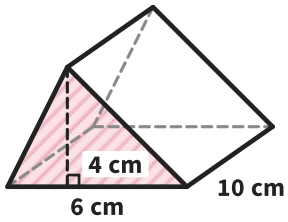
Volume of Prisms

1

Work out the volume of this triangular prism.



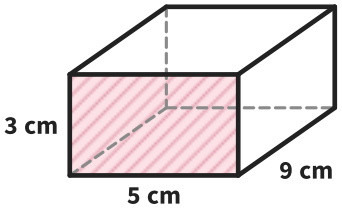
Area of cross-section

Volume = area of cross-section × length

Answer _____

2

Work out the volume of this cuboid.



Area of cross-section

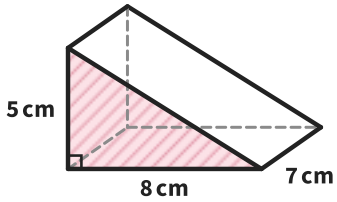
$5 \times 3 = 15\ cm^2$

Volume = area of cross-section × length

Answer _____

3

Work out the volume of this triangular prism.



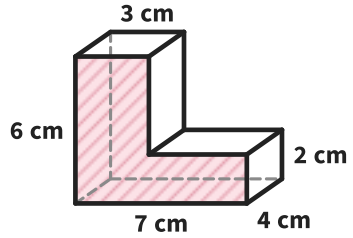
Area of cross-section

Volume = area of cross-section × length

Answer _____

4

Work out the volume of this prism.



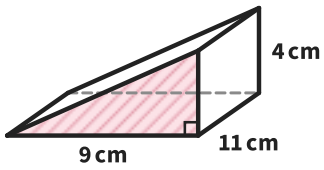
Area of cross-section

Volume = area of cross-section × length

Answer _____

5

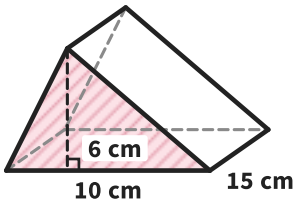
Work out the volume of this triangular prism.



Answer _____

6

Sam says the volume of this prism is $6 \times 10 \times 15 = 900\ cm^3$. Explain Sam's mistake, then work out the volume.



Answer _____

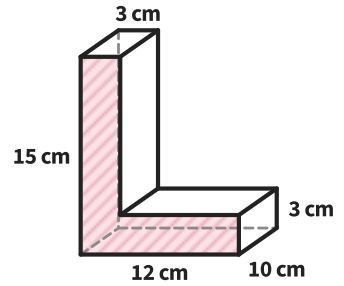
7

A wooden doorstop is a prism.
Its cross-section is a right-angled triangle 8 cm long and 3 cm high. The doorstop is 5 cm wide. Work out its volume.

Answer _____

8

A metal bookend is a prism.
Its cross-section is made of two rectangles.
Work out its volume.

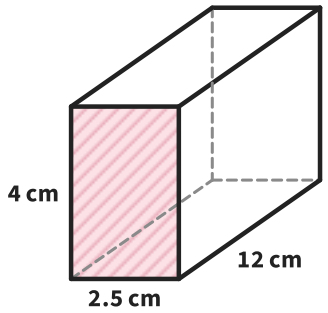


Answer _____

Volume of Prisms *further practice*

9

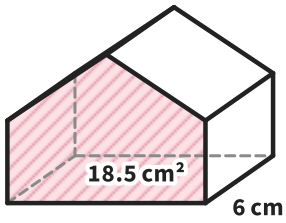
Work out the volume of this cuboid.



Answer _____

10

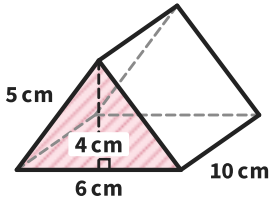
The cross-section of this prism has an area of 18.5 cm^2. Work out its volume.



Answer _____

11

Work out the volume of this triangular prism.



Answer _____

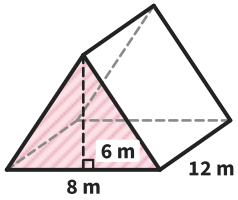
12

A fish tank is a cuboid 60 cm long, 30 cm wide and 40 cm high. How many litres of water does it hold when it is full?
(1000 cm^3 = 1 litre)

Answer _____

13

The space in a loft is a triangular prism. The triangle is 8 m wide and 6 m high, and the loft is 12 m long. Work out the volume of the loft.



Answer _____

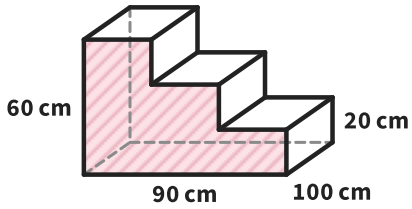
14

Box A is a cuboid 10 cm by 6 cm by 5 cm.
Box B is a triangular prism: its triangle has a base of 12 cm and a height of 8 cm, and it is 6 cm long. Which box holds more, and by how much?

Answer _____

15

A block of steps for a stage is a prism. Each step is 30 cm deep and 20 cm high. Work out its volume.



Answer _____

16

The cross-section of a prism has an area of 15 cm^2 and the prism is 4 cm long.
Kai says that if the prism were twice as long, its volume would double.
Is Kai right? Explain.

Answer _____