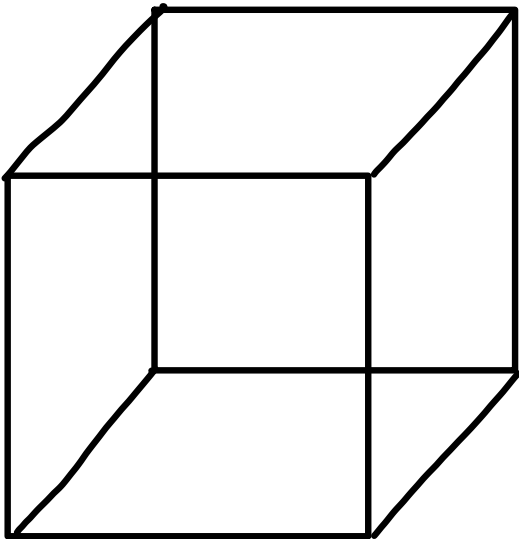


Surface Area



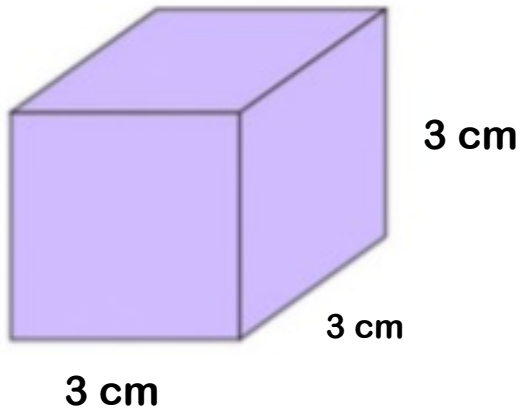
By Kru ชี

Cube

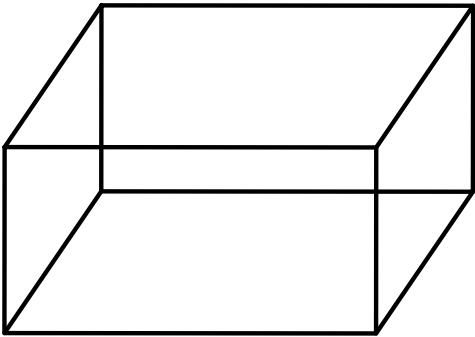


Example

Find the total surface area

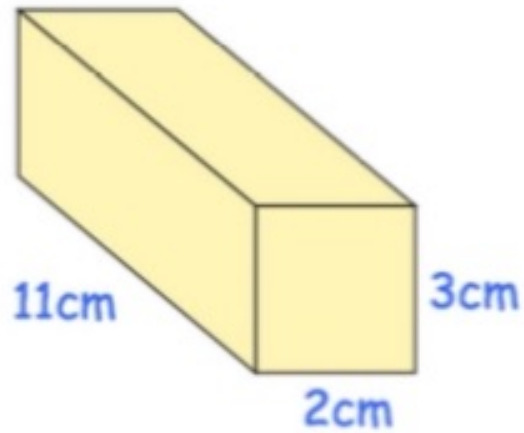


Cuboid

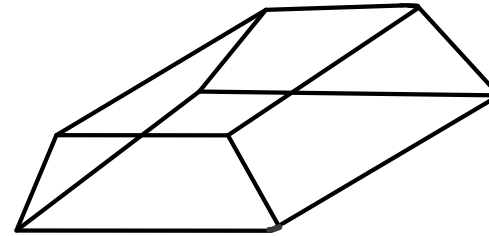
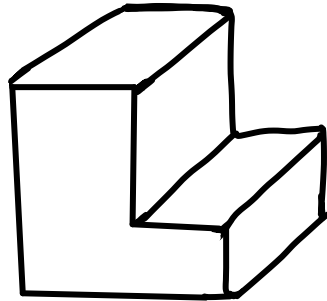
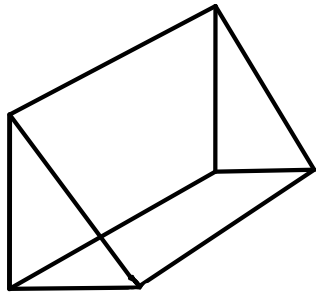


