cm and height 5·1 cm. Calculate the volume of the solid.

....

....

....

....

....

....

....

....

....

....

....

....

....

....

[4]