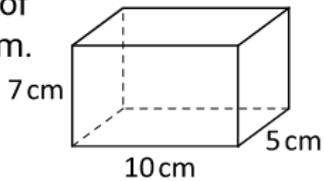


## Year 9 Class 21 questions

Q1

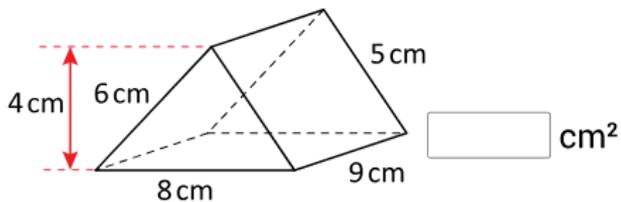
Find the surface area of this rectangular prism.

cm<sup>2</sup>



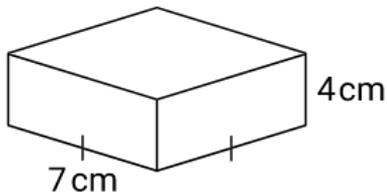
Q2

Find the surface area of the triangular prism.

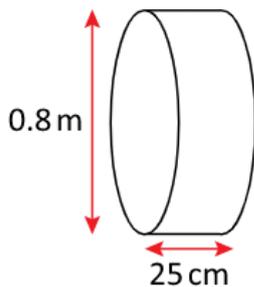


Q3

Volume =  cm<sup>3</sup>

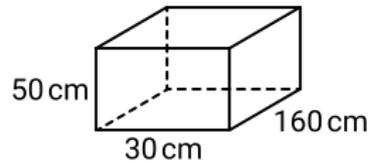


Q4



Volume =  cm<sup>3</sup> (1 d.p.)

Q5



Find the volume of this fish tank in cm<sup>3</sup>.

Volume =  cm<sup>3</sup>

What is its capacity in litres?

Capacity =  L

Q6

Find the surface area of a rectangular prism with length 12 cm, width 8 cm and height 7 cm.

cm<sup>2</sup>

Q7

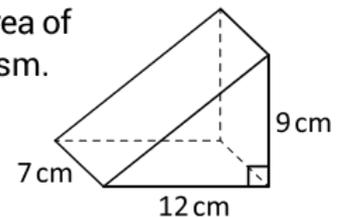
Find the surface area of a rectangular prism with length 16 cm, width 10 cm and height 11 cm.

cm<sup>2</sup>

Q8

Find the surface area of this triangular prism.

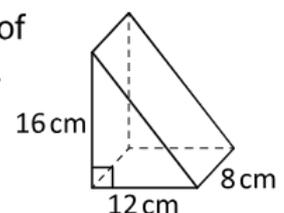
cm<sup>2</sup>



Q9

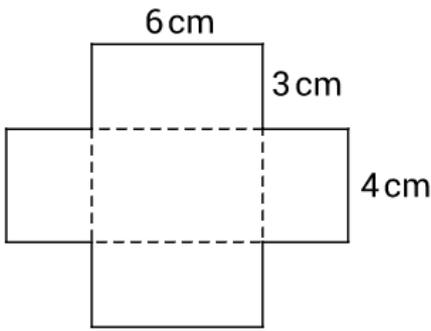
Find the surface area of this triangular prism.

cm<sup>2</sup>



Q10

This sheet of cardboard is folded to form a box. Find its volume.



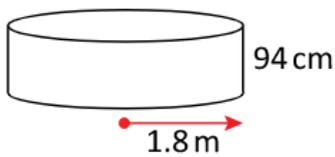
Volume =  cm<sup>3</sup>

Q11

What is the volume of a rectangular prism with length 8 cm, width 7.5 cm and height 4.2 cm?

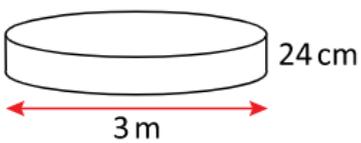
Volume =  cm<sup>3</sup>

Q12



Volume =  m<sup>3</sup> (1 d.p.)

Q13



Volume =  cm<sup>3</sup> (1 d.p.)

Q14

A cupboard in the shape of a rectangular prism measures 3 m by 50 cm by 1.7 m.