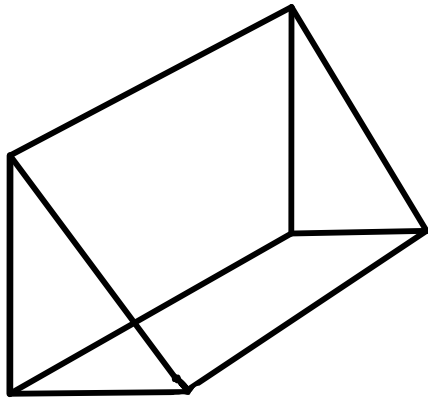
Example

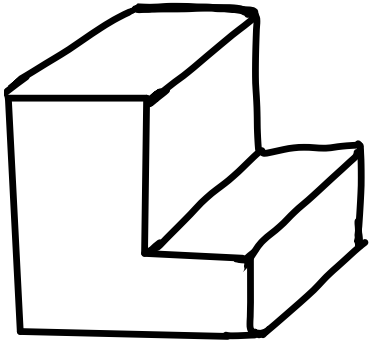
Find the total surface area

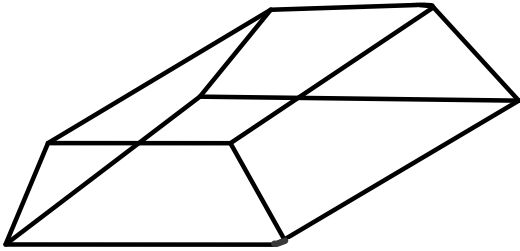


Prisms





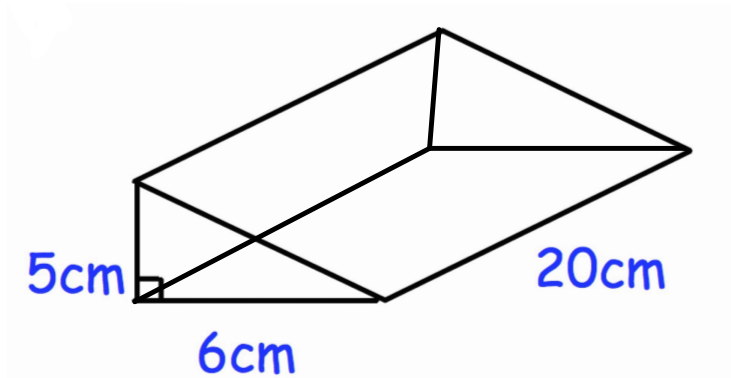




Total surface area of any prism

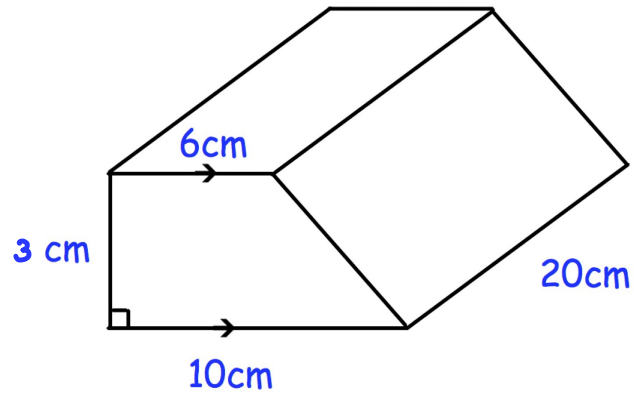
Example

Find the total surface area



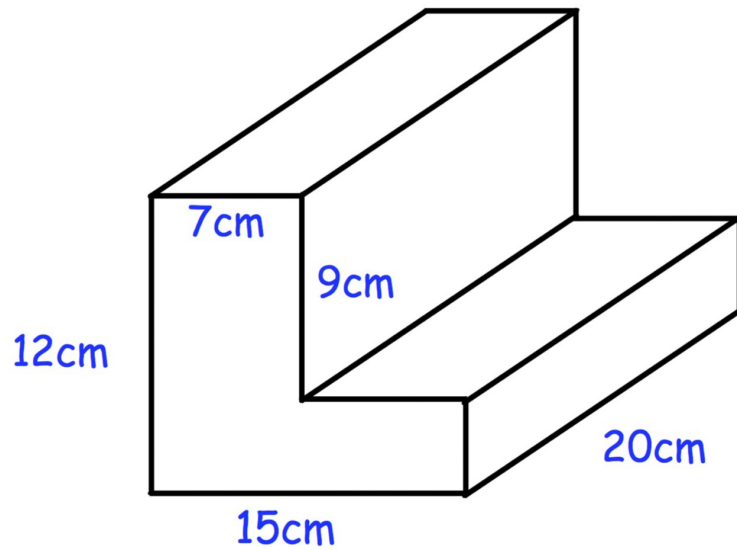
Example

Find the total surface area

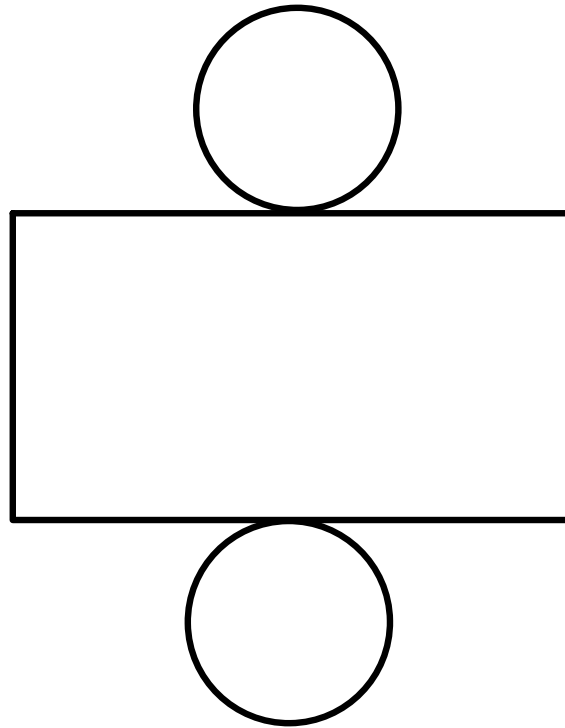
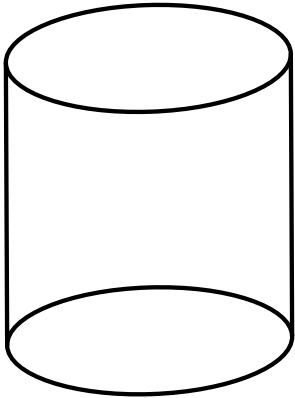


