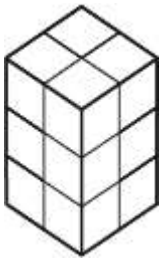
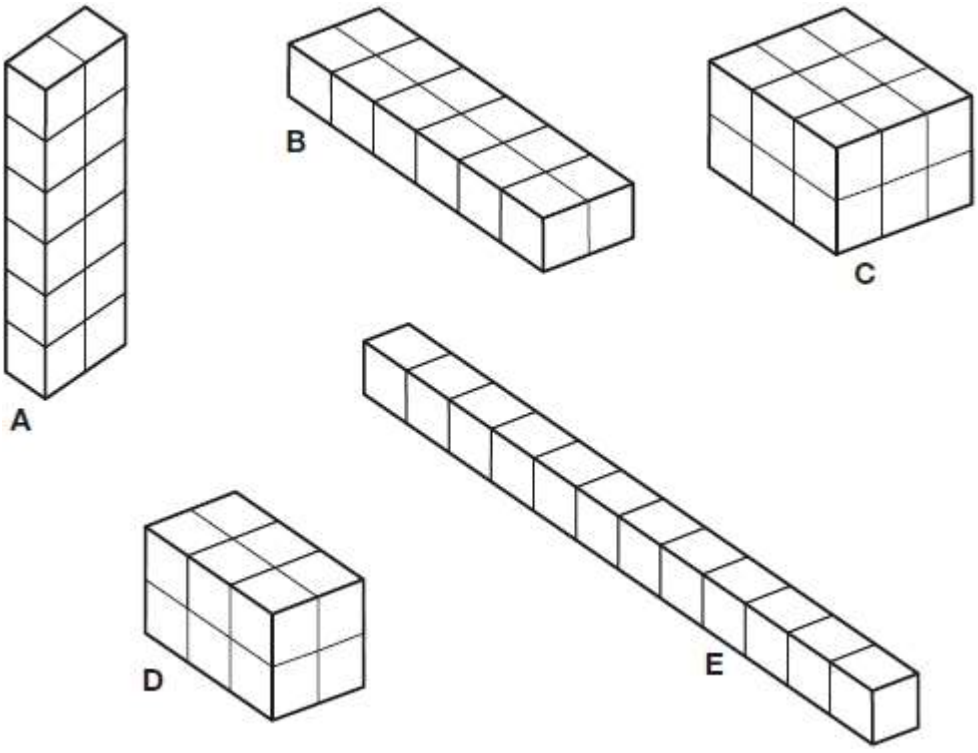
These questions get harder as they go along, so don't worry if you find some of them tricky. Just do your best. ☺

Q1.

Emma makes a cuboid using 12 cubes.



Write the letter of the cuboid that has a **different** volume from Emma's cuboid.

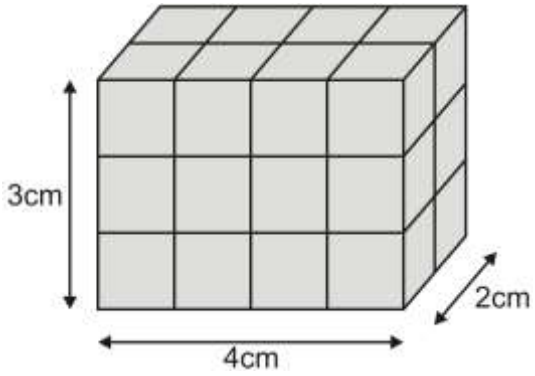


_____

1 mark

Q2.

This cuboid is made from centimetre cubes.



It is 4 centimetres by 3 centimetres by 2 centimetres.

What is the **volume** of the cuboid?

cm

1 mark

Another cuboid is made from centimere cubes.

It has a volume of **30 cubic centimetres**.

What could the **length**, **height** and **width** be?

length cm^3

height cm^3

width cm^3

1 mark

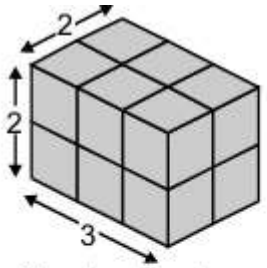
Q3.

Cuboids

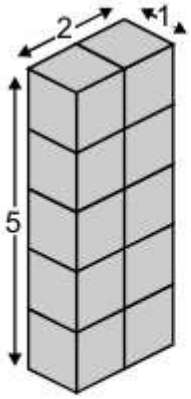
(a) These cuboids are made from small cubes.

Write **how many small cubes** there are in each cuboid.

