

SATs in Minutes

Video organiser for 21
SATs questions and
variant questions

Reasoning Paper 3, 2016

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1

The numbers in this sequence increase by 14 each time.

Write the missing numbers.

82 96 124 138

2 marks



Click here or use
the link to view
your video.

bit.ly/Q1_P3_2016_SiM

2

This table shows the temperature at 9am on three days in January.

1st January	8th January	15th January
+ 5°C	- 4°C	+ 1°C

What is the difference between the temperature on 1st January and the temperature on 8th January?

 °C

1 mark

On 22nd January the temperature was 7 degrees lower than on 15th January.

What was the temperature on 22nd January?

 °C

1 mark

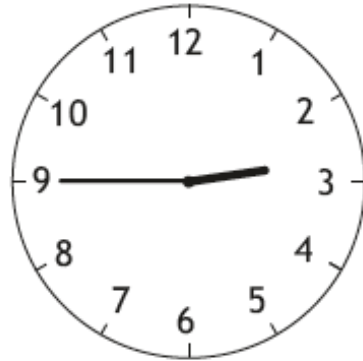


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bit.ly/Q2_P3_2016_SiM

3

A clock shows this time twice a day.



Tick the two digital clocks that show this time.

03:45

02:45

09:45

21:45

14:45

1 mark

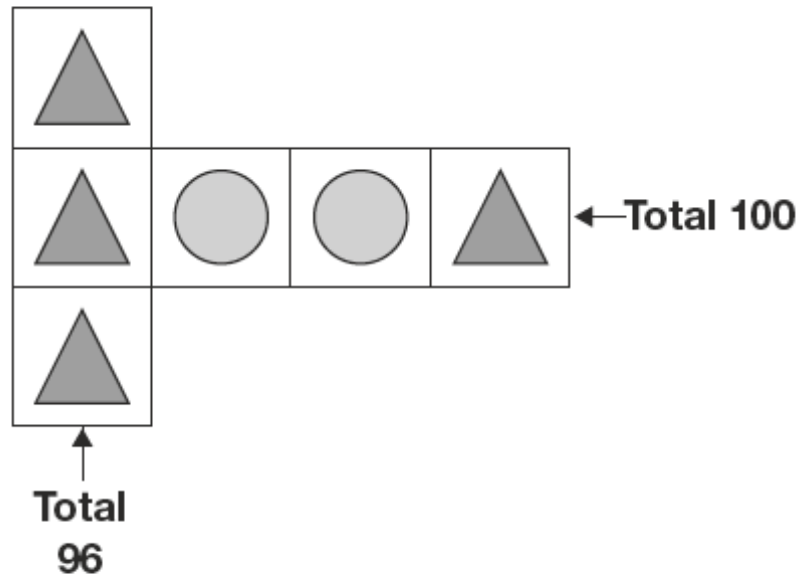


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the link to view
your video.


bit.ly/Q3_P3_2016_SiM

4


Each shape stands for a number.



Work out the **value** of each shape.

 = _____

_____ 1 mark

 = _____

_____ 1 mark



Click here or use the link to view your video.

bit.ly/Q4_P3_2016_SiM

5

Write these numbers in order, starting with the **smallest**.

0.78

0.607

5.6

0.098

4.003

smallest

1 mark



Click here or use
the link to view
your video.