Example

Find the total surface area

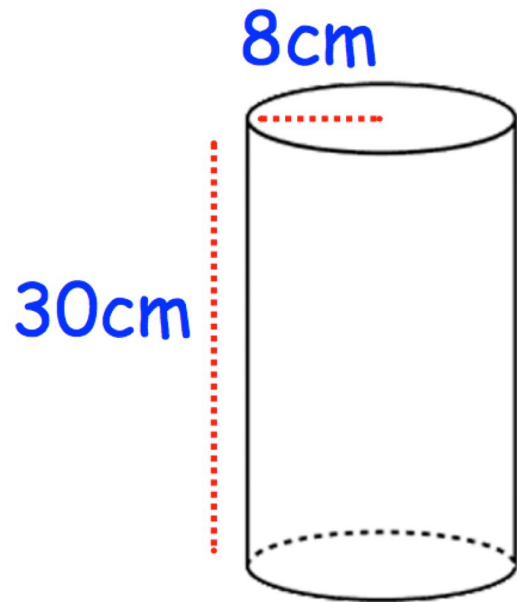


Cylinder



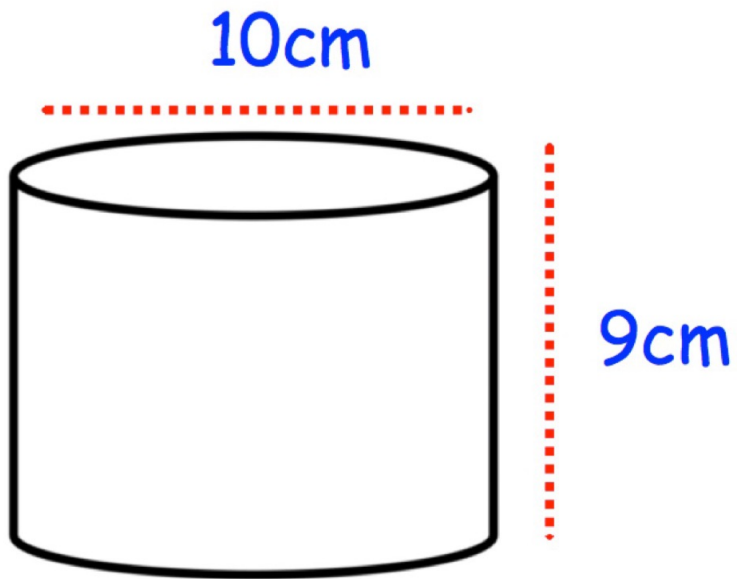
Example

Find the total surface area



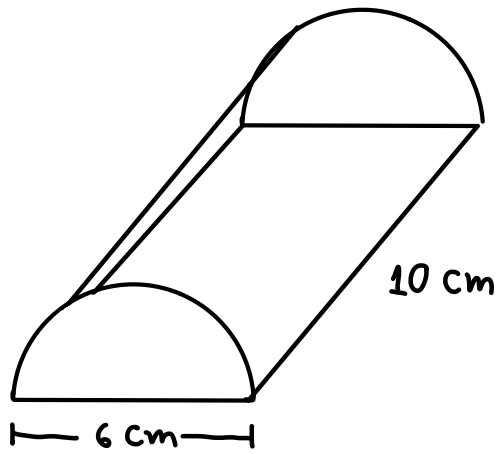
Example

Find the curved area

