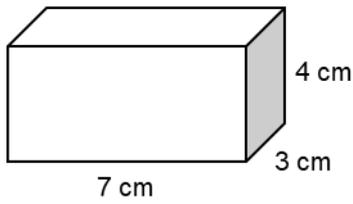## Volumes of Cubes and Cuboids GREEN
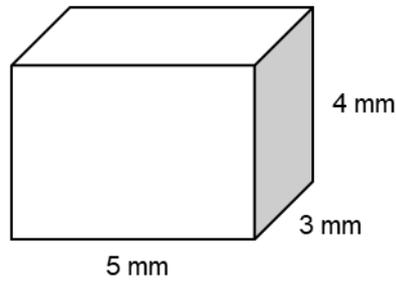
Question 1

Calculate the volumes of the cuboids below.
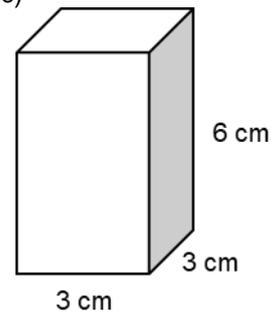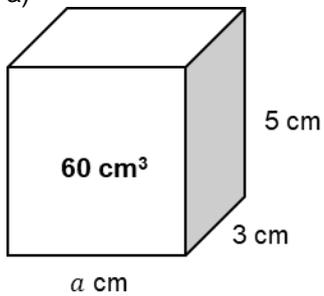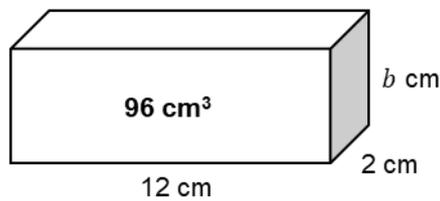
a)

4 cm
3 cm
7 cm

b)

4 mm
3 mm
5 mm

c)

6 cm
3 cm
3 cm

Question 2

Calculate the missing lengths on the cuboids below.

a)

5 cm
60 cm³
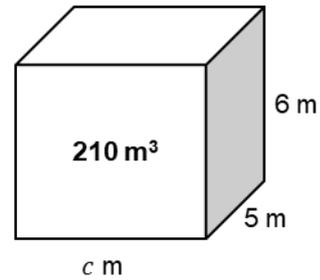3 cm
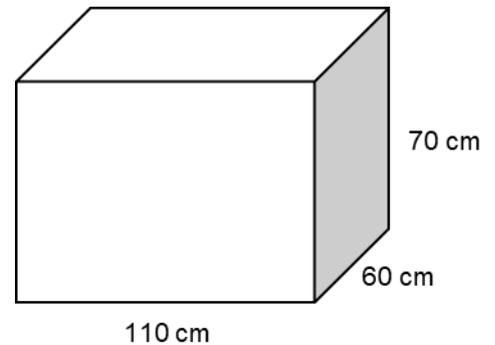a cm
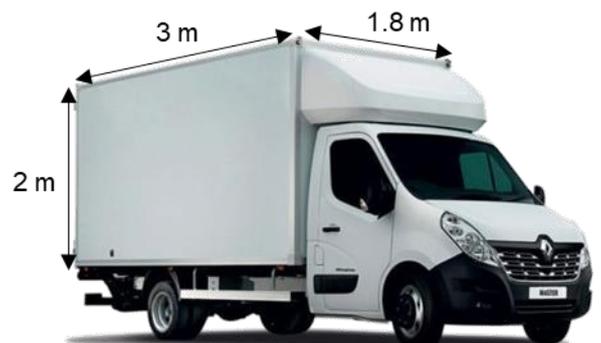
b)

b cm
96 cm³
2 cm
12 cm

c)

6 m
210 m³
5 m
c m

Question 3

The diagram shows an empty water container.
The container is going to be filled using a hose pipe.
The water will flow into the container at a rate of 2 litres per second.
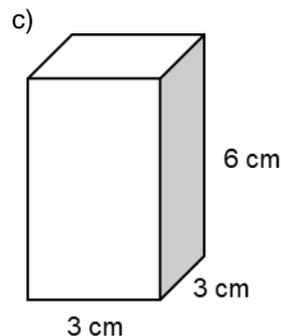How long will it take for the container to be filled completely?

70 cm
60 cm
110 cm

Question 4

Claire has a van.
She is using the van to deliver boxes.
Each box is a cuboid, 60 cm by 30 cm by 40 cm.
The van has the space for the boxes in the shape of a cuboid
with length 3 m, width 1.8 m and height 2 m
Work out how many boxes can Claire fit into the van.