Find its volume in m<sup>3</sup>.

m<sup>3</sup>

Q15

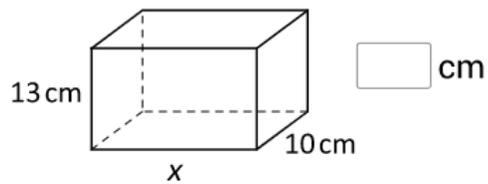
A storage box in the shape of a rectangular prism measures 1 m by 1 m by 45 cm.

Find its volume in m<sup>3</sup>.

m<sup>3</sup>

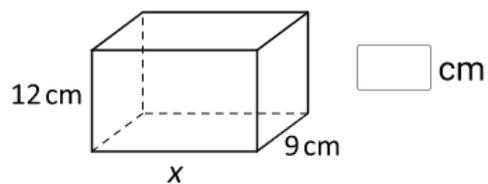
Q16

Find x given that the surface area of the rectangular prism is 996 cm<sup>2</sup>.



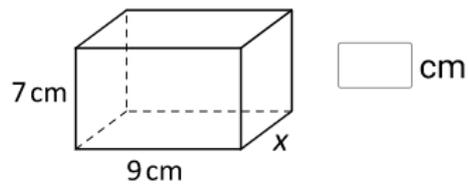
Q17

Find x given that the surface area of the rectangular prism is 846 cm<sup>2</sup>.



Q18

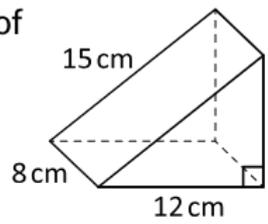
Find x given that the surface area of the rectangular prism is 286 cm<sup>2</sup>.



Q19

Find the surface area of this triangular prism.

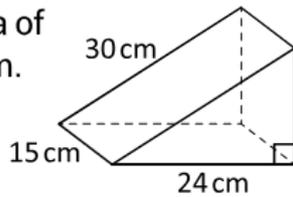
cm<sup>2</sup>



Q20

Find the surface area of this triangular prism.

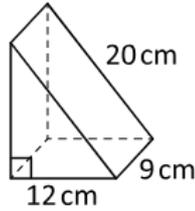
cm<sup>2</sup>



Q21

Find the surface area of this triangular prism.

cm<sup>2</sup>



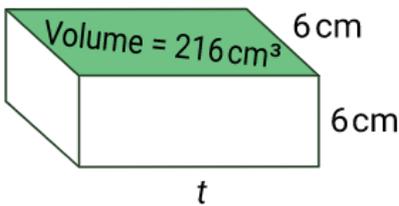
Q22

The volume of a rectangular prism is 10.4 cm<sup>3</sup>. If breadth = 5.2 cm and height = 0.4 cm, find the length of the prism.

Length =  cm

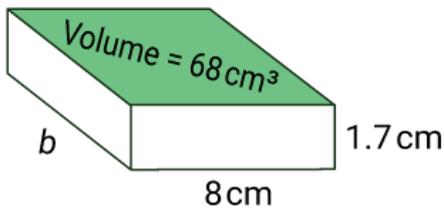
Q23

Find the missing value.  $t =$   cm



Q24

Find the missing value.  $b =$   cm



Q25

A coffee cup in the shape of a cylinder has internal diameter 8 cm and a height of 8 cm. Find the volume of liquid in millilitres it can hold if 1 cm<sup>3</sup> = 1 mL.

mL (nearest mL)

Q26

Find the volume of a cylindrical tank with a height of 78 cm and a diameter of 5 m.

m<sup>3</sup> (1 d.p.)

Q27

Find the volume of a cylindrical pipe with a length of 14.3 m and a diameter of 40 cm.

m<sup>3</sup> (1 d.p.)

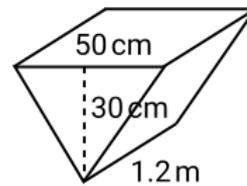
Q28

A cylindrical can of soft drink holds 360 mL. If the can has a radius of 3.5 cm, find its height. Answer in centimetres correct to 1 decimal place.

cm

Q29

A farmer makes the water trough shown.

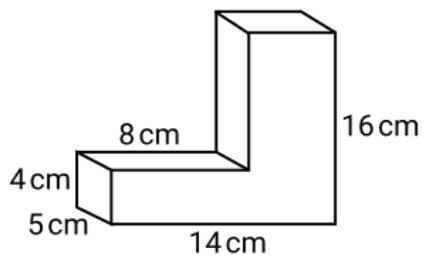


How much water does the trough hold?

L

Q30

The container shown is filled with water.



How much water does it hold?

mL

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