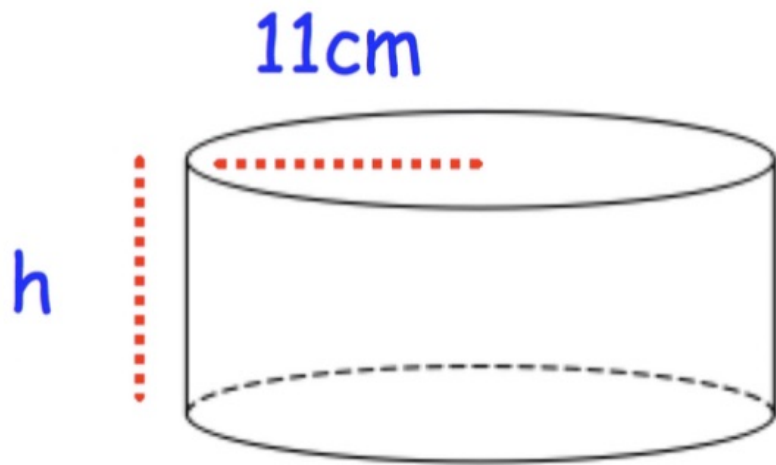


Example

Find the total surface area

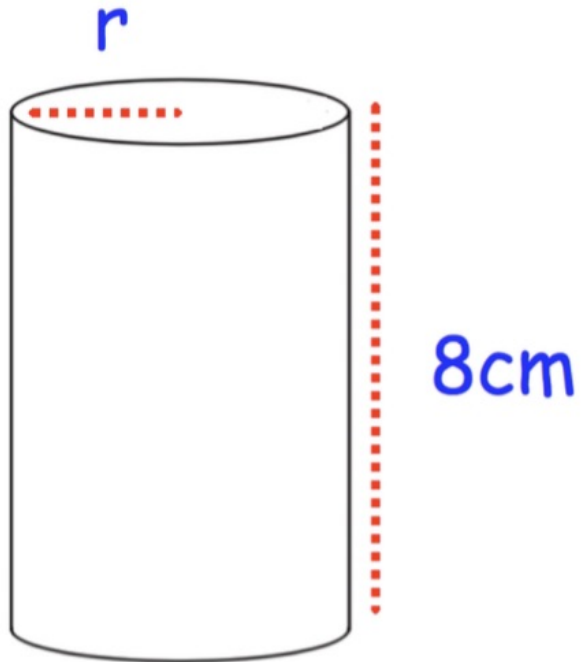


Example



$$\text{Surface area} = 850\text{cm}^2$$

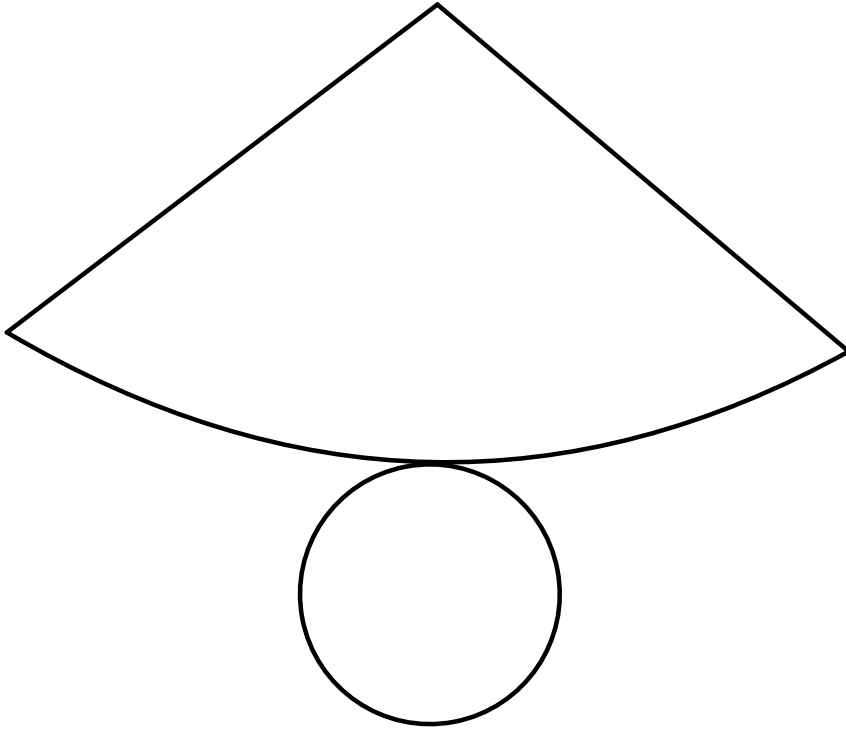
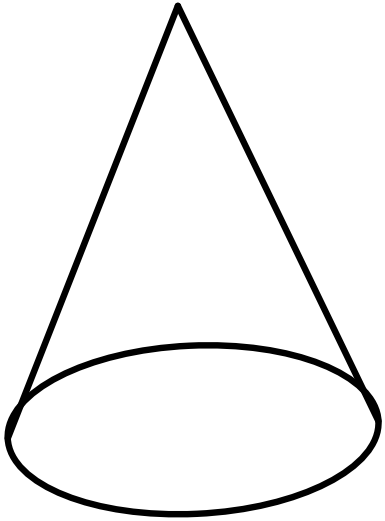
Example



