

PROPORTION

CONTENT DOMAIN REFERENCES:
R1, R3, R4

KS2 SATS

PRACTICE QUESTIONS BY TOPIC

1 100g of cheese costs 46p.

[Extra] Peter buys 250g of the cheese.

How much does he pay?

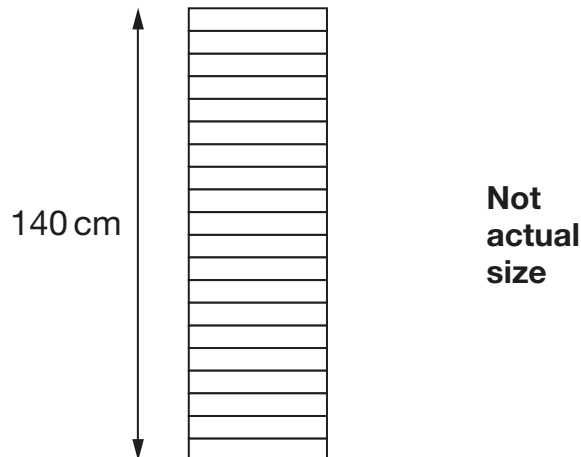


£

[1 mark]

2 A stack of 20 identical boxes is 140 cm tall.

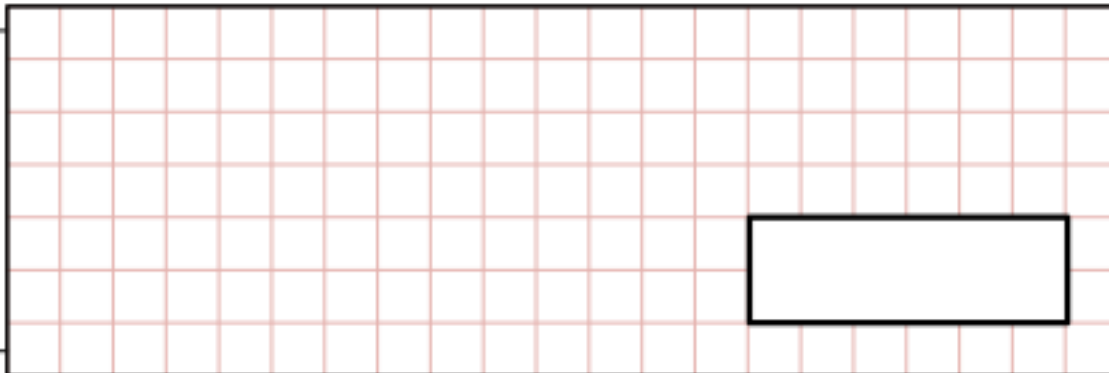
[2016]



Stefan takes **three** boxes off the top.

How tall is the stack now?

Show your method



[2 marks]

3

A meal in a restaurant costs the same for each person.

[Extra]

For **11** people the total cost is **£253**

What is the total cost for 12 people?

Show your method

[2 marks]

4

[2004]



Every **100g** of brown bread contains **6g** of fibre.

A loaf of bread weighs 800g and has 20 equal slices.

How much fibre is there in **one** slice?

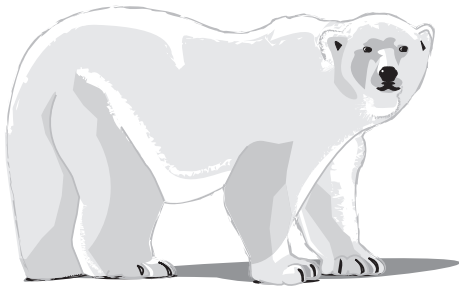
Show your method

[2 marks]

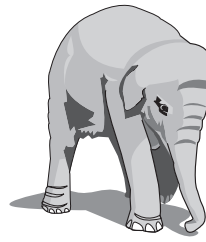
6

In a zoo, the adult polar bear weighs three times more than the baby elephant.

