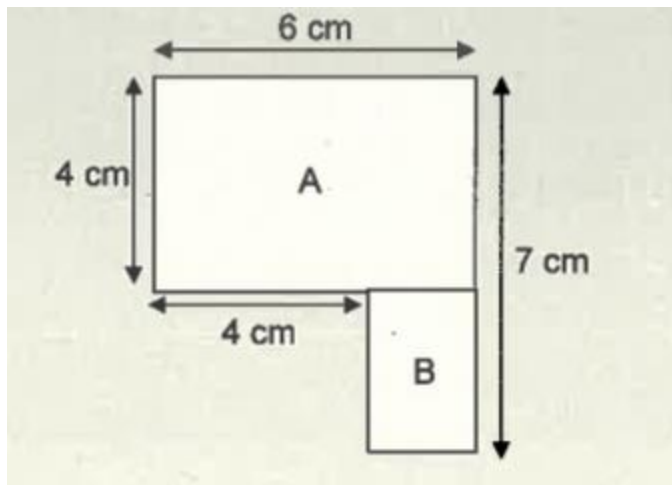


Volume L1

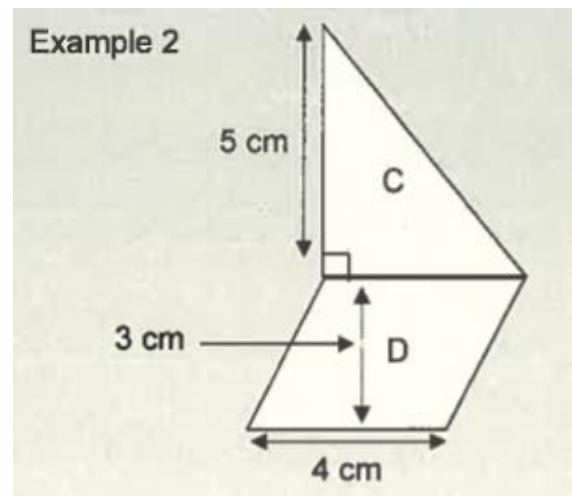
- Calculate the volumes of cubes and cuboids