$$\text{Surface area} = 18\pi \text{ cm}^2$$

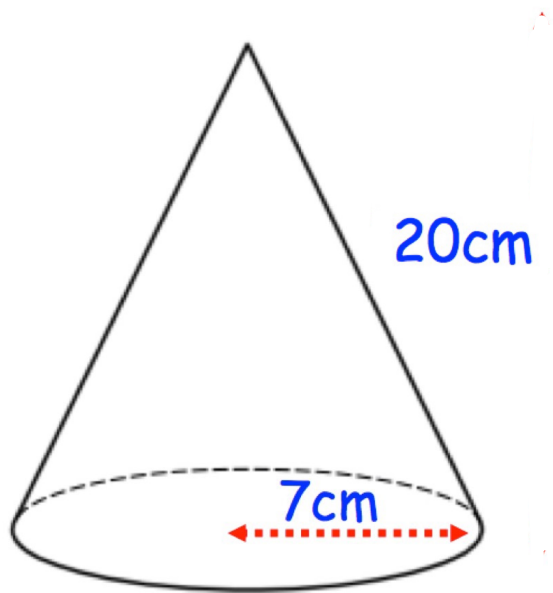


Cone



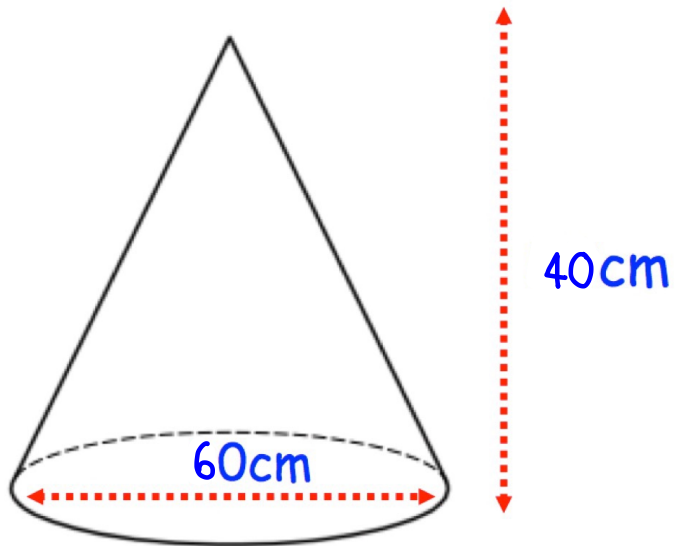
Example

Find the total surface area

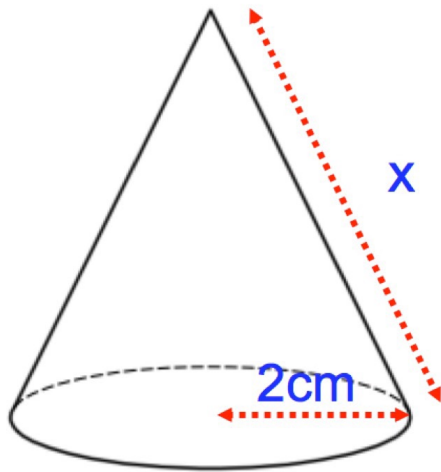


Example

Find the total surface area

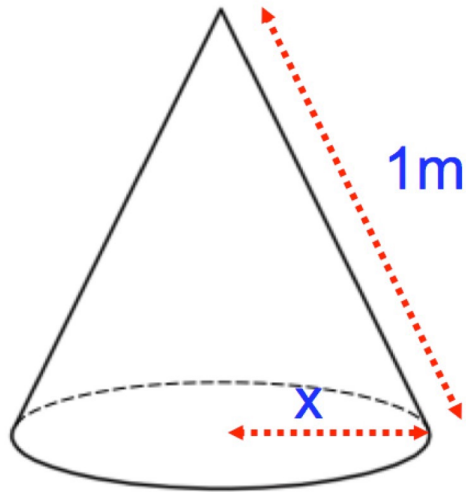


Example



Total surface area = 100 cm^2

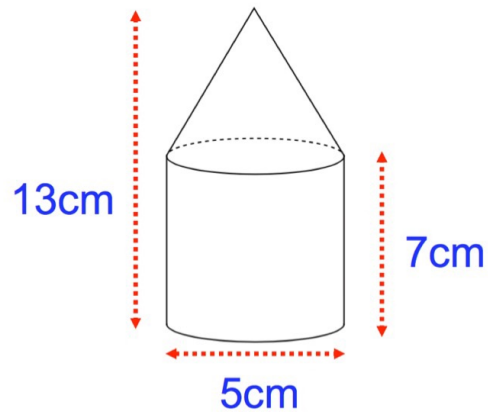
Example



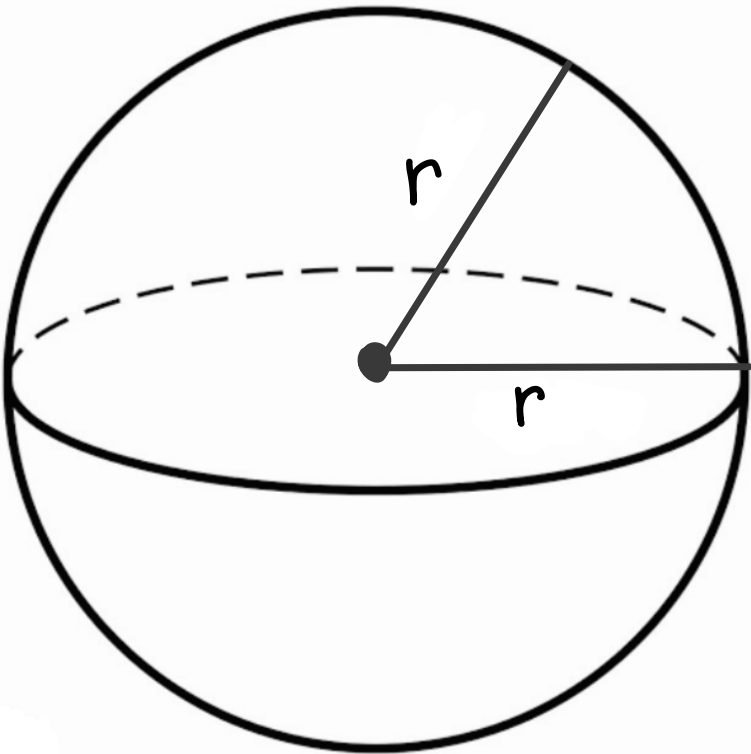
Total surface area = $9600\pi \text{ cm}^2$

Example