[Extra]



polar bear

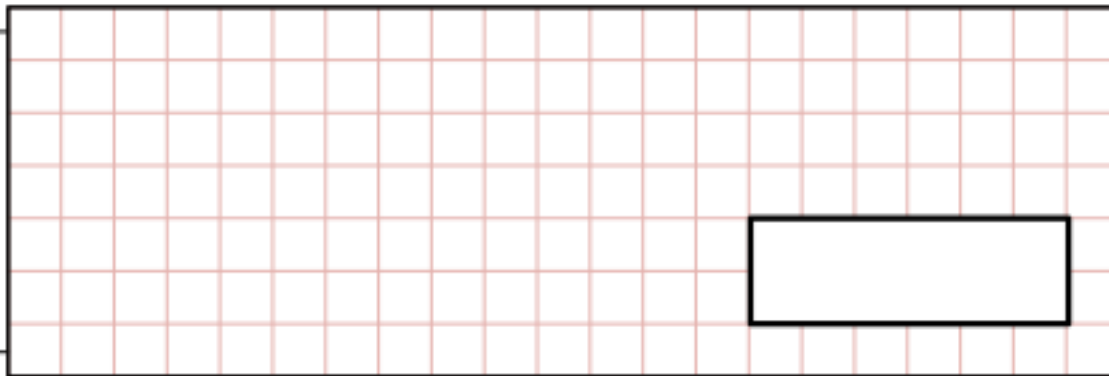


elephant

Together they weigh 700 kilograms.

How much does the polar bear weigh?

Show your method

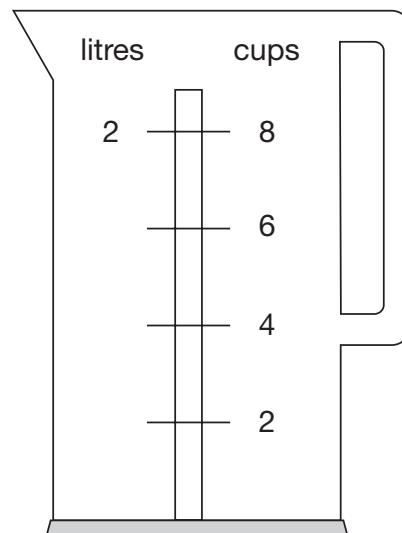


[2 marks]

7

Nisha's kettle holds 2 litres of water.

[2008]



How many millilitres are equal to 1 cup?

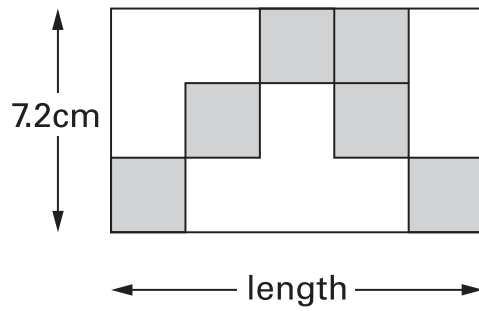


[1 mark]

10

Here is a rectangle with six identical shaded squares inside it.

[2004]