bit.ly/Q5_P3_2016_SiM

6

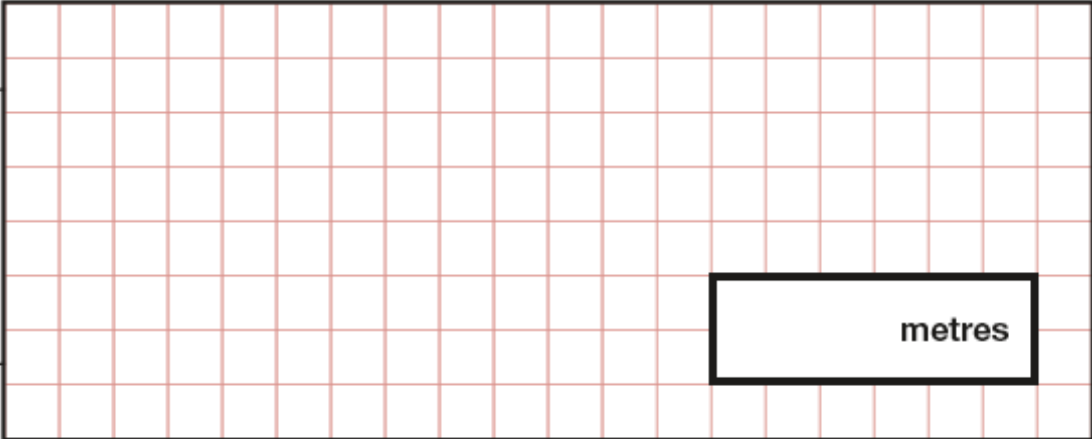
Jacob cuts **4 metres** of ribbon into **three** pieces.

The length of the first piece is **1.28 metres**.

The length of the second piece is **1.65 metres**.

Work out the length of the third piece.

Show your method



metres

2 marks

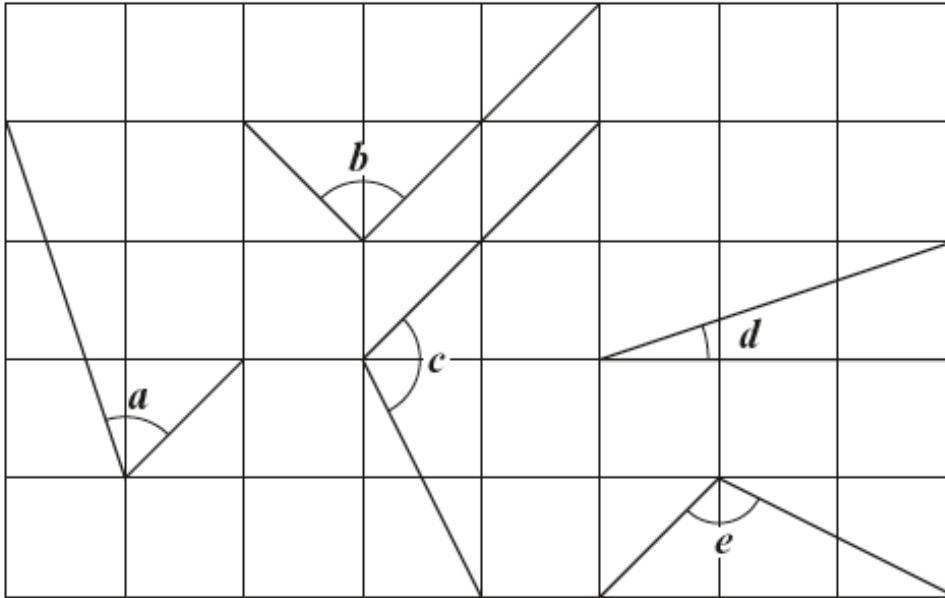


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bit.ly/Q6_P3_2016_SiM

7

Here are five angles marked on a grid of squares.



Write the letters of the angles that are **obtuse**.

_____ 1 mark

Write the letters of the angles that are **acute**.

_____ 1 mark



Click here or use the link to view your video.

bit.ly/Q7_P3_2016_SiM

8

Olivia buys three packets of nuts.



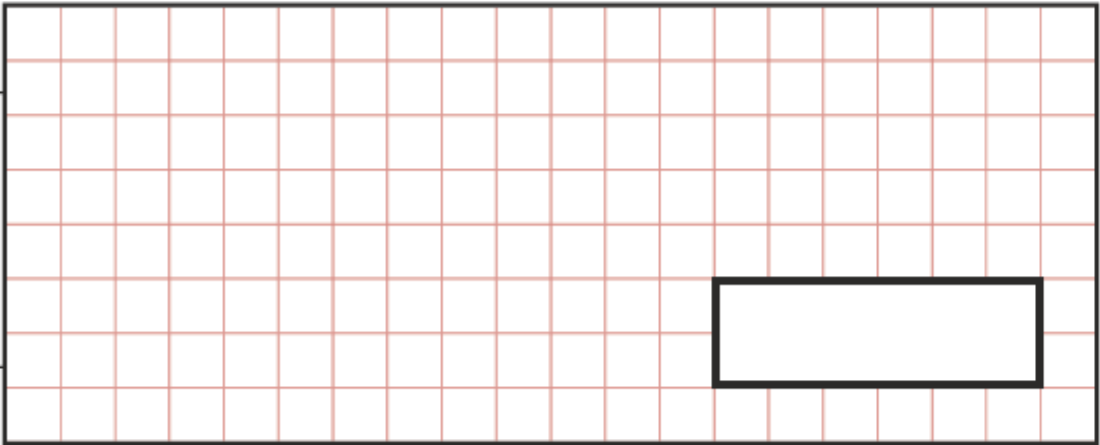
She pays with a £2 coin.