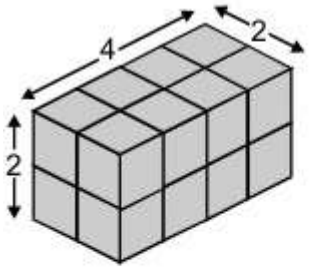
The first is done for you.



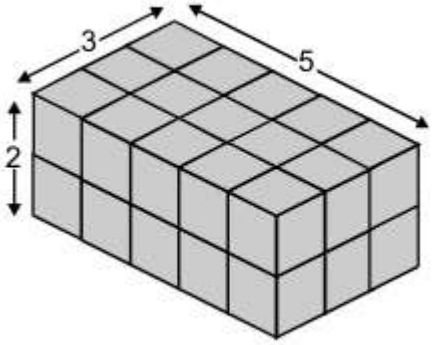
Number of cubes: 12



Number of cubes: ____



Number of cubes: ____

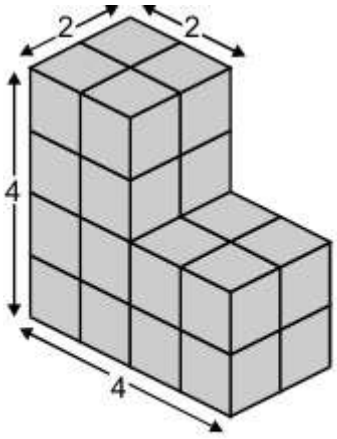


Number of cubes: ____

3 marks

(b) This shape is made with two cuboids.

Write **how many small cubes** there are in this shape.

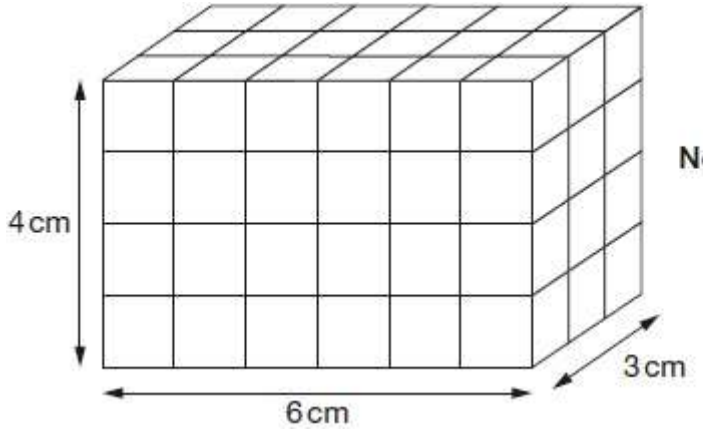


Number of cubes: ____

1 mark

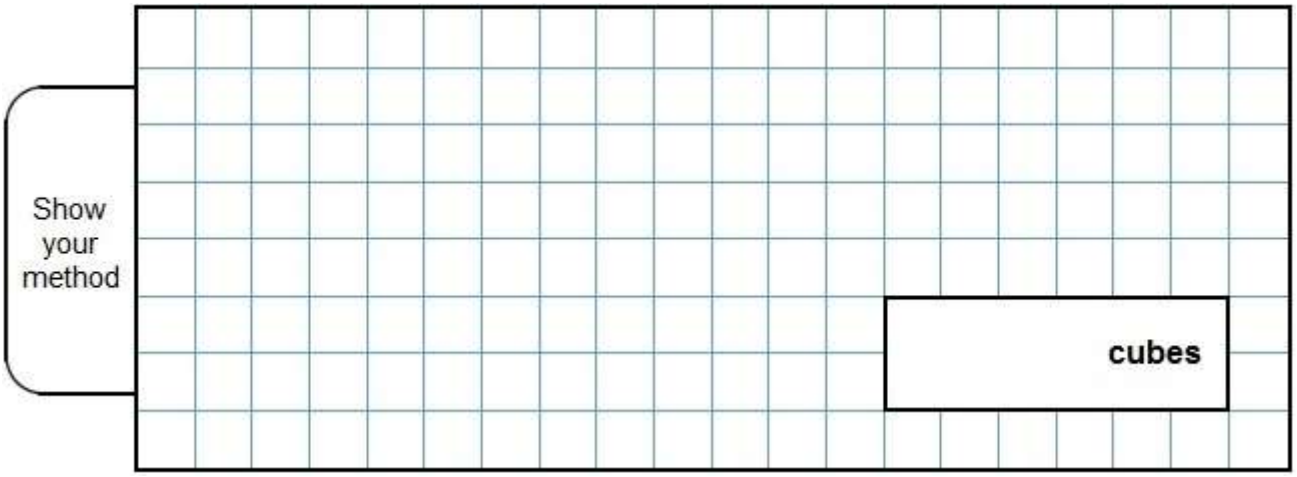
Q4.