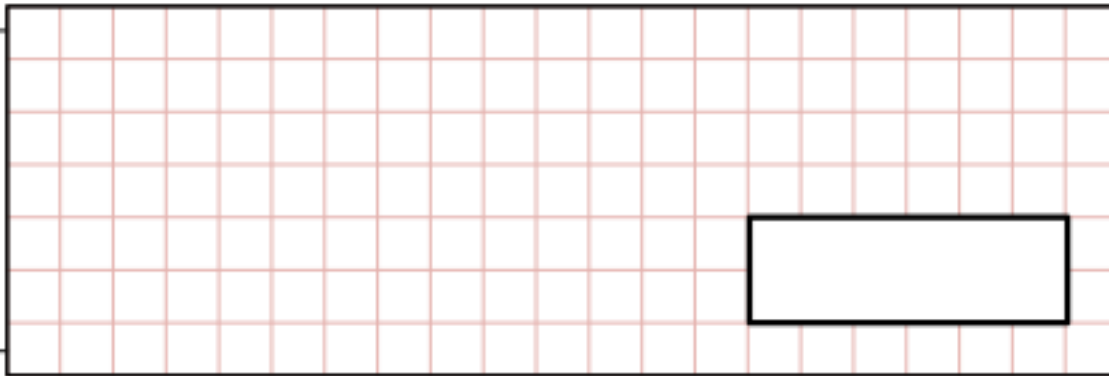


Not actual size

The width of the rectangle is **7.2 centimetres**.

Calculate the **length** of the rectangle.

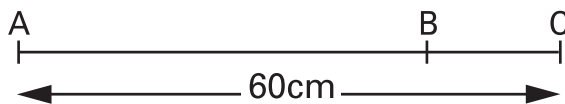
Show your method



[2 marks]

11

[2002]



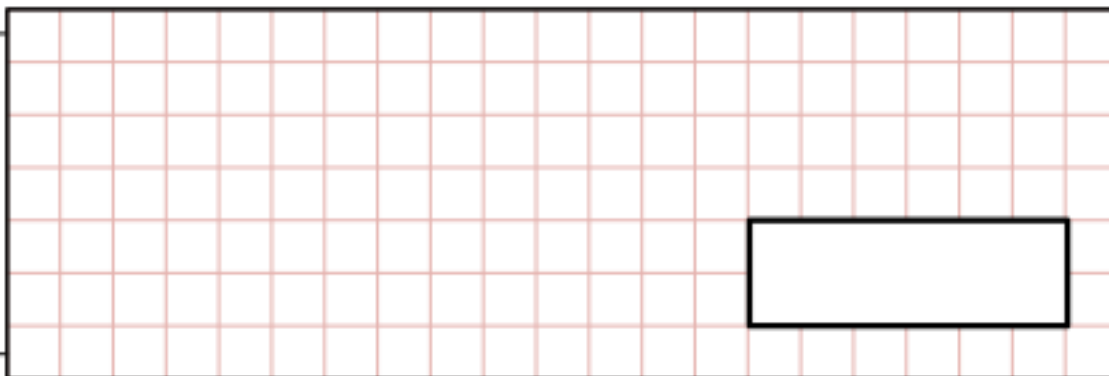
Not drawn to scale

The distance from **A to B** is three times as far as from **B to C**.

The distance from **A to C** is **60 centimetres**.

Calculate the distance from **A to B**.

Show your method



[2 marks]

12

This photograph shows three Russian dolls.

[Extra]



The real-life height of the **largest** Russian doll is **13.5 cm**

What is the real-life height of the **smallest** Russian doll?

Show your method

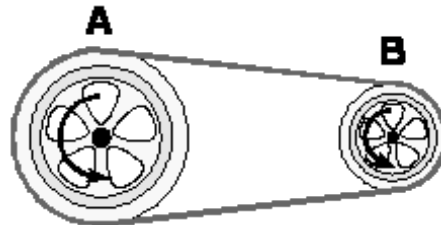
A grid for showing the method. A rectangular box is present in the bottom right corner of the grid.

[2 marks]

13

A and **B** are two chain wheels on a bike.

[Extra]



For every **2 complete turns** that wheel **A** makes, wheel **B** makes **5 complete turns**.

If wheel **A** makes **150 turns**, how many turns will wheel **B** make?

Show your method

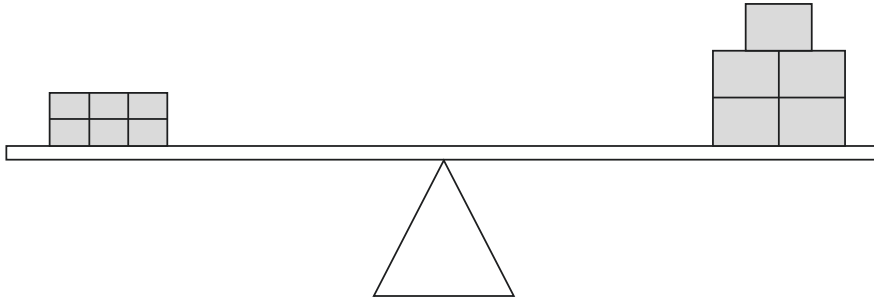
A grid for showing the method. A rectangular box is present in the bottom right corner of the grid.