Recap

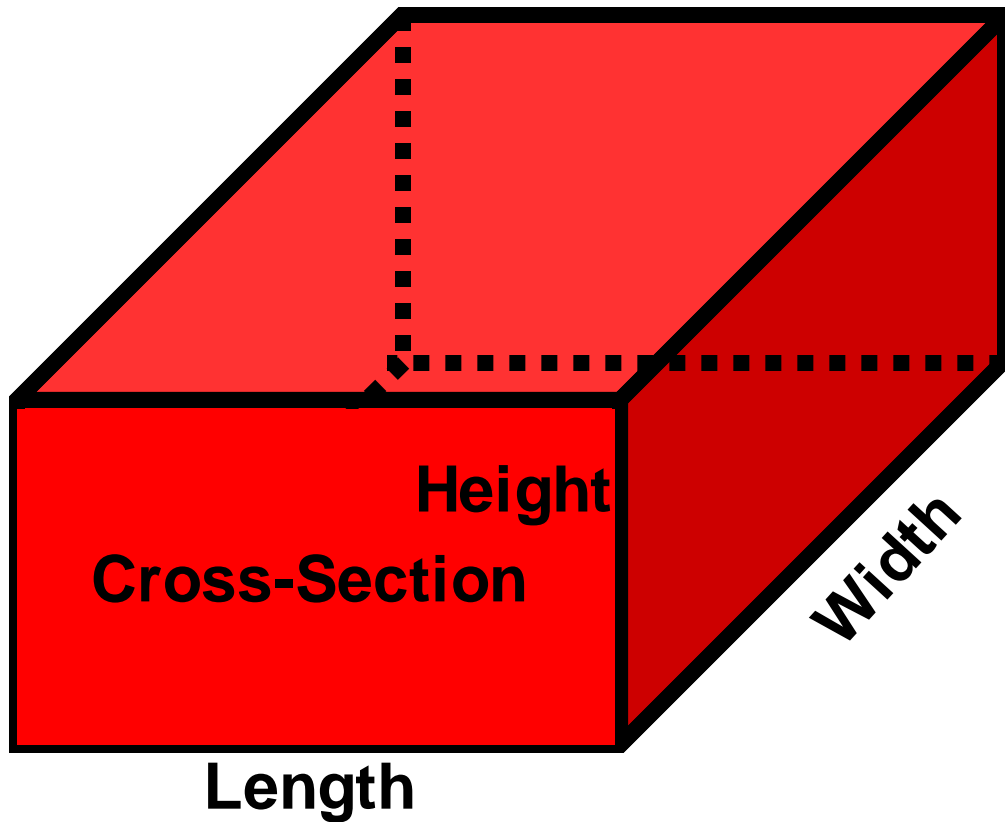
Find the area and the perimeter



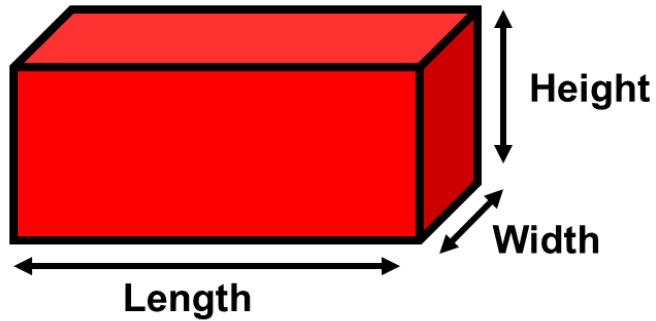
Find the area



VOLUME IS THE SPACE INSIDE A 3D SHAPE



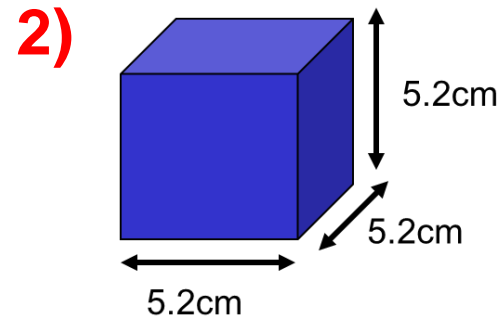
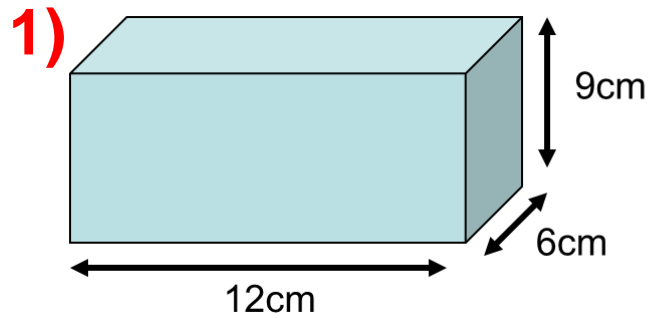
$$\text{Volume of cuboid} = \text{Length} \times \text{Width} \times \text{Height}$$



VOLUME OF A CUBOID = Length x Width x Height

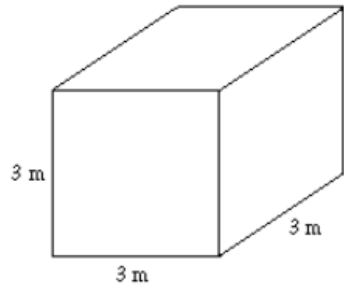
EXAMPLES

Find the volume of the cuboids below in cm^3 :

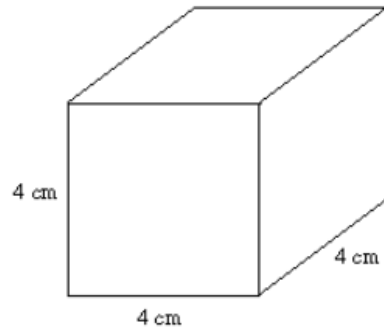


Task 1

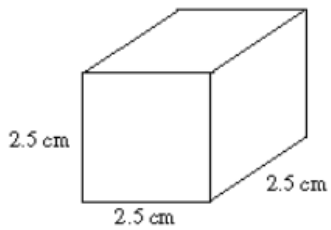
Find the volume of the following shapes



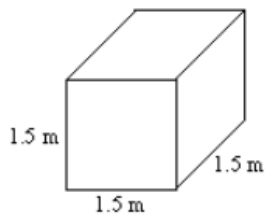
(a)



(b)



(c)

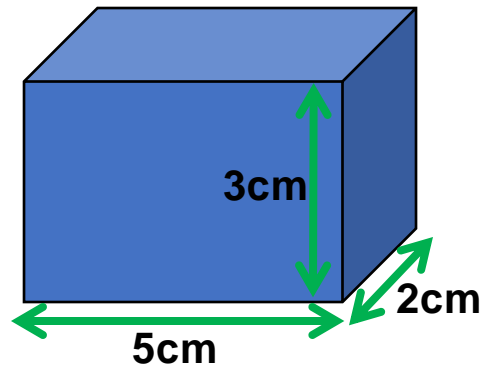


(d)

Task 2

Work out the volumes of the following cuboids:

1)