The diagram shows a solid shape.
The shape is a cone on top of a cylinder.
Work out the surface area of the shape.
Give your answer correct to **3** significant figures

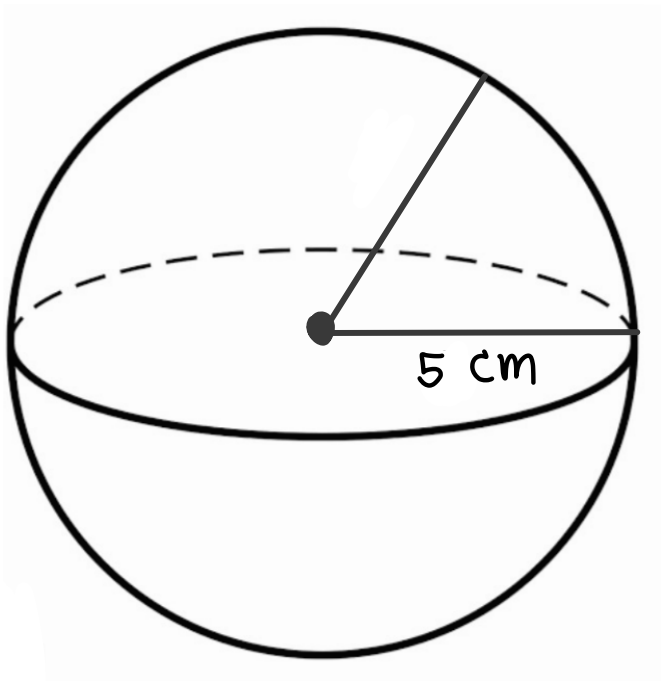


Sphere



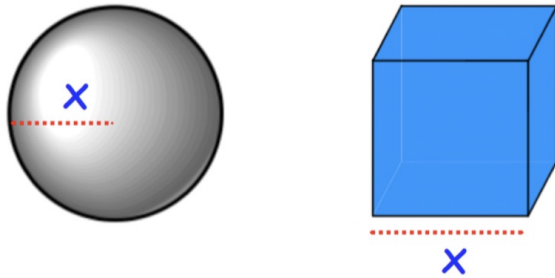
Example

Find the total surface area



Example

The diameter of a sphere is equal to the side length of a cube.

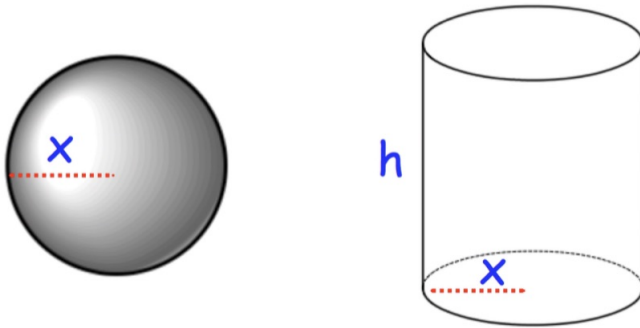


Peter says the surface area of the sphere is double the surface area of the cube.
Is Peter correct?