Amina made this cuboid using centimetre cubes.



Stefan makes a cuboid that is 5 cm longer, 5 cm taller and 5 cm wider than Amina's cuboid.

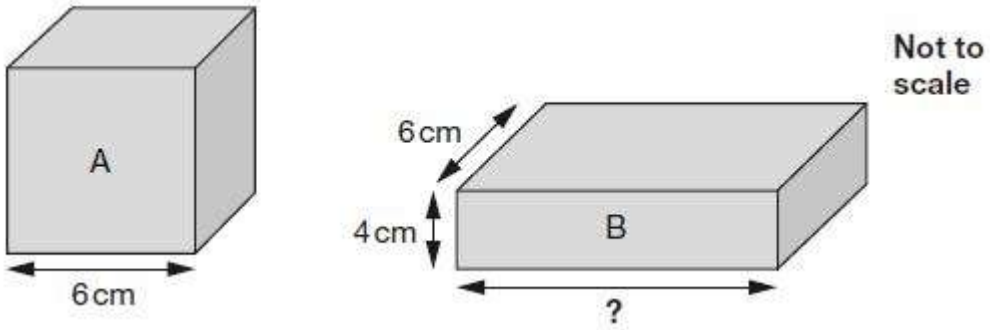
What is the **difference** between the number of cubes in Amina's and Stefan's cuboids?



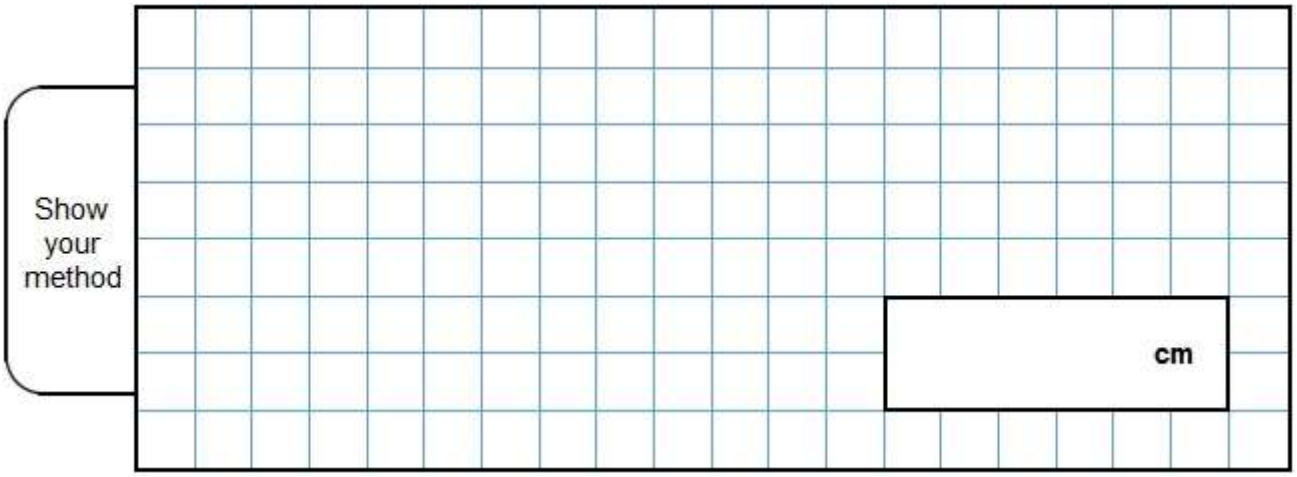
2 marks

Q5.

Cube A and cuboid B have the same volume.



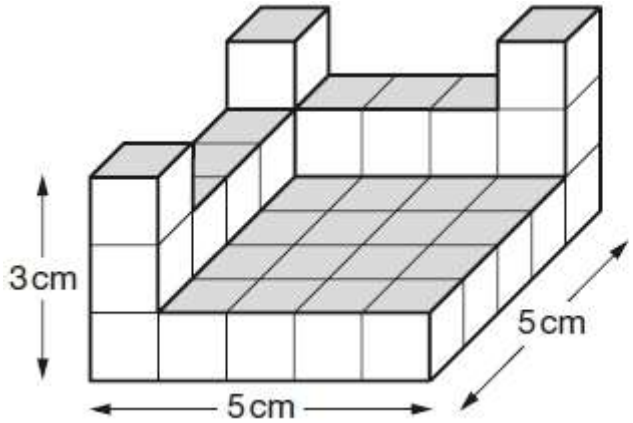
Calculate the missing length on cuboid B.



