SATs in Minutes Organiser

Video organiser for 24 SATs questions and variant questions

Reasoning Paper 3, 2017

THIRD SPACE LEARNING

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1   Write the missing number to make this **division** correct.

$$75 \div \boxed{} = 7.5$$

1 mark

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bit.ly/Q1_P3_2017_SiM

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2

A group of friends earns £80 by washing cars.

They share the money **equally**.

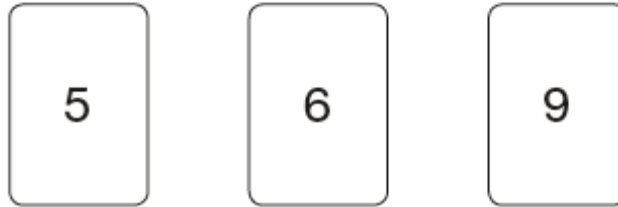They get £16 each.

How many friends are in the group?

1 mark

Click here or use the link to view your video.

bit.ly/Q2_P3_2017_SiM

3 Chen uses these digit cards.

| 5 | 6 | 9 |

She makes a 2-digit number and a 1-digit number.

She multiplies them together.

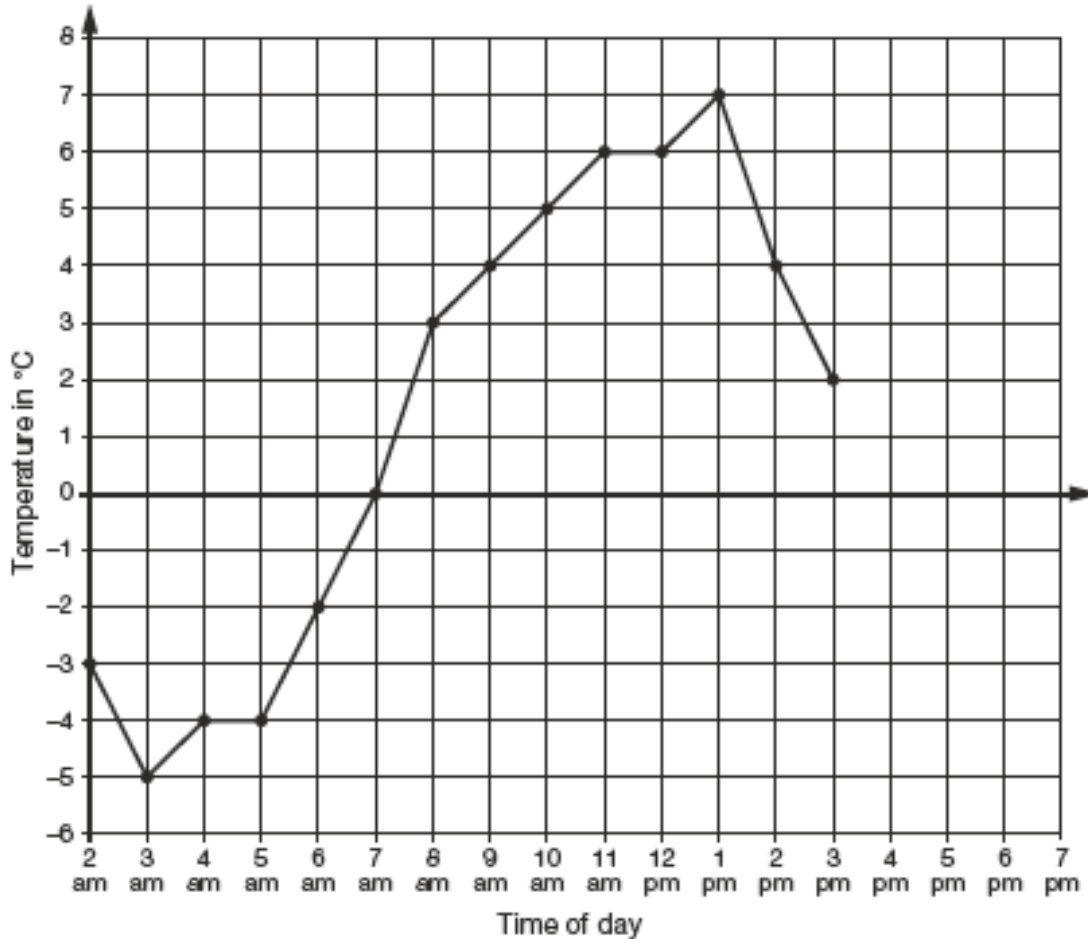Her answer is a **multiple of 10**

What could Chen's multiplication be?

$$\boxed{} \times \boxed{}$$

1 mark

Click here or use the link to view your video.

bit.ly/Q3_P3_2017_SiM

4 This graph shows the temperature in °C from 2 am to 3 pm on a cold day.

How many degrees **warmer** was it at 3 pm than at 3 am?