This is her change.



What is the cost of one packet of nuts?

Show your method



2 marks



Click here or use the link to view your video.

bit.ly/Q8_P3_2016_SiM

9

Here is part of the bus timetable from Riverdale to Mott Haven.

Riverdale	10:02	10:12	10:31	10:48
Kingsbridge	10:11	10:21	10:38	10:55
Fordham	10:28	10:38	10:54	11:11
Tremont	10:36	10:44	11:00	11:17
Mott Haven	10:53	11:01	11:17	11:34

How many minutes does it take the 10:31 bus from Riverdale to reach Mott Haven?

minutes

_____ **1 mark**

Mr Evans is at Fordham at 10:30

What is the earliest time he can reach Tremont on the bus?

_____ **1 mark**



Click here or use the link to view your video.

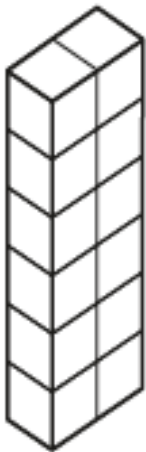
bit.ly/Q9_P3_2016_SiM

10

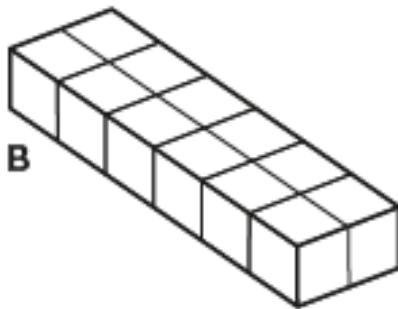
Emma makes a cuboid using 12 cubes.



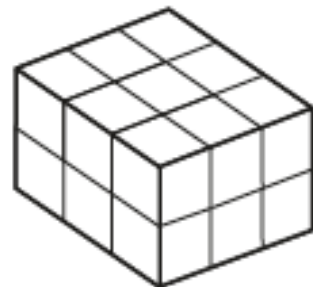
Write the letter of the cuboid that has a **different** volume from Emma's cuboid.



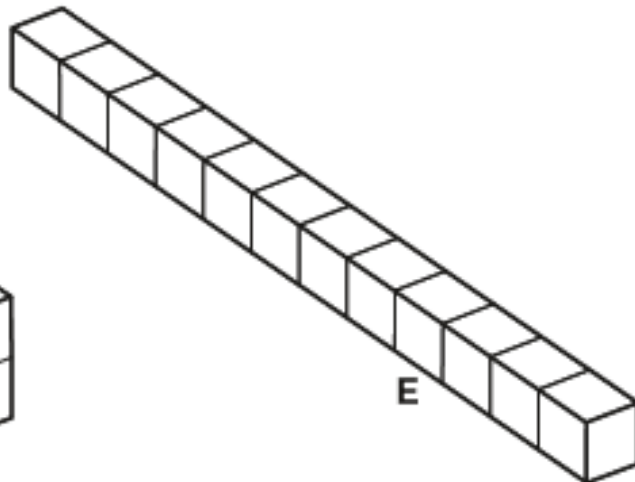
A



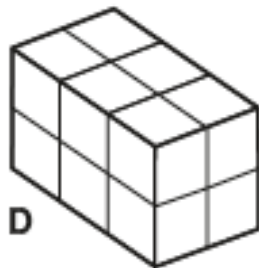
B



C



E



D

 Click here or use the link to view your video.