[2 marks]

14

6 small bricks have the same mass as 5 large bricks.

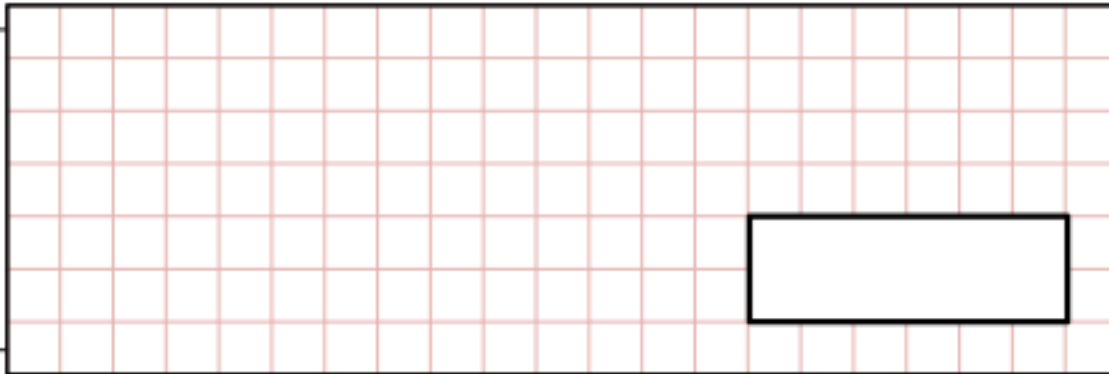
[2016]



The mass of one small brick is 2.5 kg.

What is the mass of one large brick?

Show your method

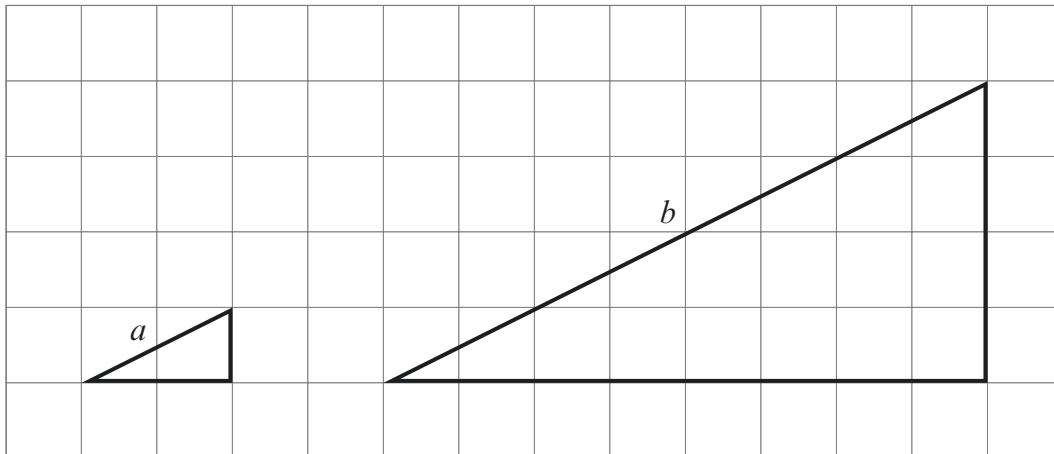


[2 marks]

15

Here are two similar right-angled triangles.

[2017]



Write the ratio of side a to side b .