Example

A sphere has a radius of x .

A cylinder has a radius of x and height h .

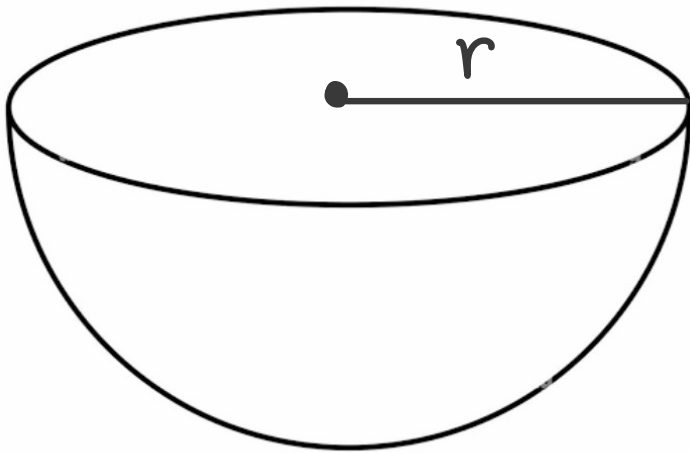


The surface area of the sphere and cylinder are equal.

Show $h = x$

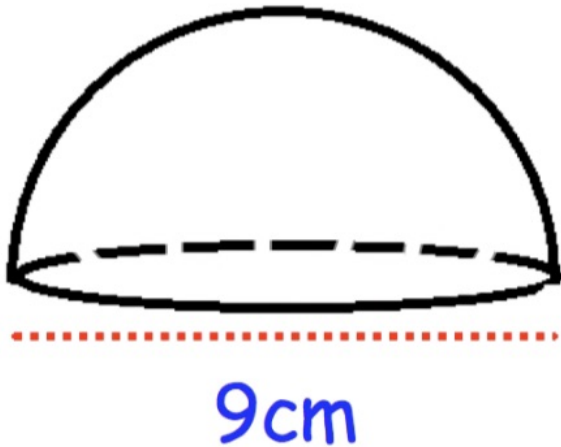


Hemisphere



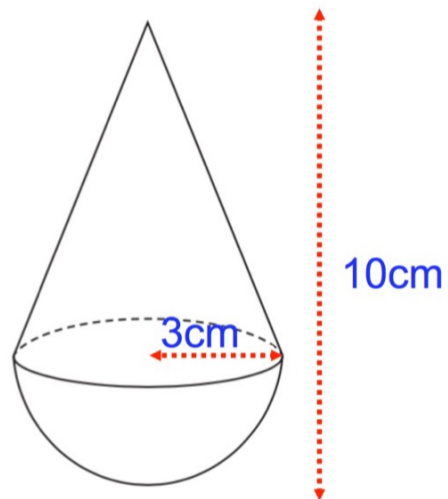
Example

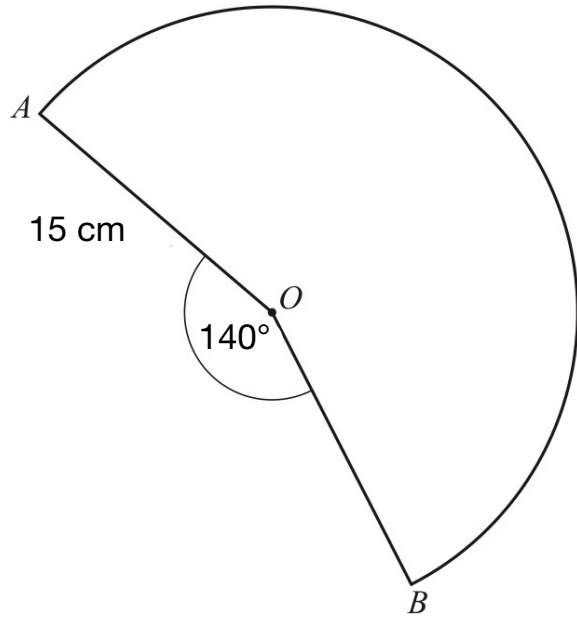
Find the total surface area



Example

The diagram shows a solid shape.
The shape is a cone on top of a hemisphere.
Work out the surface area of the shape.
Give your answer correct to **3** significant figures



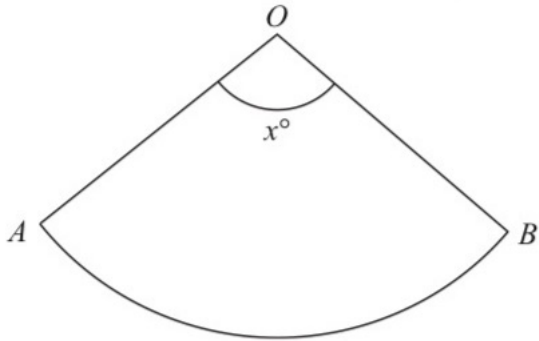


The sector is made into a cone by joining OA to OB .