bit.ly/Q10_P3_2016_SiM

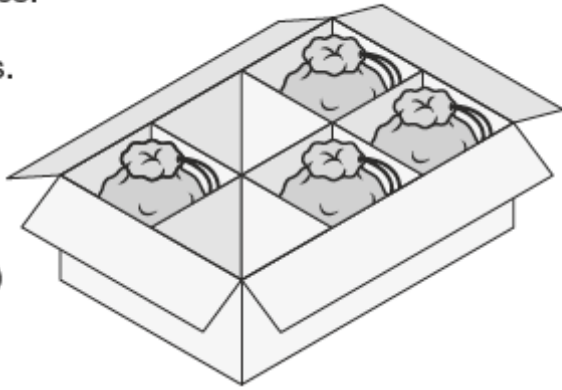
1 mark

11

A toy shop orders 11 boxes of marbles.

Each box contains 6 bags of marbles.

Each bag contains 45 marbles.



How many marbles does the shop order in total?

Show your method

marbles

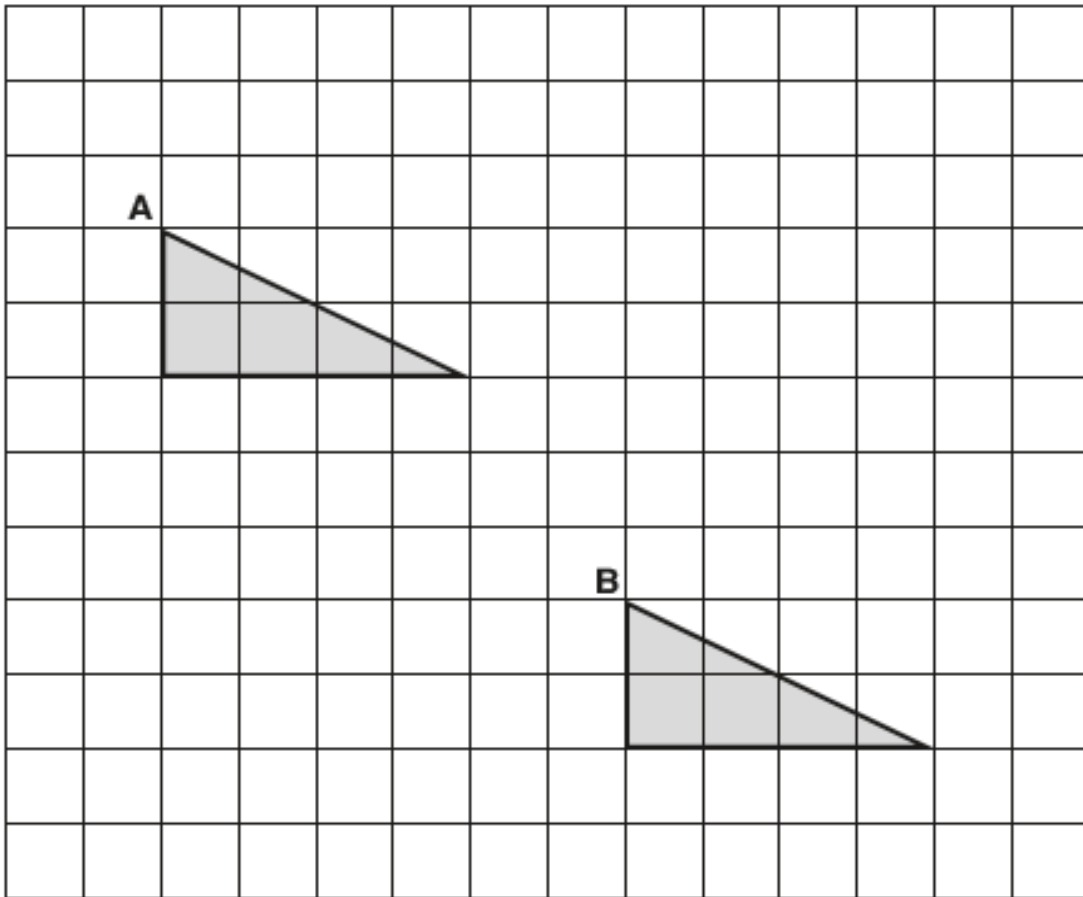
2 marks

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bit.ly/Q11_P3_2016_SiM

12

A triangle is translated from position **A** to position **B**.