2 marks

Q6.

This shape is made of wooden centimetre cubes.



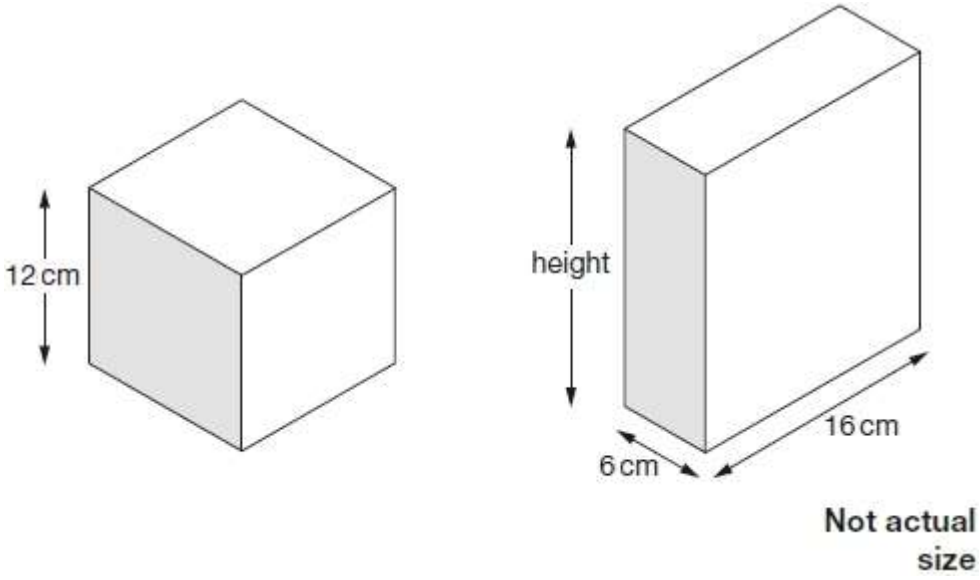
Not actual size

How many **more** centimetre cubes are needed to make it into a solid cuboid 3 cm tall, 5 cm long and 5 cm wide?

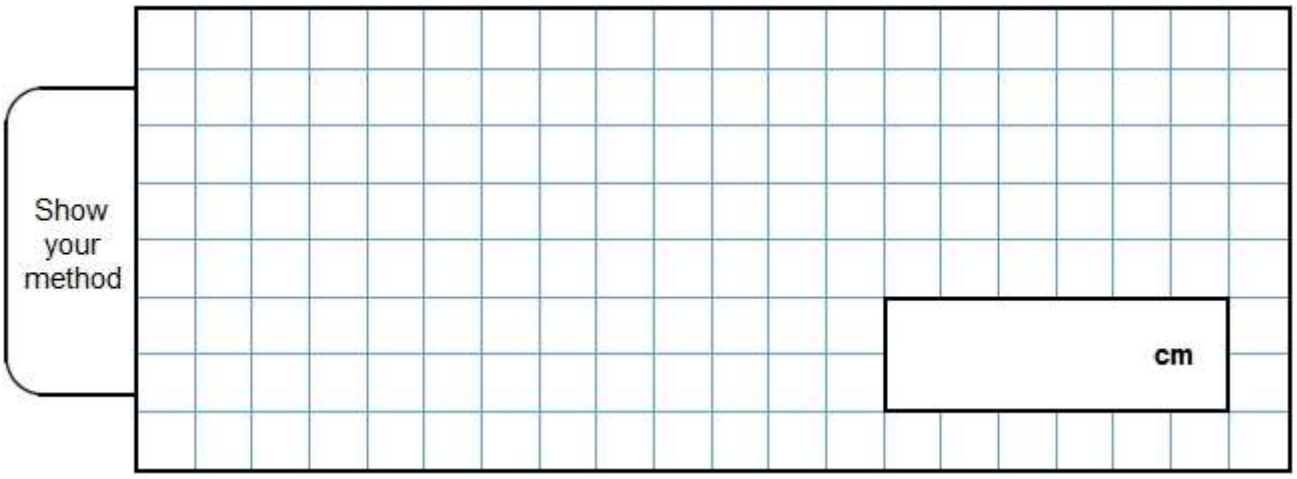
1 mark

Q7.

The cube and cuboid have **equal volumes**.