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bit.ly/Q4_P3_2017_SiM

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5

The children at Farmfield School are collecting money for charity.

Their target is to collect £360

So far they have collected £57.73

How much **more** money do they need to reach their target?

£ [   ]

1 mark

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bit.ly/Q5_P3_2017_SiM

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6 William wants to travel to Paris by train.

He needs to arrive in Paris by **5:30 pm.**

Circle the **latest time** that William can leave London.

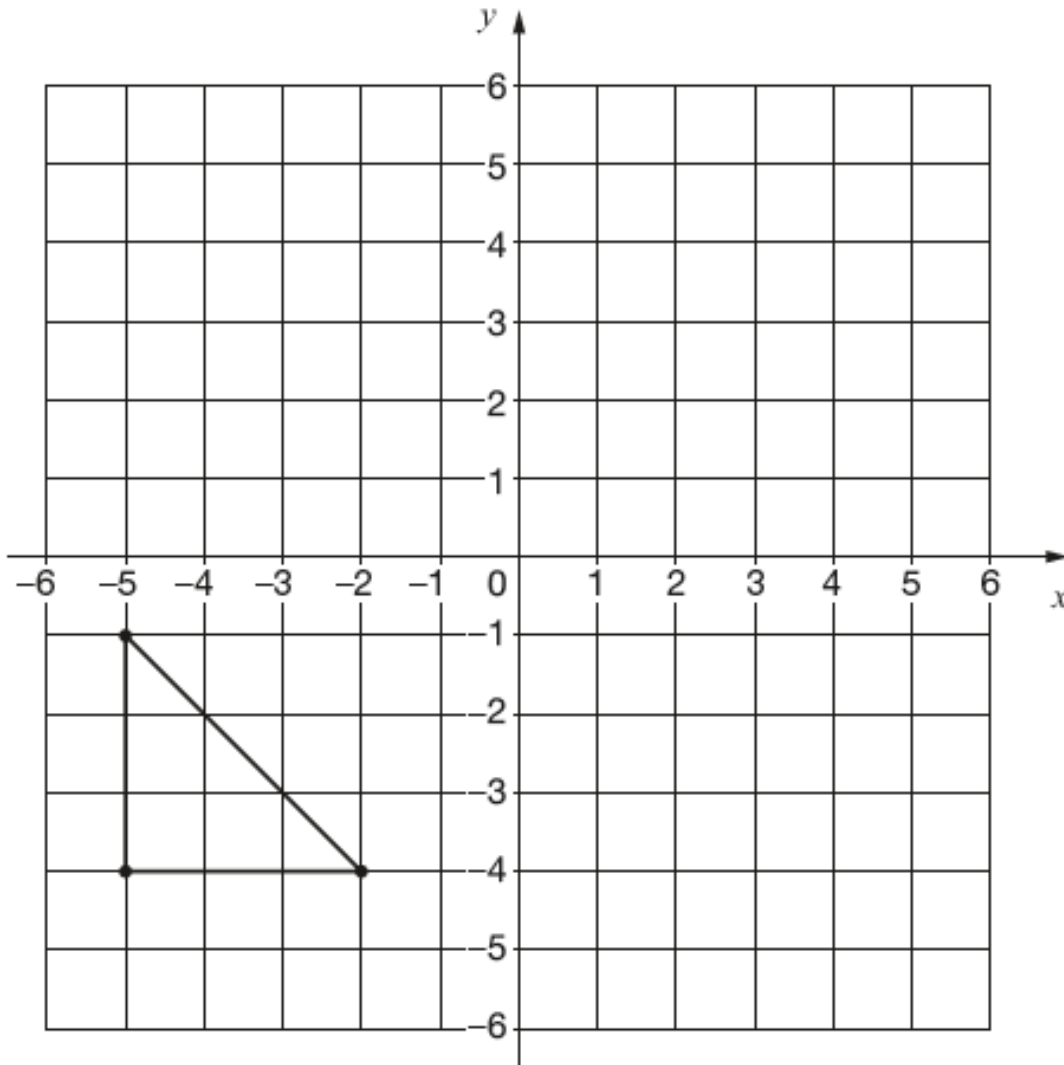| Leaves London	Arrives Paris
12:01	15:22
12:25	15:56
13:31	16:53
14:01	17:26
14:31	17:53
15:31	18:53
16:01	19:20