Complete the sentence.

The triangle has moved squares to the right
and squares down.

1 mark

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bit.ly/Q12_P3_2016_SiM

13

Lara chooses a number less than 20

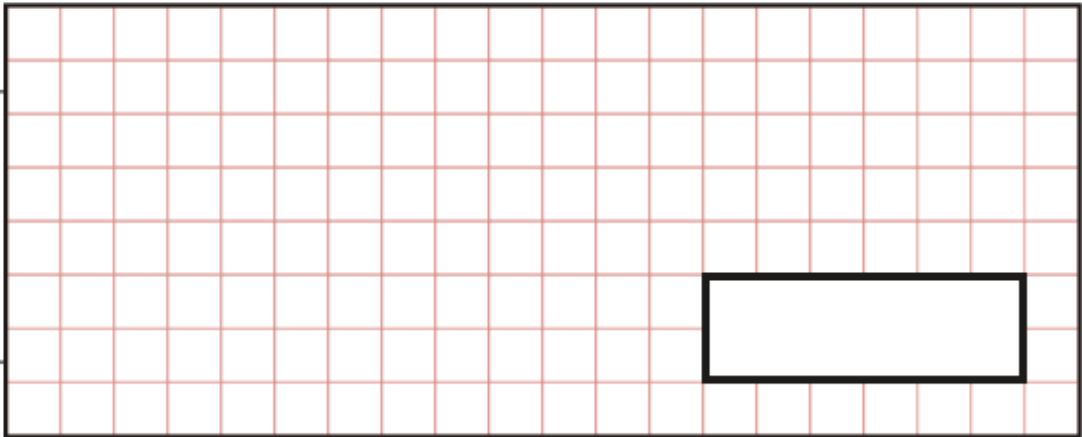
She divides it by 2 and then adds 6

She then divides this result by 3

Her answer is 4.5

What was the number she started with?

Show
your
method



2 marks



Click here or use the link to view your video.

bit.ly/Q13_P3_2016_SiM

14

Complete each sentence using a number from the list below.

120 240 600 1,440 3,600 6,000

There are seconds in an hour.

1 mark

There are minutes in a day.

1 mark



Click here or use
the link to view
your video.

bit.ly/Q14_P3_2016_SiM

15

Complete this table by rounding the numbers to the nearest hundred.

	Rounded to the nearest hundred
20,906	
2,090.6	
209.06	

2 marks

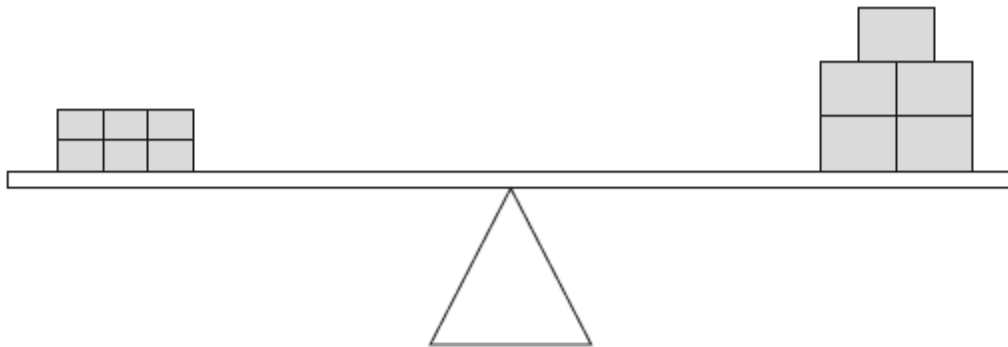


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bit.ly/Q15_P3_2016_SiM

16

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



The mass of one small brick is 2.5 kg.

What is the mass of one large brick?

Show your method

A large rectangular grid with a red border and a light red grid pattern. On the left side, there is a rounded rectangular box containing the text "Show your method". On the right side of the grid, there is a smaller rectangular box with a black border containing the text "kg".

