



Volume and Surface Area of Cylinders



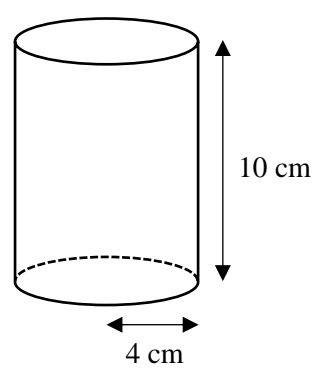
SCAN ME

REVISE THIS TOPIC

CHECK YOUR ANSWERS

SCAN ME

1 Here is a cylinder with a radius of 4 cm and a height of 10 cm.



(a) Work out the volume of the cylinder.
Give your answer in terms of π .

..... cm³
(2)

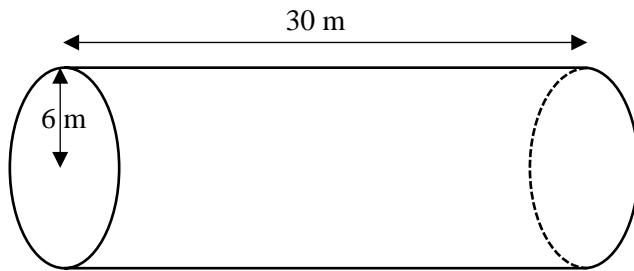
(b) Work out the surface area of the cylinder.
Give your answer in terms of π .

..... cm²
(3)

(Total for Question 1 is 5 marks)



2 Here is a cylinder.



- (a) Work out the volume of the cylinder.
Give your answer to 1 decimal place.

..... m³
(2)

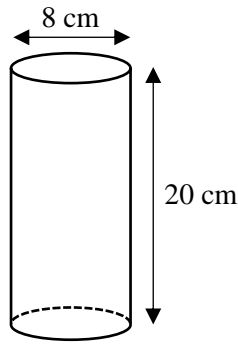
- (b) Work out the surface area of the cylinder.
Give your answer to 1 decimal place.

..... m²
(3)

(Total for Question 2 is 5 marks)



3 Here is a cylinder.



(a) Work out the volume of the cylinder.
Give your answer to 1 decimal place.

..... cm³
(2)

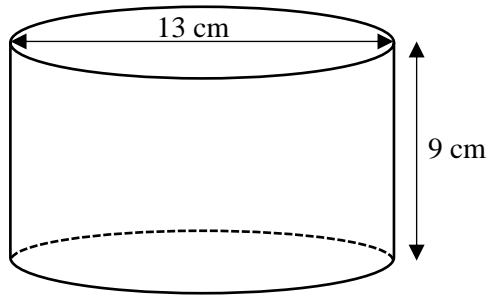
(b) Work out the surface area of the cylinder.
Give your answer to 1 decimal place.

..... cm²
(3)

(Total for Question 3 is 5 marks)



4 Here is a cylinder.



- (a) Work out the volume of the cylinder.
Give your answer to 4 significant figures.

..... cm³
(2)

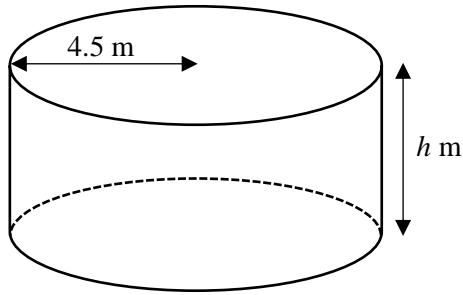
- (b) Work out the surface area of the cylinder.
Give your answer to 3 significant figures.

..... cm²
(3)

(Total for Question 4 is 5 marks)



5 Here is a cylinder with a volume of 299 m^3



- (a) Work out the value of h , the height of the cylinder.
Give your answer to 1 decimal place.

..... m
(2)

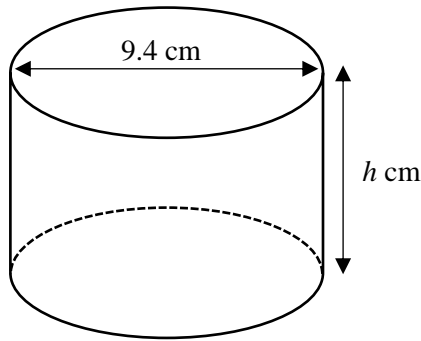
- (b) Work out the surface area of the cylinder.
Give your answer to 3 significant figures.

