

Question 2: Work out the surface areas of each of the following cones. Give each answer to one decimal place.
(a)

(b)

(c)


Question 3: Work out the surface areas of each of the following cones. Give each answer to one decimal place.
(a)

(b)

(c)


## Surface Area of a Cone <br> Video 314 on www.corbettmaths.com

Question 4: Work out the surface area of each of the following cones. Give each answer in terms of $\boldsymbol{\pi}$
(a)

(b)

(c)


Question 5: Calculate the slant height for each of these cones
(a)


Total surface area $=216 \pi \mathrm{~cm}^{2}$
(b)


Total surface area $=792 \pi \mathrm{~cm}^{2}$
(c)


Question 6: Calculate the lengths of the radius for each of these cones
(a)


Total surface area $=36 \pi \mathrm{~cm}^{2}$
(b)


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

Question 7: Calculate the heights of these cones
(a)

Total surface area $=800 \pi \mathrm{~cm}^{2}$
(b)

Total surface area $=750 \mathrm{~cm}^{2}$

Question 1: The cone and cube below have the same surface areas.
Work out the side length of the cube, $x$.


Question 2: 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 2 significant figures


Question 3: A cone has a radius of 9 cm .
The surface area of the cone is $450 \pi \mathrm{~cm}^{2}$
Work out the volume of the cone.
Give your answer in terms of $\pi$

Question 4: 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 2 significant figures


10 cm

## Surface Area of a Cone

Question 5: The cylinder and cone has the same surface area. Express L in terms of x .


Question 6: A frustum is made from cutting a small cone from the top of a larger cone. The larger cone was 21 cm tall.


Calculate the surface area of the frustum

Question 7: A cone and cylinder are joined to make a solid.


Show the total surface area of the solid is $\frac{3 \pi r}{2}(3 r+8)$


