

Cylinders

Question Paper

Level	GCSE
Subject	Maths
Exam Board	Edexcel GCSE
Topic	Cylinders
Grade Level	Grade 4
Booklet	Question Paper

Time Allowed: 36 minutes

Score: /30

Percentage: /100

Grade Boundaries:

1.

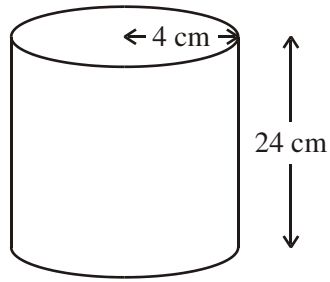


Diagram **NOT** accurately drawn

A cylinder has a height of 24 cm and a radius of 4 cm.
Work out the volume of the cylinder.
Give your answer correct to 3 significant figures.

..... cm³
(Total 2 marks)

2. A can of drink is in the shape of a cylinder.
The can has a radius of 4 cm and a height of 15 cm.

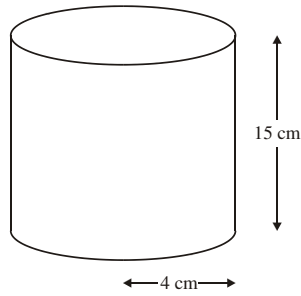


Diagram **NOT**
accurately drawn

Calculate the volume of the cylinder.
Give your answer correct to 3 significant figures.

.....
(Total 3 marks)

- 3.

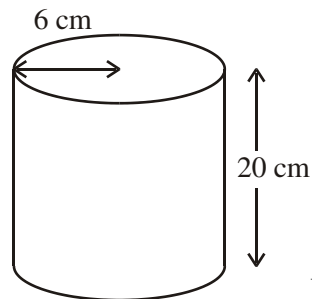


Diagram **NOT** accurately drawn

A solid cylinder has a radius of 6 cm and a height of 20 cm.

Calculate the volume of the cylinder.

Give your answer correct to 3 significant figures.

..... cm³
(Total 2 marks)

4.

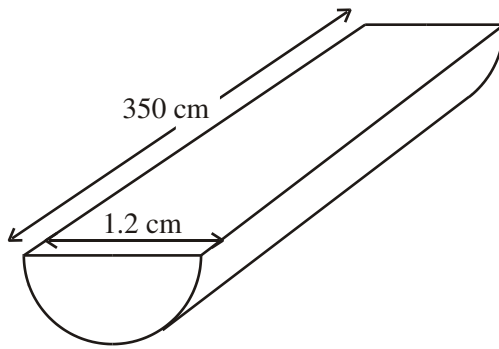


Diagram **NOT** accurately drawn

The diagram shows a piece of wood.

The piece of wood is a prism of length 350 cm.

The cross-section of the prism is a semi-circle with diameter 1.2 cm.

Calculate the volume of the piece of wood.

Give your answer correct to 3 significant figures.

..... cm³
(Total 4 marks)

5.

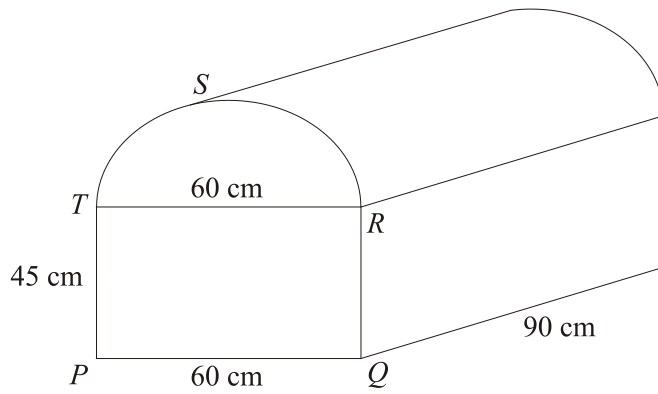


Diagram **NOT** accurately drawn

The diagram shows a prism of length 90 cm .

The cross section, $PQRST$, of the prism is a semi-circle above a rectangle.

$PQRT$ is a rectangle.

RST is a semi-circle with diameter RT .

$PQ = RT = 60\text{ cm}$.

$PT = QR = 45\text{ cm}$.

Calculate the volume of the prism.

Give your answer correct to 3 significant figures.

State the units of your answer.

.....

(Total 5 marks)

6.

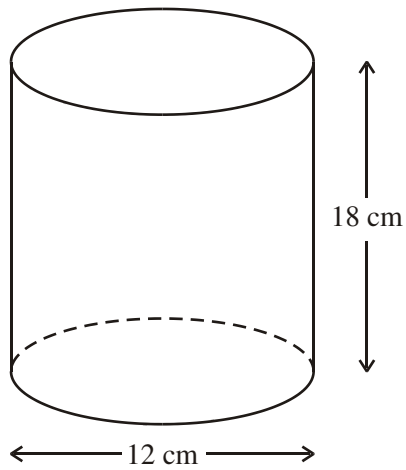


Diagram **NOT** accurately drawn

The diagram shows a solid cylinder.

The cylinder has a diameter of 12 cm and a height of 18 cm.

Calculate the **total** surface area of the cylinder.

Give your answer correct to 3 significant figures.

..... cm²
(Total 4 marks)

7.

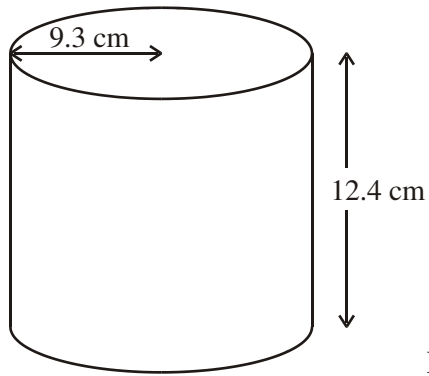


Diagram **NOT** accurately drawn

The diagram shows a solid cylinder.
The radius of the cylinder is 9.3 cm.
Its height is 12.4 cm.

Calculate the **total** surface area of the cylinder.
Give your answer correct to 3 significant figures.

..... cm²
(Total 4 marks)

8.

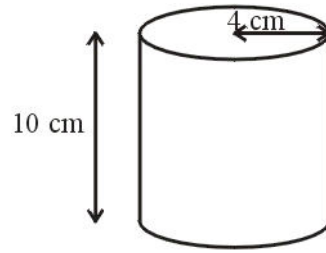


Diagram **NOT** accurately drawn

The diagram shows a cylinder with a height of 10 cm and a radius of 4 cm.

- (a) Calculate the volume of the cylinder.
Give your answer correct to 3 significant figures.

.....

(3)

The cylinder is solid.

- (b) Calculate the **total** surface area of the cylinder.
Give your answer correct to 3 significant figures.

.....

(3)

(Total 6 marks)