..... m^2
(3)

(Total for Question 5 is 5 marks)



6 Here is a cylinder with a volume of 299 m^3



(a) Work out the value of h , the height of the cylinder.
Give your answer to 1 decimal place.

..... cm
(2)

(b) Work out the surface area of the cylinder.
Give your answer to 4 significant figures.

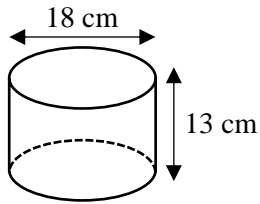
..... cm^2
(3)

(Total for Question 6 is 5 marks)

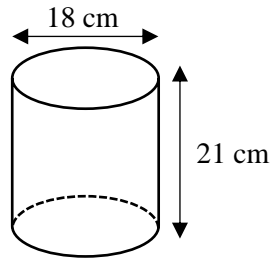


7 Here are two cylinders.

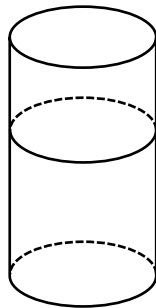
Cylinder A



Cylinder B



Cylinder A is placed on top of **cylinder B** to form a new cylinder.

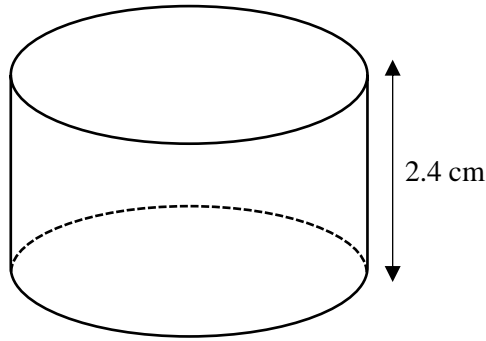


Work out the surface area of the new cylinder.
Give your answer to 4 significant figures.

..... cm²
(Total for Question 7 is 3 marks)



8 Here is a cylinder with a height of 2.4 cm



The ratio of the radius of the cylinder to the height of the cylinder is 2 : 3

- (a) Work out the volume of the cylinder.
Give your answer to 1 decimal place.

..... cm³
(3)

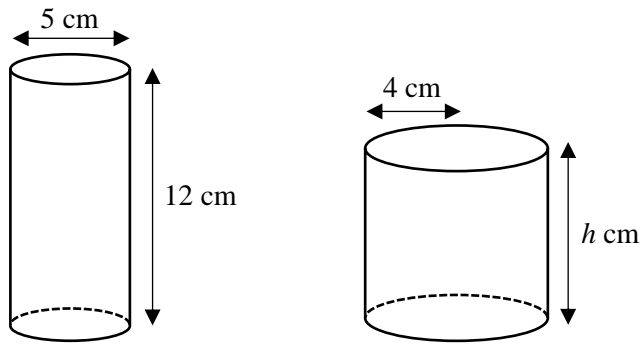
- (b) Work out the surface area of the cylinder.
Give your answer to 3 significant figures.

..... cm²
(3)

(Total for Question 8 is 6 marks)



9 Here are two cylinders with the same volume.



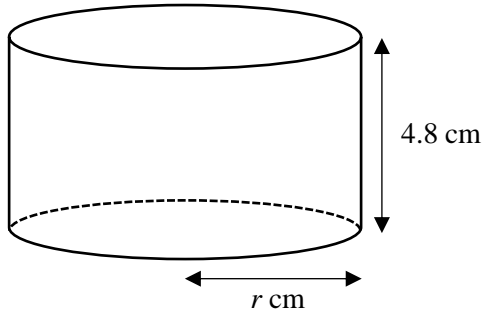
Work out the value of h , the height of the second cylinder.
Give your answer to 2 decimal places.

..... cm

(Total for Question 9 is 4 marks)



10 Here is a cylinder with a volume of 266 cm^3



- (a) Work out the value of r , the radius of the cylinder.
Give your answer to 1 decimal place.

..... cm
(3)

- (b) Work out the surface area of the cylinder.
Give your answer to 4 significant figures.

..... cm^2
(3)

(Total for Question 10 is 6 marks)

