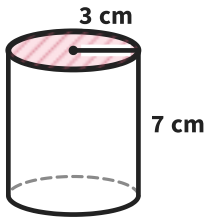
Volume of Cylinders

1

Work out the volume of this cylinder.
Give your answer to 1 decimal place.



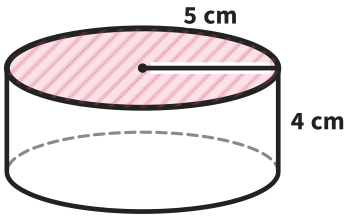
Area of cross-section = $\pi \times r^2$

Volume = area × height

Answer

2

Work out the volume of this cylinder.
Give your answer to 1 decimal place.



Area of cross-section = $\pi \times r^2$

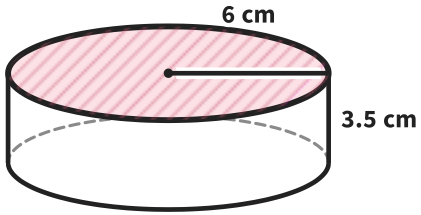
$\pi \times 5^2 = 78.539\ldots \text{ cm}^2$

Volume = area × height

Answer

3

Work out the volume of this cylinder.
Give your answer to 1 decimal place.



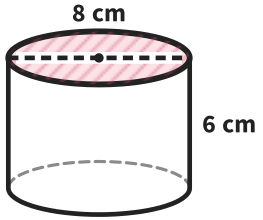
Area of cross-section = $\pi \times r^2$

Volume = area × height

Answer

4

Work out the volume of this cylinder.
Give your answer to 1 decimal place.



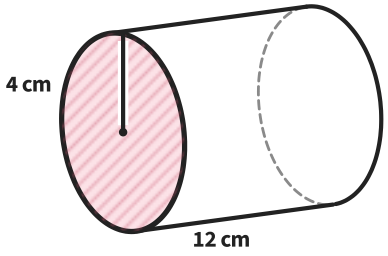
Area of cross-section = $\pi \times r^2$

Volume = area × height

Answer

5

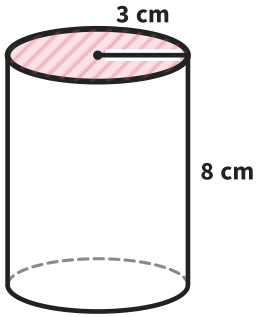
This cylinder is lying on its side.
Work out its volume. Give your answer to 1 decimal place.



Answer

6

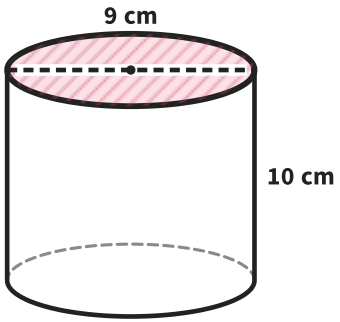
Work out the volume of this cylinder.
Give your answer in terms of π.



Answer

7

Work out the volume of this cylinder.
Give your answer to 2 decimal places.



Answer

8

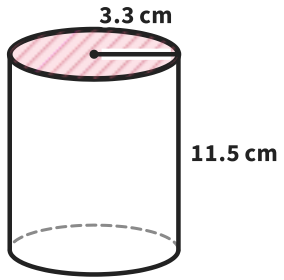
This cylinder has a diameter of 10 cm and a height of 7 cm. Ben works out $\pi \times 10^2 \times 7 = 2199.1 \text{ cm}^3$.
Explain Ben's mistake, then work out the volume. Give your answer to 1 decimal place.

Answer

Volume of Cylinders *further practice*

9

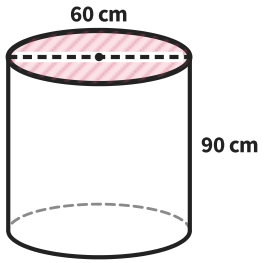
A drinks can is a cylinder with a radius of 3.3 cm and a height of 11.5 cm.
Work out its volume. Give your answer to 1 decimal place.



Answer _____

10

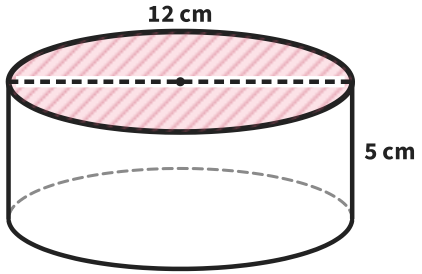
A water butt is a cylinder with a diameter of 60 cm and a height of 90 cm.
How many litres does it hold when it is full? Give your answer to 1 decimal place. (1000 cm^3 = 1 litre)



Answer _____

11

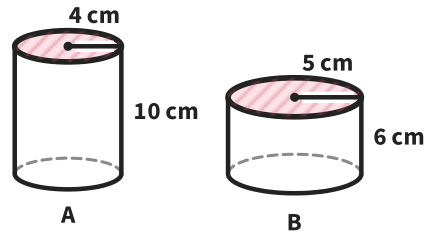
Work out the volume of this cylinder.
Give your answer in terms of π.



Answer _____

12

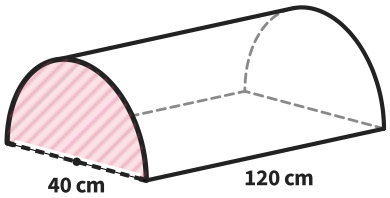
Which cylinder holds more, A or B?
By how much? Give your answer to 1 decimal place.



Answer _____

13

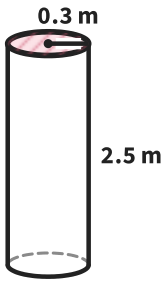
A water trough is half a cylinder.
The semicircle has a diameter of 40 cm and the trough is 120 cm long.
Work out its volume. Give your answer to 1 decimal place.



Answer _____

14

A concrete pillar is a cylinder with a radius of 0.3 m and a height of 2.5 m.
Work out the volume of concrete in m^3.
Give your answer to 2 decimal places.



Answer _____

15

A jug is a cylinder with a radius of 7 cm and a height of 20 cm. A glass is a cylinder with a radius of 3.5 cm and a height of 10 cm.
The jug is full. How many glasses can it fill?

Answer _____

16

Cylinder A has a radius of 2 cm and a height of 10 cm. Cylinder B has a radius of 10 cm and a height of 2 cm. Mia says they have the same volume, because they use the same numbers. Is Mia right? Explain.

Answer _____