$a:b =$ $:$

[1 mark]

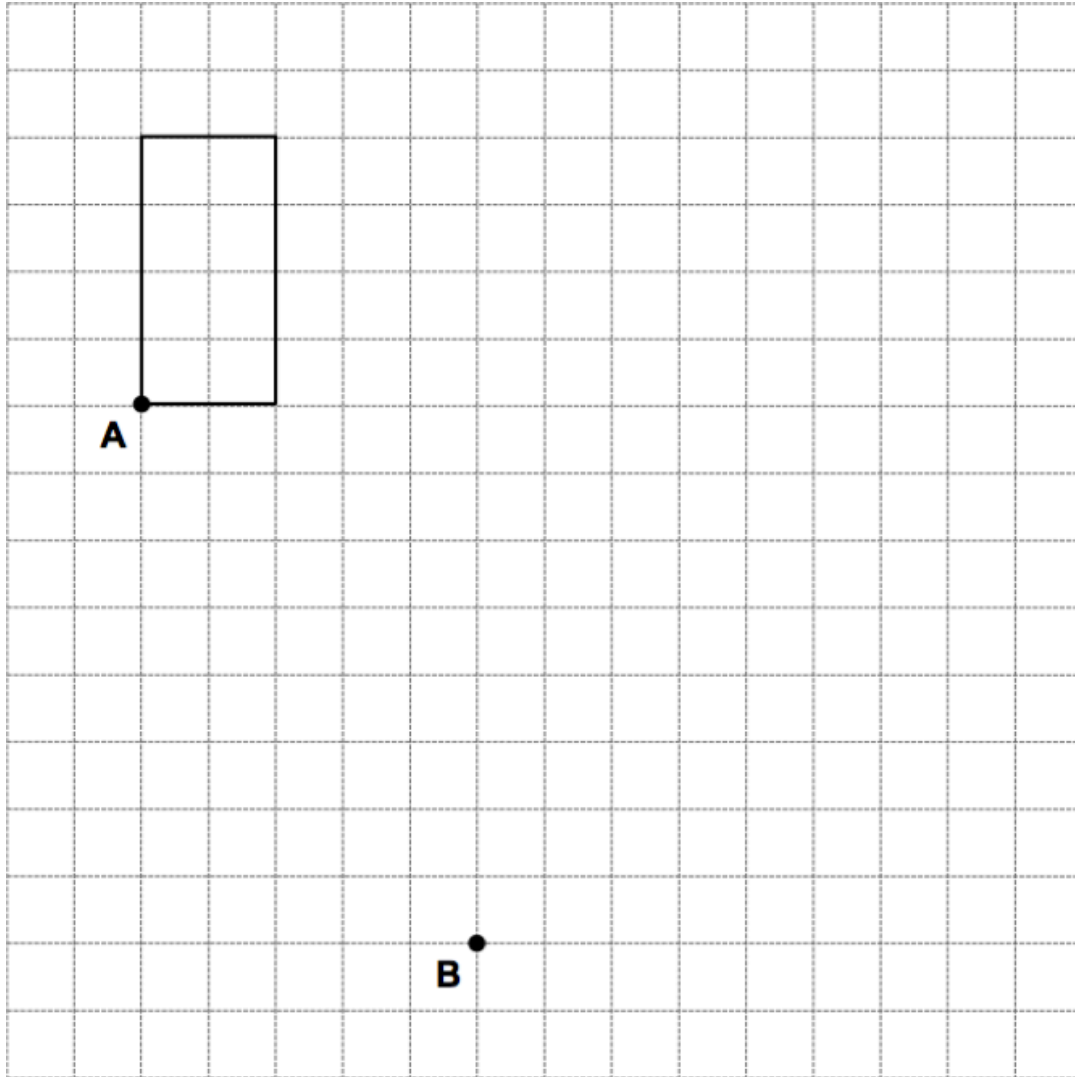
16

The rectangle is translated from **A** to **B** and **enlarged** by a **scale factor of 2**

[Extra]

Draw the **enlarged rectangle** on the grid.

