Volume and Surface Area Revision

(a)

The volume of a cuboid is $320\ cm^3$. Its height is $16\ cm$ and the length is $5\ cm$. Find the width of the cuboid.

$4\ cm$

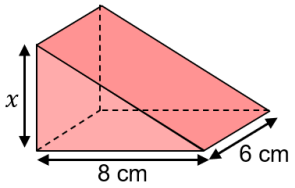
(b)

Find the surface area of a cube with side length $8.5\ cm$.

$433.5\ cm^2$

(c)

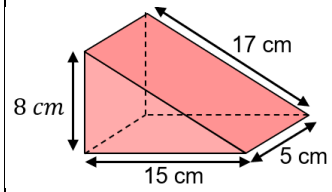
The volume of the prism is $264\ cm^3$. Find x.



$11\ cm$

(d)

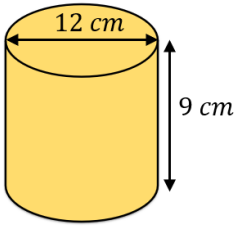
Find the surface area of this prism.



$320\ cm^2$

(e)

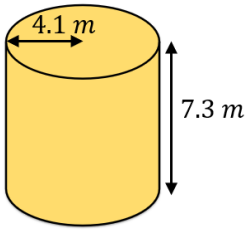
Find the volume of the cylinder, leaving your answer in terms of π.



$324\pi\ cm^3$

(f)

Find the total surface area of the cylinder, giving your answer to 3 significant figures.



$294\ m^2$

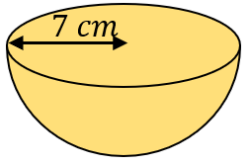
(g)

The volume of a sphere is $288\pi\ cm^3$. Find the radius of the sphere.

$6\ cm$

(h)

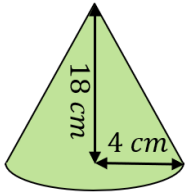
Find the total surface area of the hemisphere, giving your answer to 3 significant figures.



$462\ cm^2$

(i)

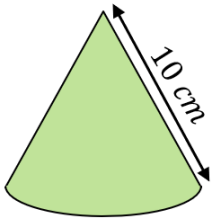
Find the volume of the cone, leaving your answer in terms of π.



$96\pi\ cm^3$

(j)

A cone has a slanted height of $10\ cm$ and a curved surface area of $60\pi\ cm^2$. Find the volume of the cone, giving your answer to 3 significant figures.



$302\ cm^3$

(k)

A cylinder has a height of $16\ cm$ and a radius of $x\ cm$. A sphere has a radius of $2x\ cm$. The volume of the cylinder and the sphere are equal. Find the value of x.

$1.5\ cm$