Calculate the height of the cuboid.

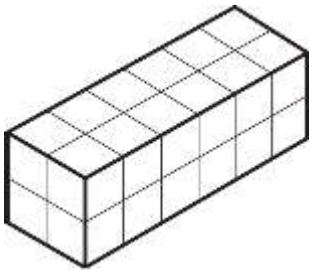


2 marks

Q8.

Cleo has **24** centimetre cubes.

She uses all 24 cubes to make a cuboid with dimensions **6** cm, **2** cm and **2** cm.



Write the dimensions of a **different** cuboid she can make using all 24 cubes.

_____ cm, _____ cm and _____ cm

1 mark

Jon has **20** centimetre cubes.

He wants to make a cube with edges that are **3** cm long.

How many **more** centimetre cubes does he need?

more

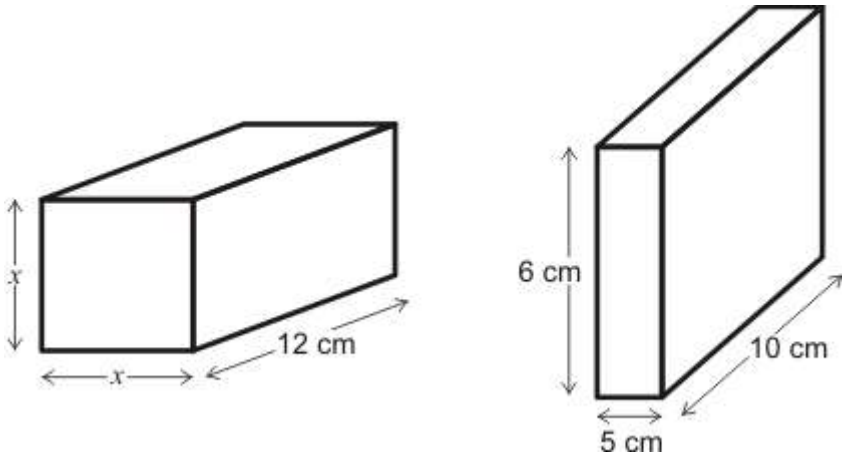
1 mark

Q9.

The two cuboids have the same volume.

Calculate the length x.

(Not to scale)



Show your method

cm

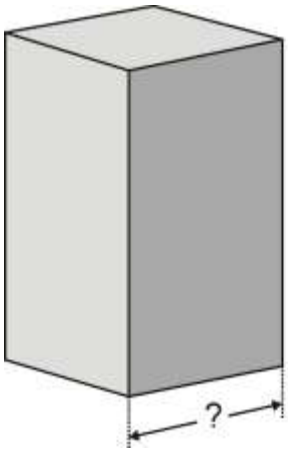
2 marks

Q10.

A cuboid has a **square base**.

It is **twice as tall** as it is **wide**.

Its volume is **250 cubic centimetres**.



Not actual size

Calculate the **width** of the cuboid.

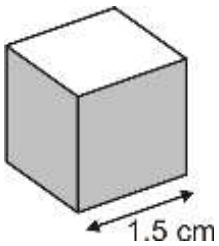
Show your method

cm

2 mark

Q11.

Amit has some small cubes.



The edge of each cube is **1.5 centimetres.**

He makes a larger cube out of the small cubes.

The **volume** of this larger cube is **216 cm^3.**

How many small cubes does he use?

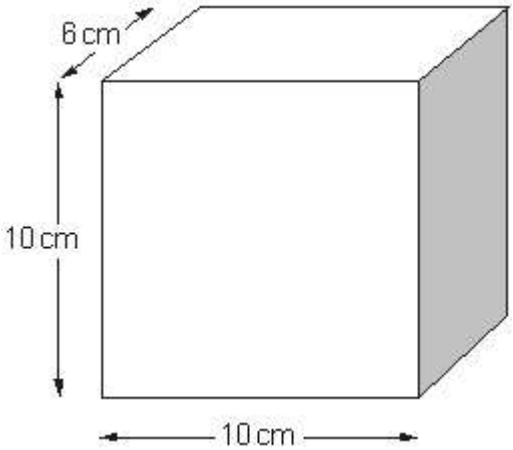
Show your method

2 mark

Q12.

Volume

(a) The diagram shows a cuboid.



Not drawn accurately

What is the volume of this cuboid?

2 marks

(b) The volume of a different cuboid is **half the volume** of the cuboid in part (a).

What could the **dimensions** of this different cuboid be?

_____ cm by _____ cm by _____ cm

1 mark