Use a ruler.



[2 marks]

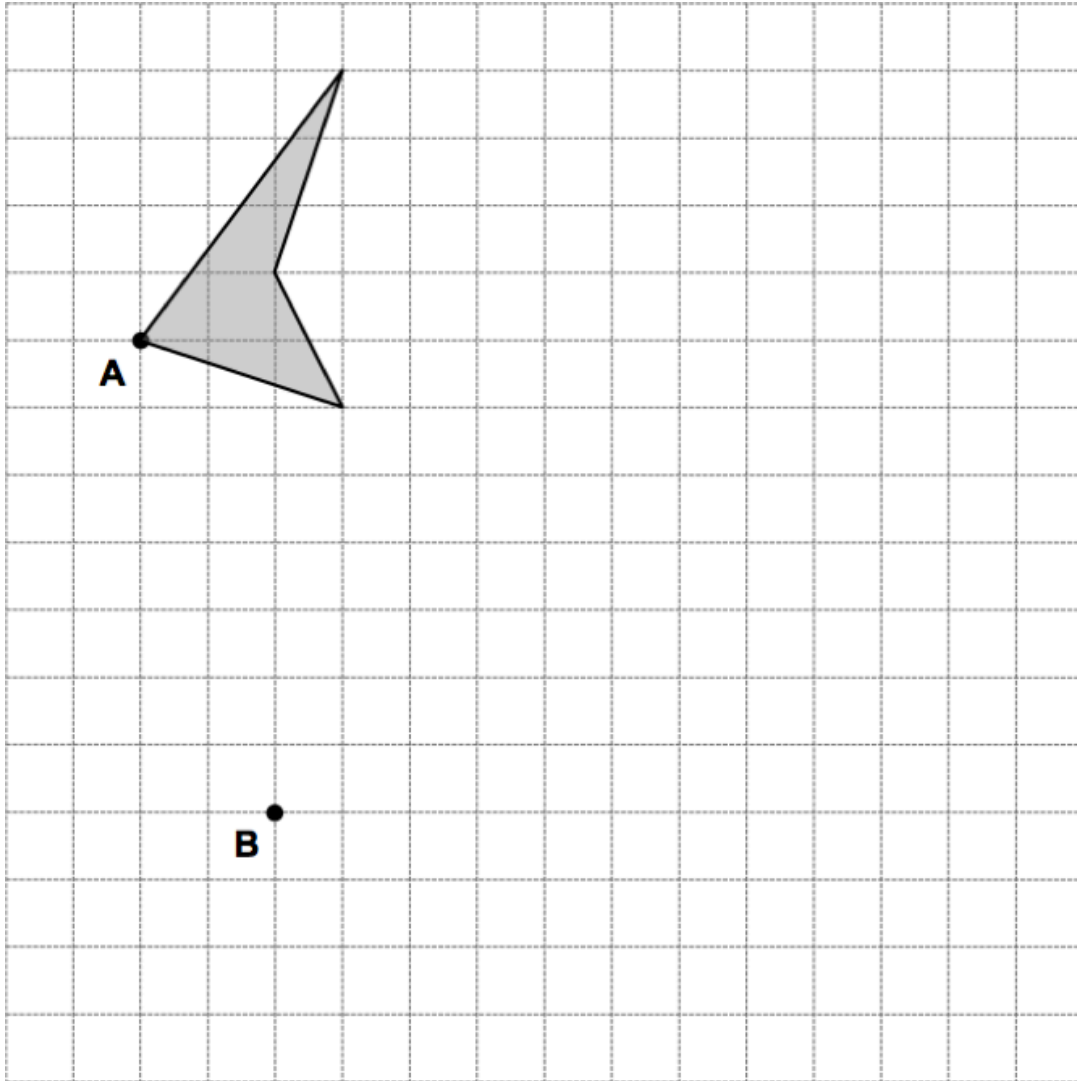
17

The shaded shape is translated from **A** to **B** and **enlarged** by a **scale factor of 2**

[2000]

Draw the **enlarged shape** on the grid.