3 m
1.8 m
2 m

Volumes of Cubes and Cuboids AMBER

Question 1
Calculate the volumes of the cuboids below.

a)

4 cm
3 cm
7 cm

b)

4 mm
3 mm
5 mm

c)

6 cm
3 cm
3 cm

Question 2
Calculate the missing lengths on the cuboids below.

a)

5 cm
60 cm³
3 cm
a cm

$60 = a \times 3 \times 5$

b)

b cm
96 cm³
2 cm
12 cm

$96 =$

c)

6 m
210 m³
5 m
c m

Question 3
The diagram shows an empty water container.
The container is going to be filled using a hose pipe.
The water will flow into the container at a rate of 2 litres per second.
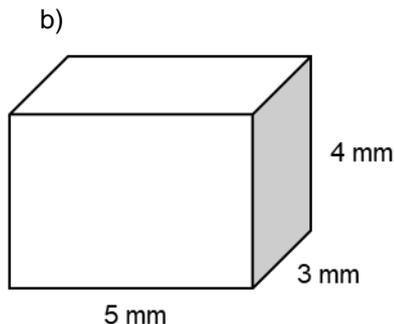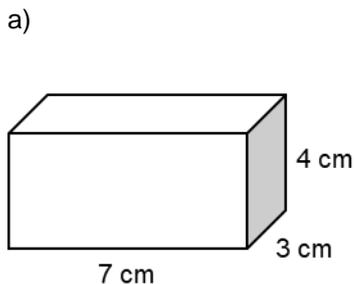How long will it take for the container to be filled completely?

$1 \text{ L} = 1000 \text{ cm}^3$

70 cm
60 cm
110 cm

Question 4
Claire has a van.
She is using the van to deliver boxes.
Each box is a cuboid, 60 cm by 30 cm by 40 cm.
The van has the space for the boxes in the shape of a cuboid
with length 3 m, width 1.8 m and height 2 m
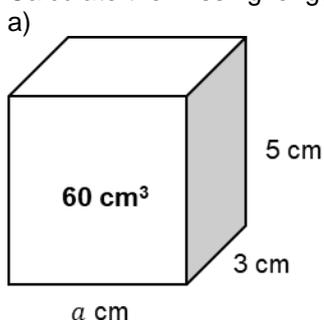Work out how many boxes can Claire fit into the van.
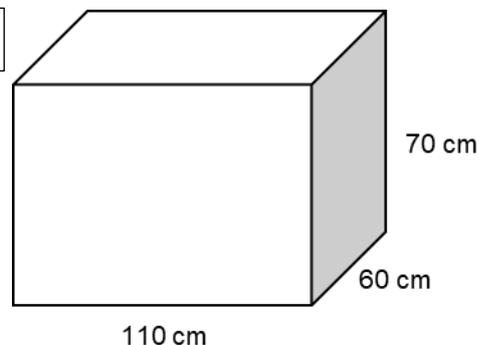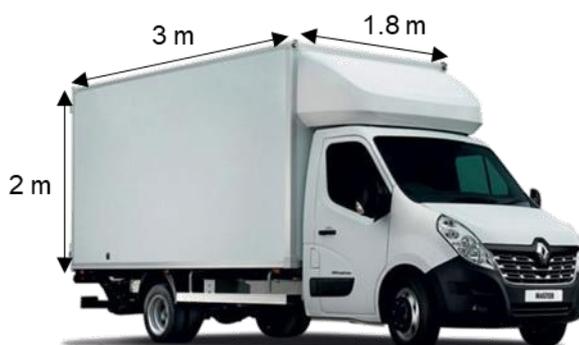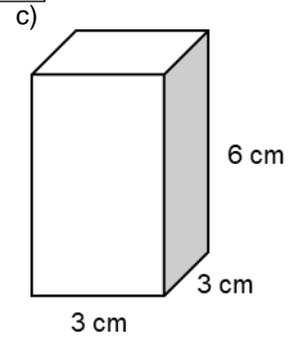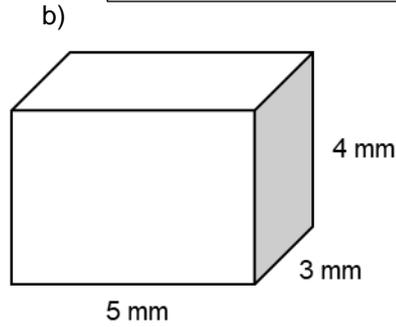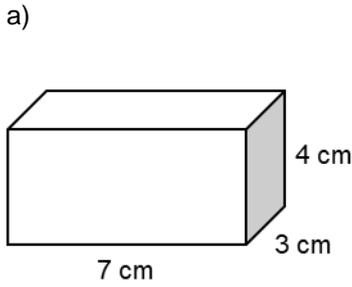
3 m   1.8 m
2 m