1 mark

Click here or use the link to view your video.

bit.ly/Q6_P3_2017_SiM

7 Here is a triangle drawn on a coordinate grid.

1 mark

The triangle is translated **7 right** and **5 up**.

Draw the triangle in its new position.

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bit.ly/Q7_P3_2017_SiM

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8   Write three factors of 30 that are **not** factors of 15

<div style="border:1px solid #000; display:inline-block; width:200px; height:80px;"></div>   <div style="border:1px solid #000; display:inline-block; width:200px; height:80px;"></div>   <div style="border:1px solid #000; display:inline-block; width:200px; height:80px;"></div>

2 marks

Click here or use the link to view your video.

bit.ly/Q8_P3_2017_SiM

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9 Here is the morning timetable for Chen's class this week.

Time	Mon	Tue	Wed	Thu	Fri
9:00 am–10:30 am	Maths	English	Maths	English	Maths
10:30 am–11:00 am	Break	Break	Break	Break	Break
11:00 am–12:00 pm	English	Maths	Science	Maths	English

What is the **total** number of hours for **English** on this timetable?

hours

1 mark

Click here or use the link to view your video.

bit.ly/Q9_P3_2017_SiM

10   A bottle contains 568 millilitres of milk.

Jack pours out **half a litre**.

How much milk is left?

1 mark

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bit.ly/Q10_P3_2017_SiM

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11 A bicycle wheel has a diameter of 64 cm.

What is the **radius** of the bicycle wheel?

	cm

1 mark

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bit.ly/Q11_P3_2017_SiM

12

24 white balloons

24

12 red balloons

12
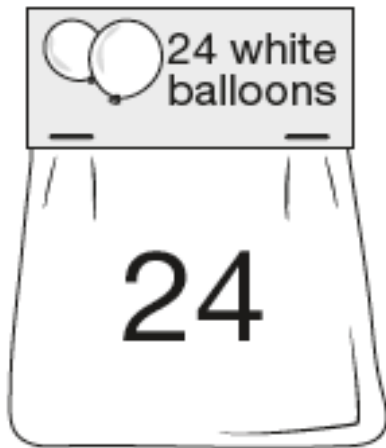
Adam buys **6** bags of white balloons.

Chen buys **3** bags of red balloons.

Adam says,

'*I have four times as many balloons as Chen.*'
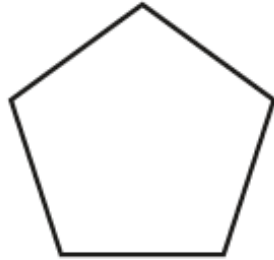
Explain why Adam is correct.
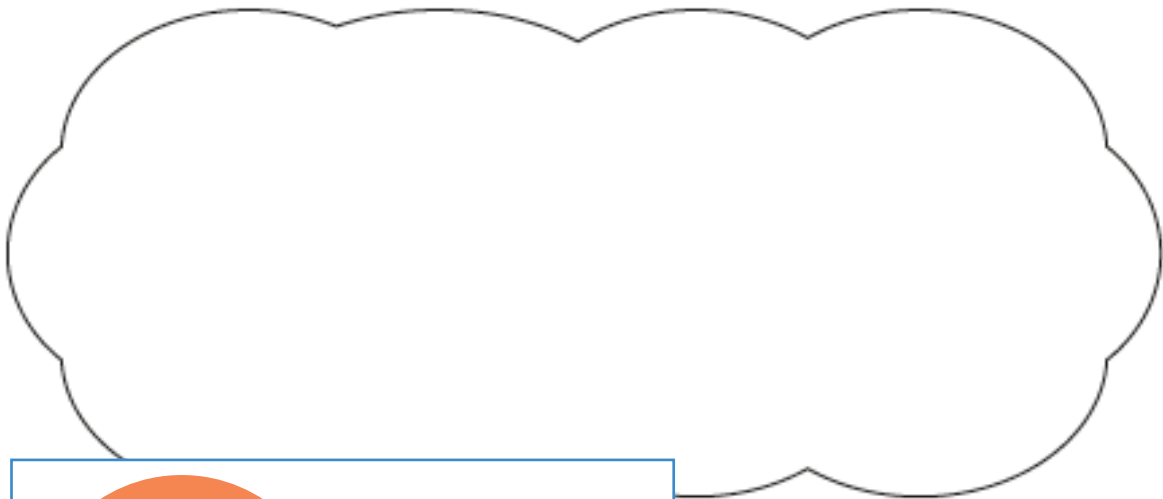
1 mark