Calculate the volume of the cone.



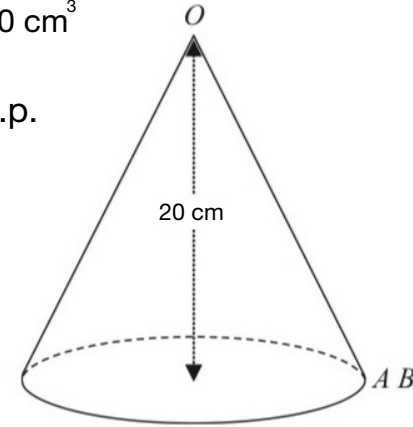
Here is a sector, AOB , of a circle with centre O and angle $AOB = x^\circ$



The sector can form the curved surface of a cone by joining OA to OB .

The volume of cone is 1200 cm^3

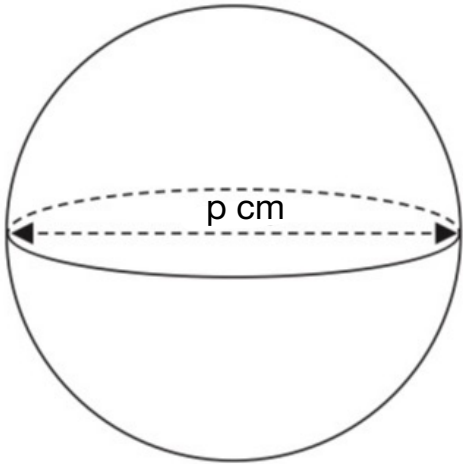
Find the value of x in 1 d.p.



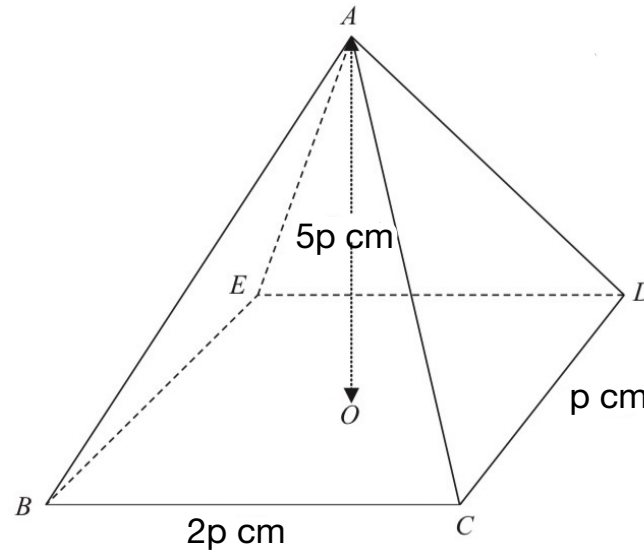


Questions

Volume of sphere is $\frac{4000\pi}{3} \text{ cm}^3$



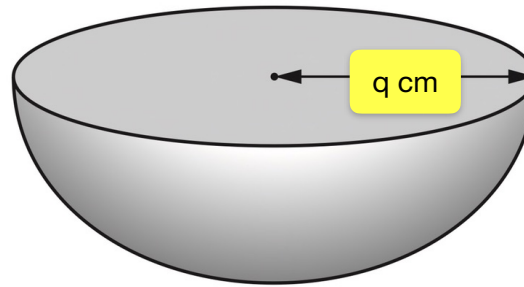
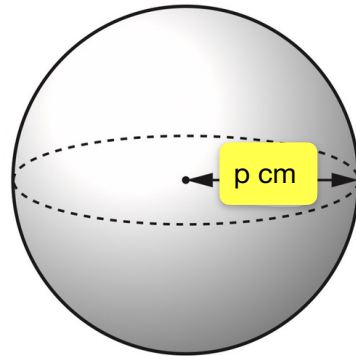
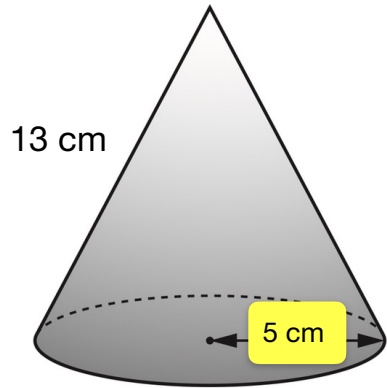
ABCDE is rectangular based pyramid



Calculate total surface area of pyramid
(answer as 1 d.p.)



The total surface area of each shape is the same



Find the value of p and q , then find the volume of sphere