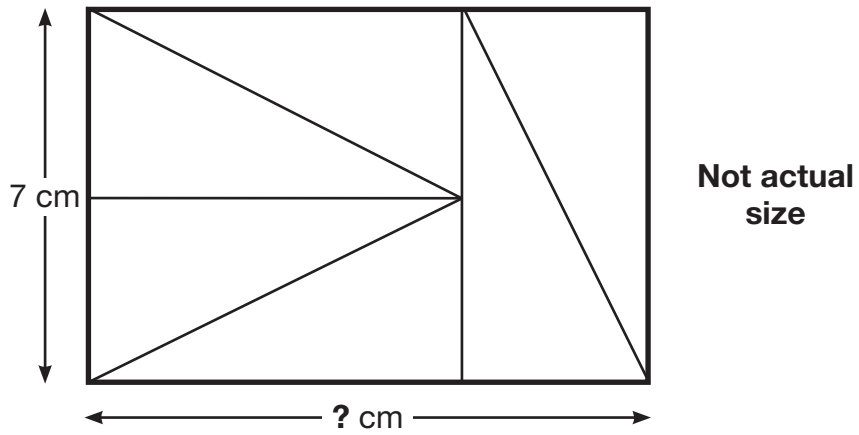


22

Six identical right-angled triangles are arranged to make a rectangle.

Calculate the **length** of the rectangle.

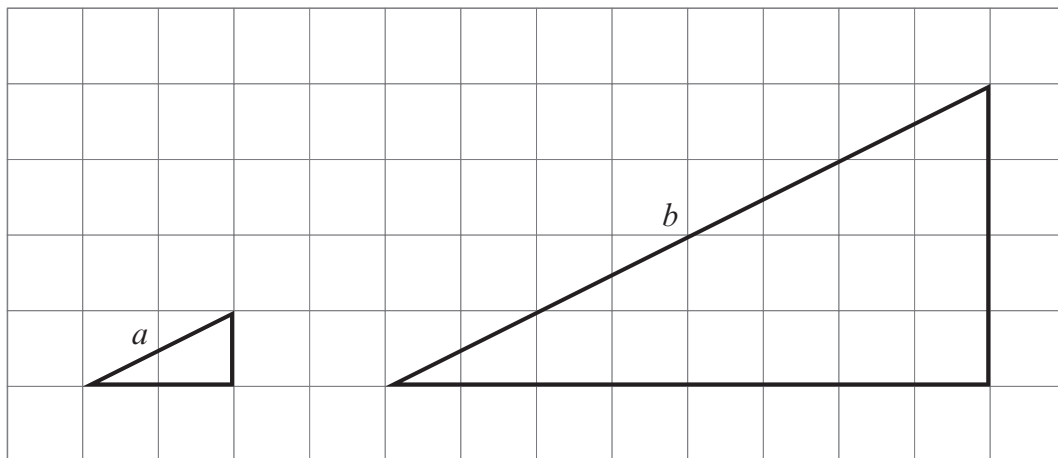
cm

1 mark



22

Here are two similar right-angled triangles.



Write the ratio of side a to side b .

$$a:b = \boxed{ : }$$

1 mark



23

The length of a day on Earth is 24 hours.

The length of a day on Mercury is $58\frac{2}{3}$ times the length of a day on Earth.

What is the length of a day on Mercury, in **hours**?

Show
your
method

hours

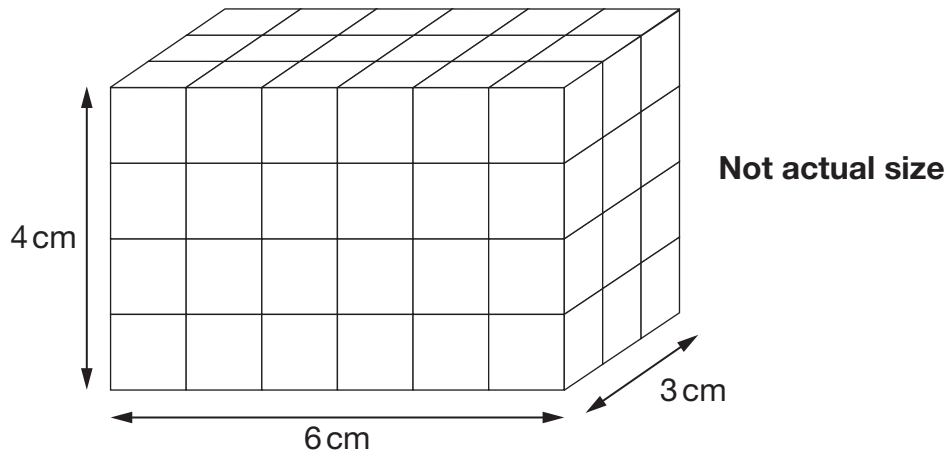
2 marks



G 0 0 0 7 0 A 0 2 3 2 4

23

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?