2)



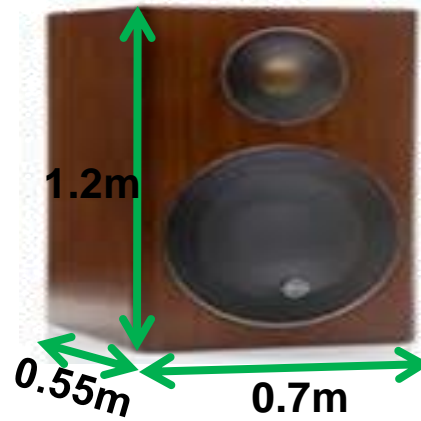
3)



4)



5)



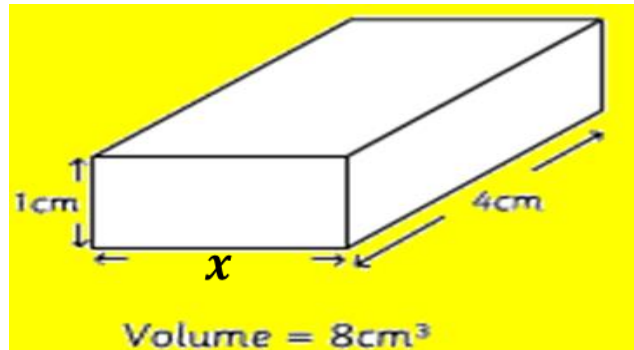
6)



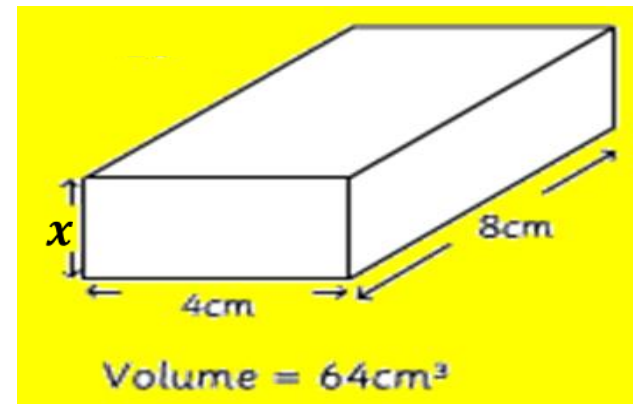
Task 3

How can you find out the measurement of the missing side?

(a)

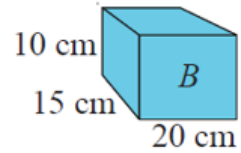
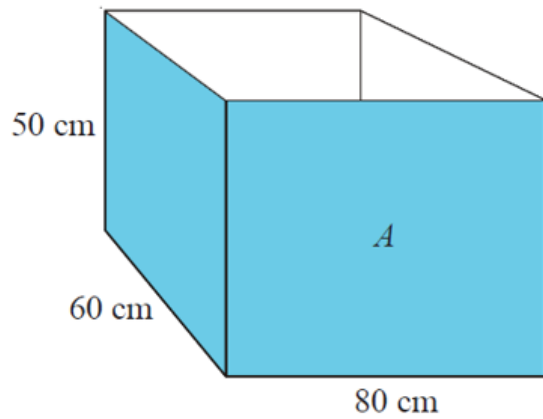


(b)



Volume Exam Questions

- Boxes *A* and *B* are both cuboids.
How many of box *B* could be packed into box *A*.



Volume Exam Questions

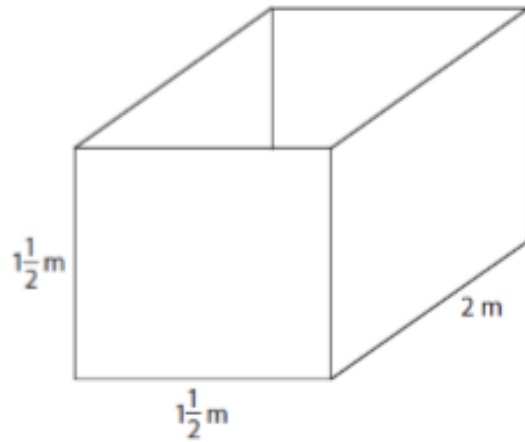


Diagram **not**
accurately drawn

Each compost bin is in the shape of a cuboid with width $1\frac{1}{2}$ m, length 2 m and depth $1\frac{1}{2}$ m.

Work out the volume of a compost bin.
Show a check of your working.