Click here or use the link to view your video.

bit.ly/Q12_P3_2017_SiM

13 Circle the **pentagon** with exactly **four acute angles**.
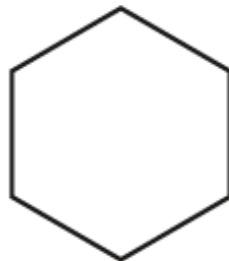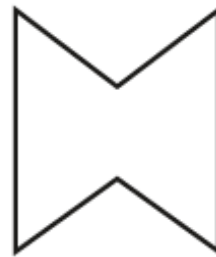
1 mark

Click here or use the link to view your video.

bit.ly/Q13_P3_2017_SiM

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14 3 pineapples cost the same as 2 mangoes.

One mango costs £1.35

How much does **one** pineapple cost?

Show your method

£

2 marks

Click here or use the link to view your video.

bit.ly/Q14_P3_2017_SiM

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15 Look at the letters below.

Circle the letter below that has both parallel **and** perpendicular lines.

A C E L Z

1 mark

Click here or use the link to view your video.

bit.ly/Q15_P3_2017_SiM

16
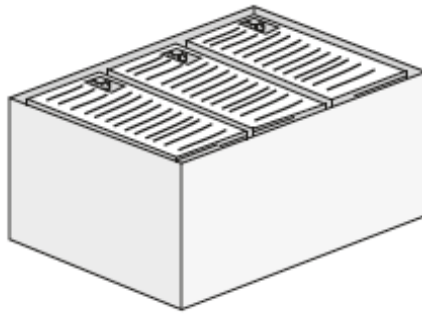
There are 2,400 leaflets in a box.

William and Ally take 450 leaflets each.

Adam and Chen share the rest of the leaflets equally.

How many leaflets does Adam get?

Show your method

2 marks

Click here or use the link to view your video.

bit.ly/Q16_P3_2017_SiM

17   In each box, circle the number that is **greater.**

$1\frac{1}{2}$ 1.2

$1\frac{1}{4}$ 1.3

$1\frac{5}{100}$ 1.4

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18   A **square** number and a **prime** number have a total of 22

What are the two numbers?

$$\boxed{} + \boxed{} = 22$$

square number   prime number

1 mark

▶ Click here or use the link to view your video.

bit.ly/Q18_P3_2017_SiM

19 Dev thinks of a **whole** number.

He multiplies it by 4

He rounds his answer to the nearest 10

The result is 50

Write **all** the possible numbers that Dev could have started with.

_____

2 marks

Click here or use the link to view your video.

bit.ly/Q19_P3_2017_SiM

20
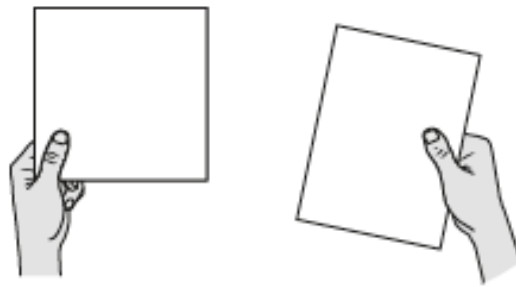
A square tile measures 20 cm by 20 cm.

A rectangular tile is 3 cm **longer** and 2 cm **narrower** than the square tile.

What is the **difference in area** between the two tiles?