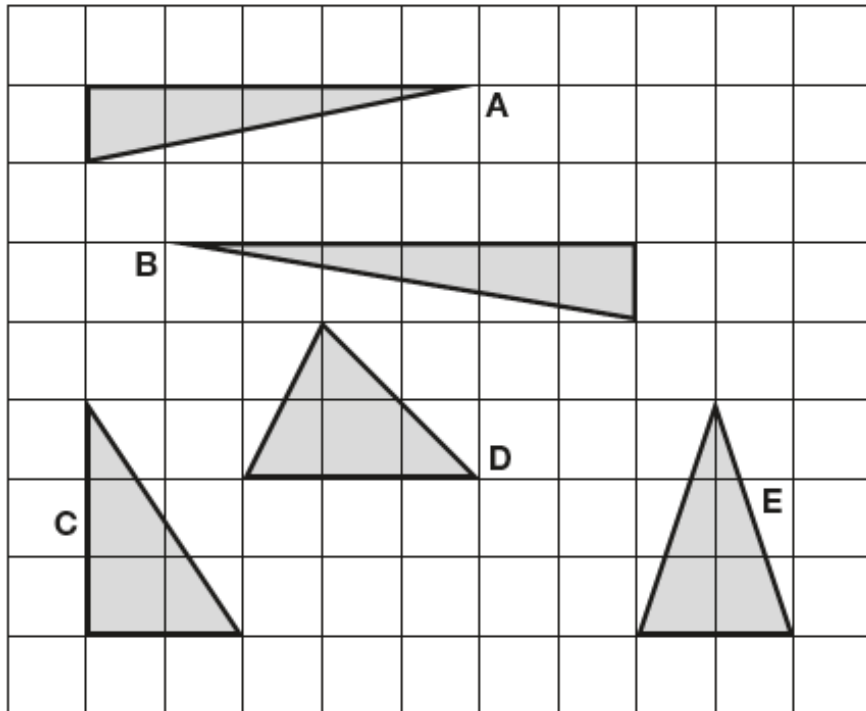
2 marks

Click here or use the link to view your video.

bit.ly/Q16_P3_2016_SiM

17

Here are five triangles on a square grid.



Four of the triangles have the same area.

Which triangle has a **different** area?

_____ 1 mark

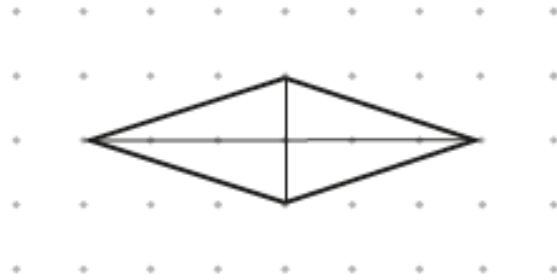


Click here or use the link to view your video.