Divide the dimensions of the van
by the dimensions of the boxes

Volumes of Cubes and Cuboids RED

Question 1
Calculate the volumes of the cuboids below.

Volume = length × width × height

a)

4 cm
3 cm
7 cm

b)

4 mm
3 mm
5 mm

c)

6 cm
3 cm
3 cm

Question 2
Calculate the missing lengths on the cuboids below.

a)

5 cm
60 cm³
3 cm
a cm

$60 = a \times 3 \times 5$
$60 = 15a$

b)

b cm
96 cm³
2 cm
12 cm

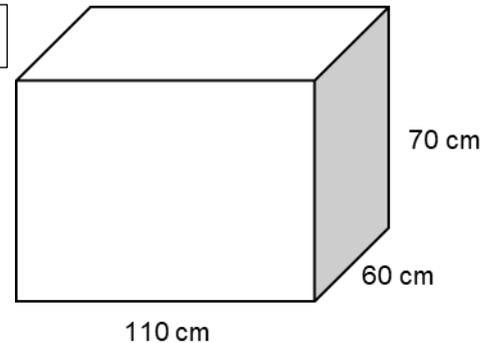$96 = 12 \times 2 \times b$
$96 =$

c)

6 m
210 m³
5 m
c m
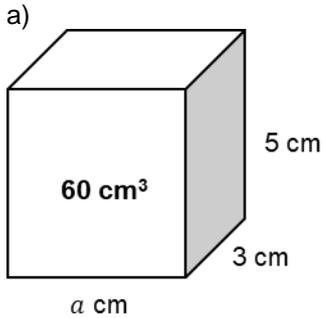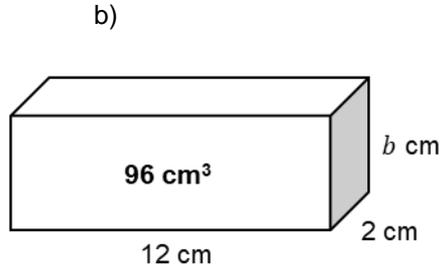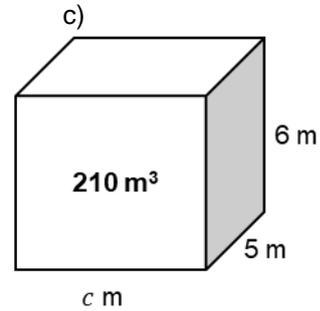
$210 =$

Question 3
The diagram shows an empty water container.
The container is going to be filled using a hose pipe.
The water will flow into the container at a rate of 2 litres per second.
How long will it take for the container to be filled completely?

$1 L = 1000 cm^3$
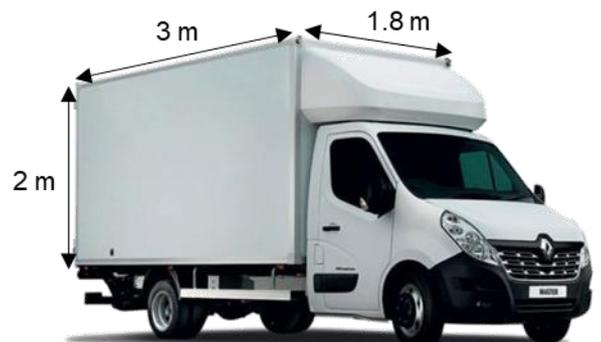
Volume $= 110 \times 60 \times 70 =$

70 cm
60 cm
110 cm

Question 4
Claire has a van.
She is using the van to deliver boxes.
Each box is a cuboid, 60 cm by 30 cm by 40 cm.
The van has the space for the boxes in the shape of a cuboid
with length 3 m, width 1.8 m and height 2 m
Work out how many boxes can Claire fit into the van.

$300\ cm \div 60\ cm =$
$180\ cm \div$
$200\ cm \div$

3 m
1.8 m
2 m

Divide the dimensions of the van
by the dimensions of the boxes