Show your method

cm²
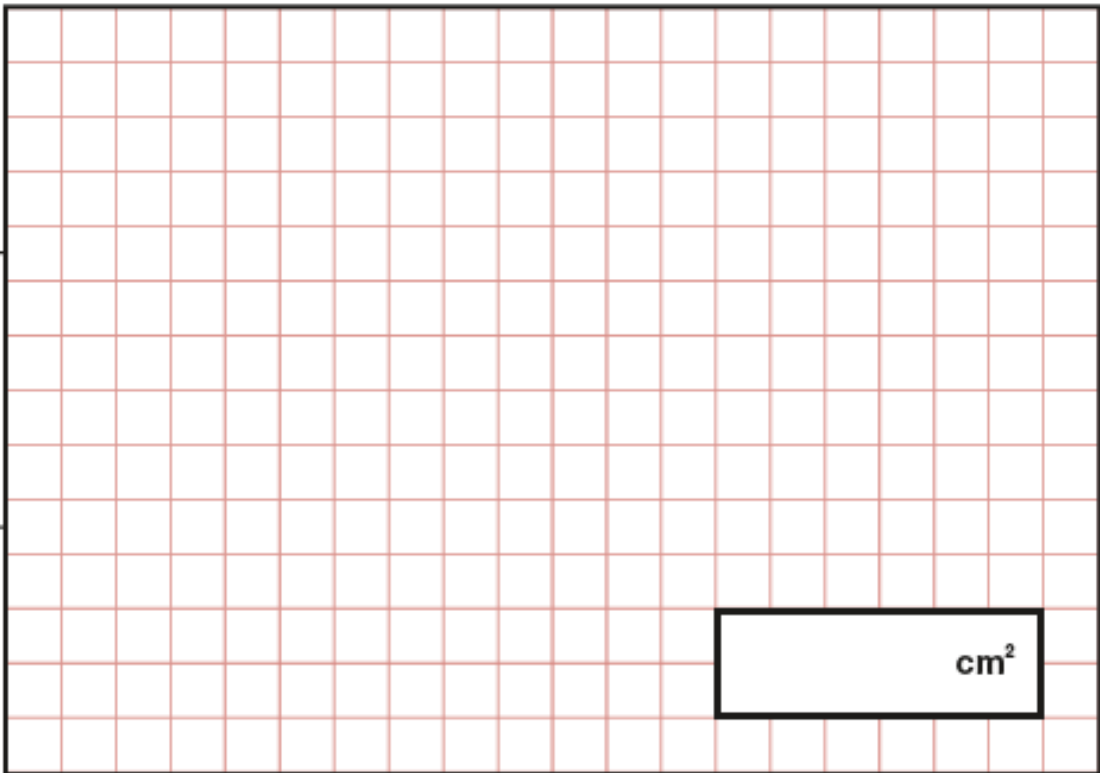
3 marks

Click here or use the link to view your video.

bit.ly/Q20_P3_2017_SiM

21 The numbers in this sequence increase by the same amount each time.

Write the missing numbers.