Show
your
method

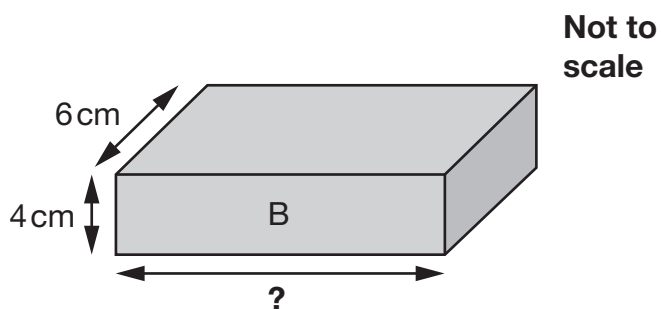
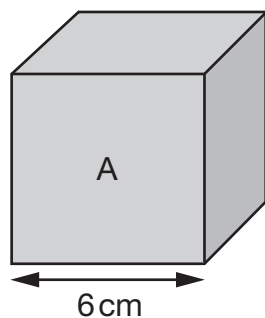
cubes

2 marks



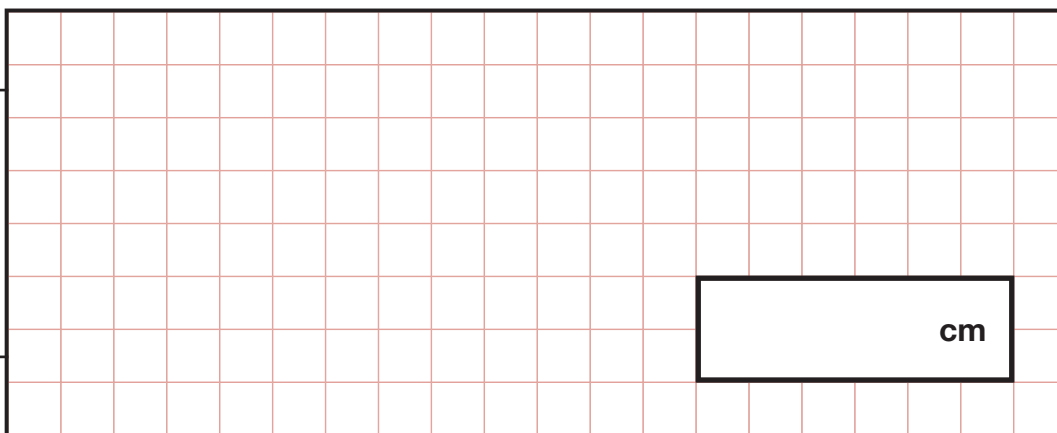
24

Cube A and cuboid B have the same volume.



Calculate the missing length on cuboid B.

Show
your
method



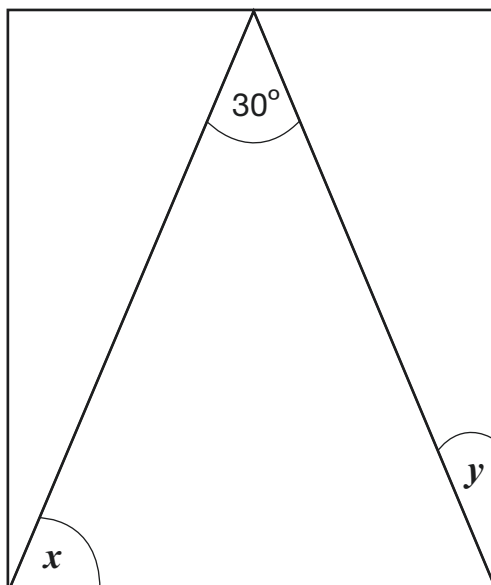
2 marks



F 0 0 0 8 0 A 0 2 3 2 4

24

Here is an **isosceles** triangle inside a rectangle.



Not to
scale

Calculate the sizes of angles x and y .

Show
your
method

$x =$

°

$y =$

°

2 marks



K 0 0 0 7 0 A 0 2 1 2 4