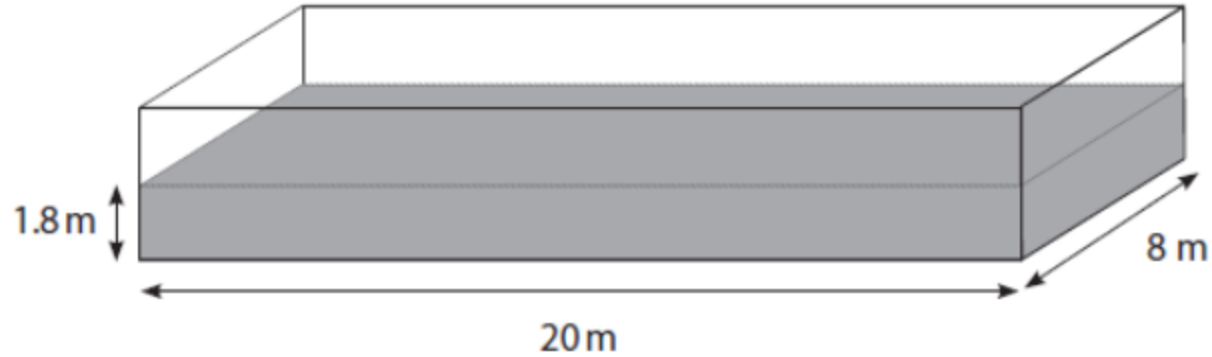
(3)

Use the space below to show clearly how you get your answer.

Use the space below to show your check.

Volume Exam Questions

The swimming pool is in the shape of a cuboid 20 metres long and 8 metres wide. It is filled with water to a depth of 1.8 metres.



Charles needs to add chlorine powder to the water in the pool to keep the water clean.

Each week Charles needs to use 300 grams of chlorine powder per 50 m^3 of water.

Chlorine powder is sold in boxes.

Each box contains 5000 grams of chlorine powder.

Charles thinks that one box will be enough for 4 weeks.

Is one box enough for 4 weeks?

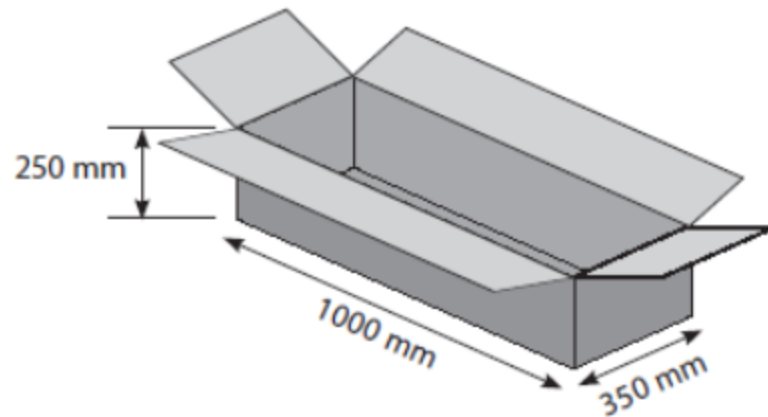
Show why you think this.

Volume Exam Questions

Lucas gets an order for 12 TV sound bars.
He needs to pack the TV sound bars for posting.

Each TV sound bar is in a space that is a cuboid 70 mm by 940 mm by 80 mm.

Lucas wants to pack these 12 spaces in one large space.
The large space is also a cuboid 1000 mm by 250 mm by 350 mm.



(a) Can Lucas pack the 12 TV sound bar spaces in one large space?

(4)

Volume Exam Questions

Olivia is going to make compost bins to hold compost.

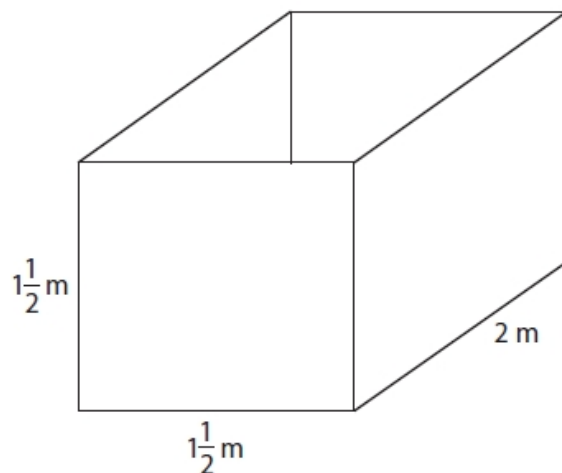


Diagram **not**
accurately drawn

Each compost bin is in the shape of a cuboid with width $1\frac{1}{2}$ m, length 2 m and depth $1\frac{1}{2}$ m.

Work out the volume of a compost bin.
Show a check of your working.

(3)

Use the space below to show clearly how you get your answer.