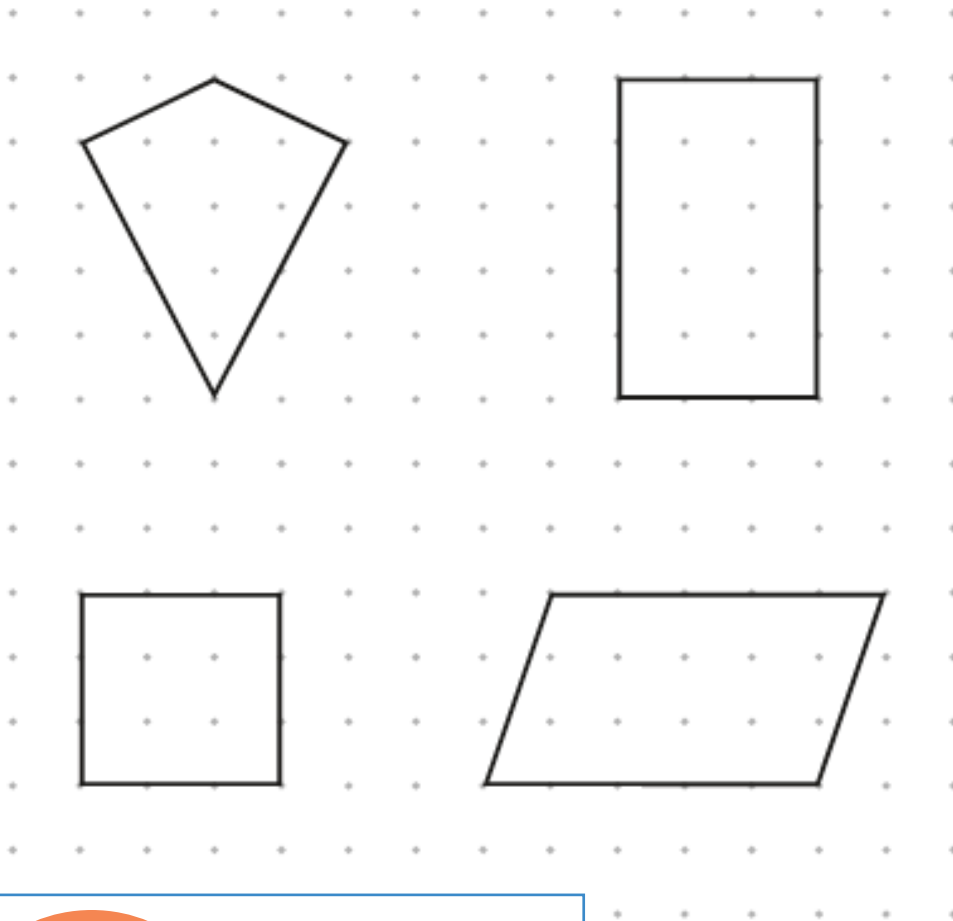
bit.ly/Q17_P3_2016_SiM

18

The diagonals of this quadrilateral cross at right angles.



Tick **all** the quadrilaterals that have diagonals which cross at right angles.



2 marks



Click here or use the link to view your video.

bit.ly/Q18_P3_2016_SiM

19

Circle two numbers that multiply together to equal **1 million**.

200

2,000

5,000

50,000

1 mark



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the link to view
your video.

bit.ly/Q19_P3_2016_SiM

20

Lara had some money.


She spent £1.25 on a drink.

She spent £1.60 on a sandwich.

She has **three-quarters** of her money left.

How much money did Lara have to **start with**?

Show your method



£

2 marks



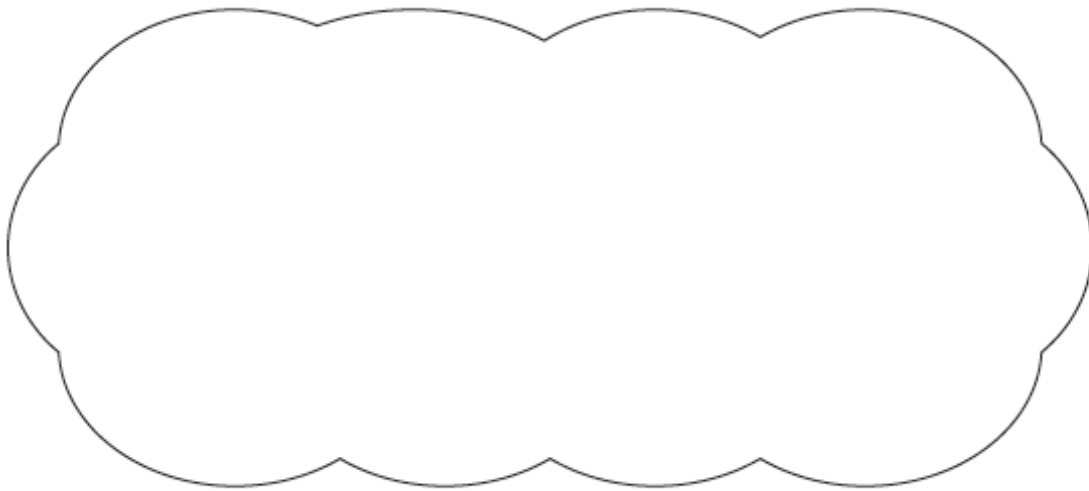
Click here or use the link to view your video.

bit.ly/Q20_P3_2016_SiM

21

$$5,542 \div 17 = 326$$

Explain how you can use this fact to find the answer to 18×326



1 mark



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the link to view
your video.

bit.ly/Q21_P3_2016_SiM