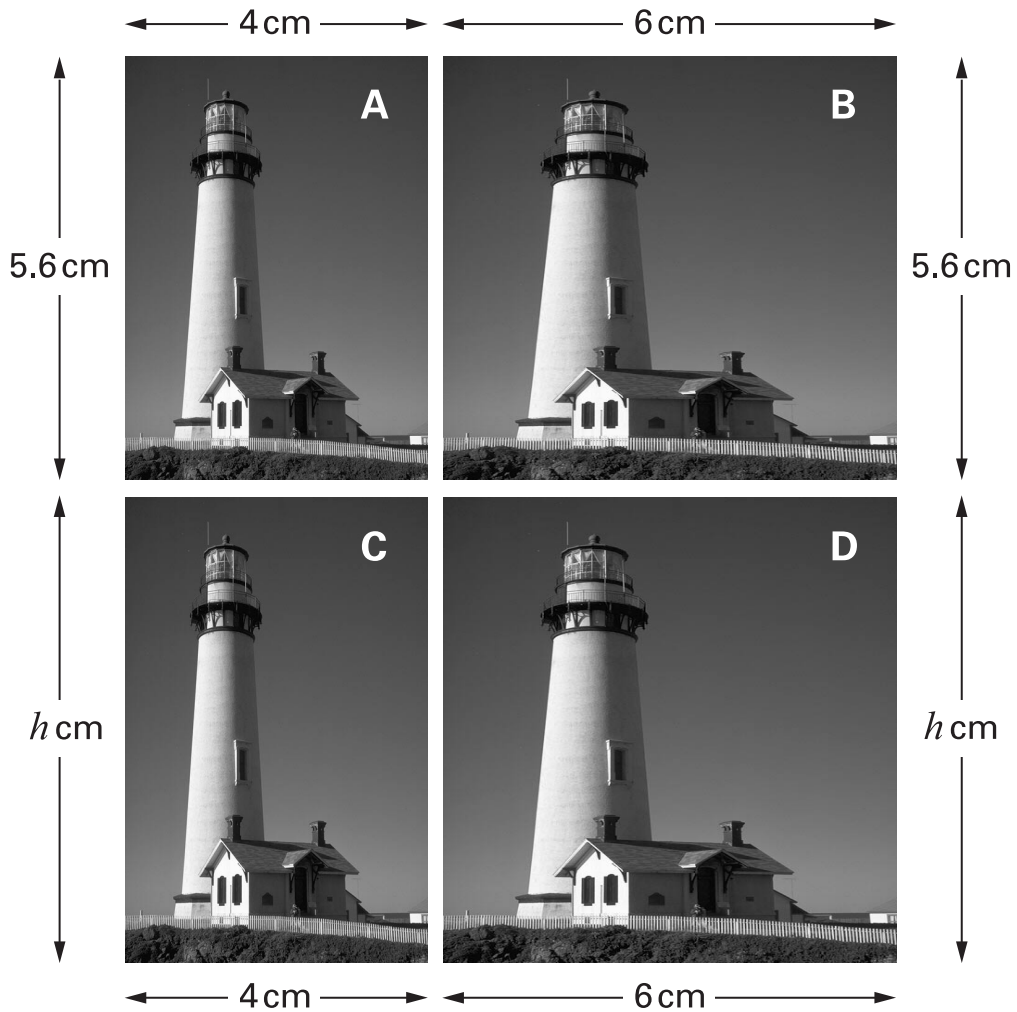
Use a ruler.



[2 marks]

Here are four pictures, A, B, C and D. They are not to scale.

[Extra]



Picture A can be stretched horizontally to make picture B.

Show that the horizontal factor of enlargement is **1.5**

Picture A can be stretched vertically to make picture C.

The vertical factor of enlargement is **1.25**

What is the height, h , of picture C?

	cm
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[2 marks]