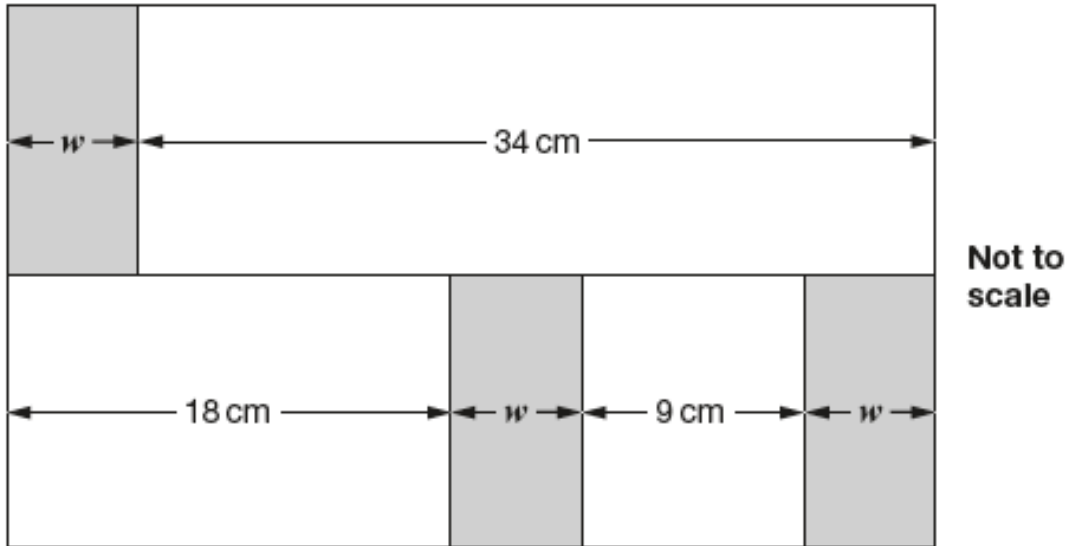|	1	$1\frac{5}{8}$	$2\frac{1}{4}$	

1 mark

1 mark

Click here or use the link to view your video.

bit.ly/Q21_P3_2017_SiM

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22 In this diagram, the shaded rectangles are all of equal width (w).

Not to scale

Calculate the width (w) of one shaded rectangle.

Show your method

cm
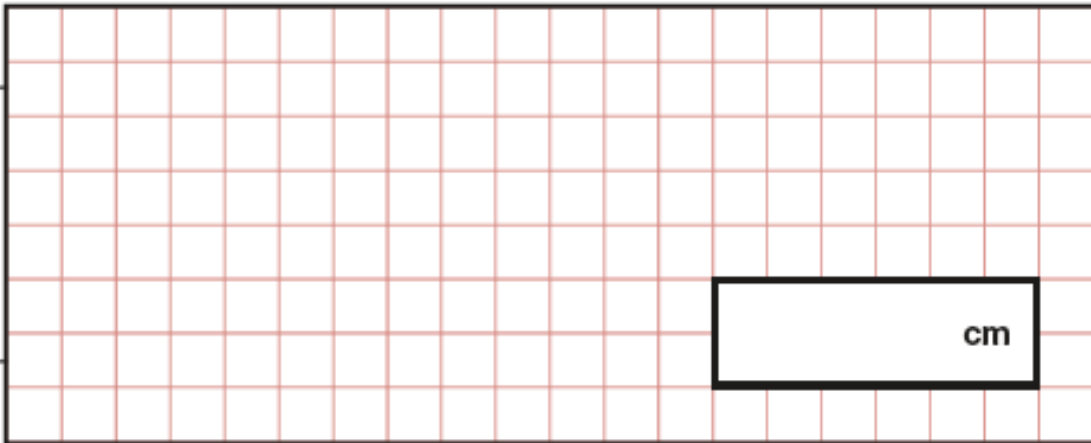
2 marks

Click here or use the link to view your video.

23 Here is a pattern of number pairs.

a	b
1	9
2	19
3	29
4	39

Complete the **rule** for the number pattern.

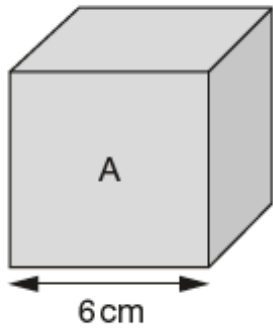$$b = \boxed{} \times a - \boxed{}$$

1 mark

Click here or use the link to view your video.

bit.ly/Q23_P3_2017_SiM

24 Cube A and cuboid B have the same volume.

Not to scale

A

6 cm

6 cm

4 cm

B

?
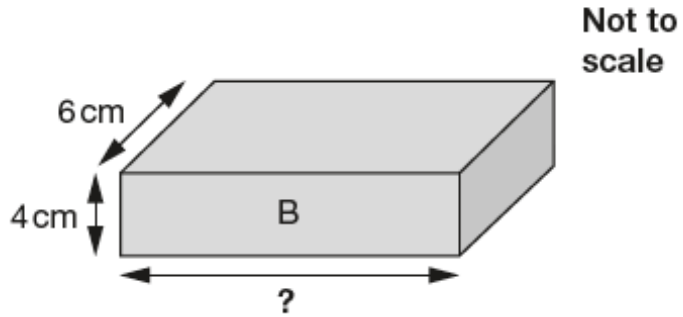
Calculate the missing length on cuboid B.

Show your method

cm

2 marks

Click here or use the link to view your video.

bit.ly/Q24_P3_2017_SiM