

# SATs in Minutes Organiser

Video organiser for 23  
SATs questions and  
variant questions

Reasoning Paper 2, 2017

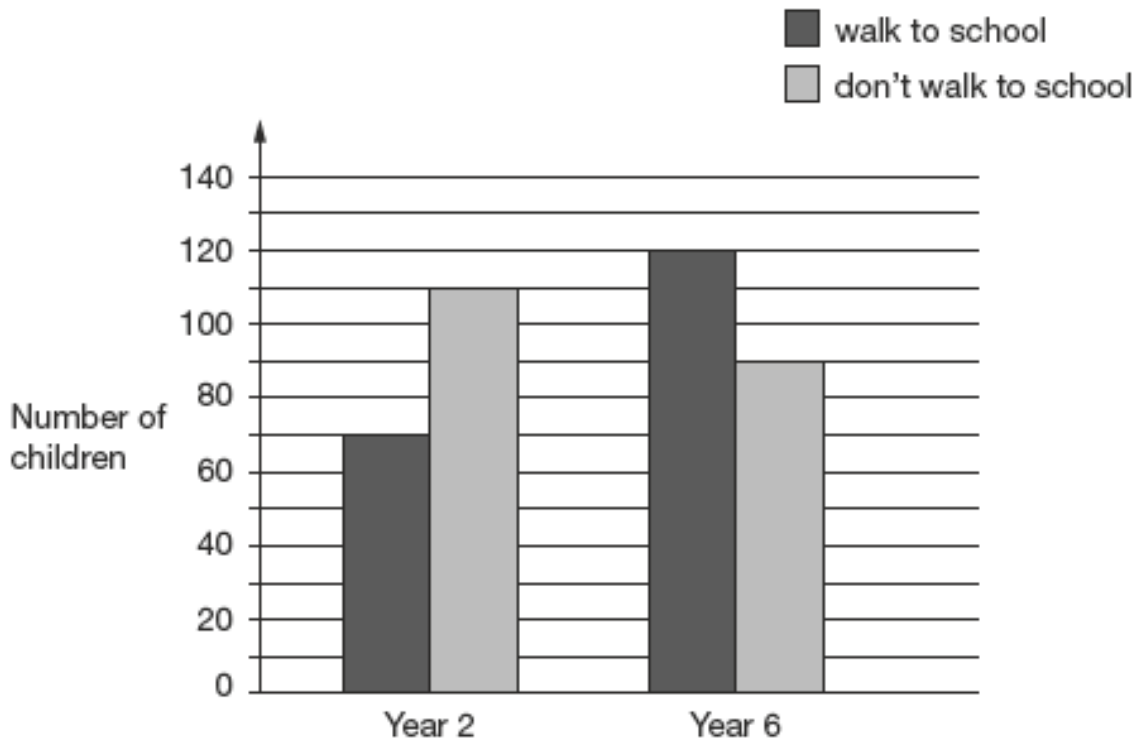
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1

William asks the children in Year 2 and Year 6 if they walk to school.

This graph shows the results.



Altogether, how many children **don't** walk to school?

1 mark

How many **more** Year 6 children than Year 2 children walk to school?

1 mark



Click here or use the link to view your video.

[bit.ly/Q1\\_P2\\_2017\\_SiM](https://bit.ly/Q1_P2_2017_SiM)

2

Circle the number that is **10 times** greater than nine hundred and seven.

9,700

907

9,007

970

9,070

1 mark



Click here or use the link to view your video.

[bit.ly/Q2\\_P2\\_2017\\_SiM](https://bit.ly/Q2_P2_2017_SiM)

3

Write the missing numbers to make this **multiplication** grid correct.

×		
9	63	54
□	56	48

1 mark



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[bit.ly/ Q3\\_P2\\_2017\\_SiM](https://bit.ly/Q3_P2_2017_SiM)

4

This table shows the heights of three mountains.

Mountain	Height in metres
Mount Everest	8,848
Mount Kilimanjaro	5,895
Ben Nevis	1,344

How much higher is Mount Everest than the combined height of the other two mountains?

Show your method

m

2 marks

What is the **difference** between the numbers of people living in Bedford and in Dover?

1 mark

Click here or use the link to view your video.

[bit.ly/Q4\\_P2\\_2017\\_SiM](https://bit.ly/Q4_P2_2017_SiM)

5

Complete this table with the missing numbers.

One row has been done for you.

Number	1,000 more
3,500	4,500
85	
	9,099
	15,250

2 marks



Click here or use the link to view your video.

[bit.ly/Q5\\_P2\\_2017\\_SiM](https://bit.ly/Q5_P2_2017_SiM)

6

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

1.9

0.96

1.253

0.328

smallest

1 mark



Click here or use  
the link to view  
your video.

[bit.ly/Q6\\_P2\\_2017\\_SiM](https://bit.ly/Q6_P2_2017_SiM)



7

Write the missing numbers.

60 months =  years

72 hours =  days

84 days =  weeks

2 marks



Click here or use  
the link to view  
your video.

[bit.ly/Q7\\_P2\\_2017\\_SiM](https://bit.ly/Q7_P2_2017_SiM)

8

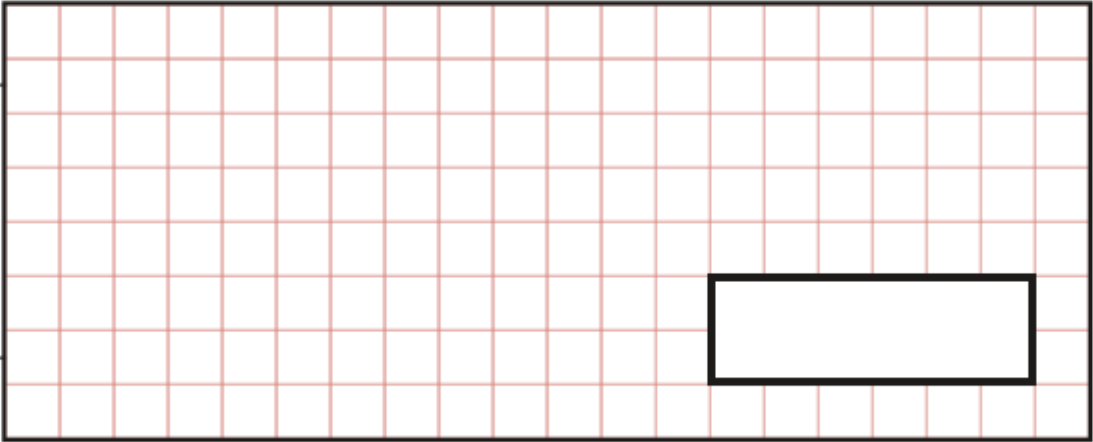
At the start of June, there were 1,793 toy cars in the shop.

During June,

- 8,728 more toy cars were delivered
- 9,473 toy cars were sold.

How many toy cars were left in the shop at the end of June?

Show your method



2 marks

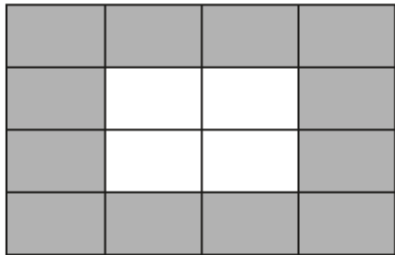
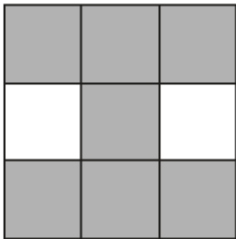
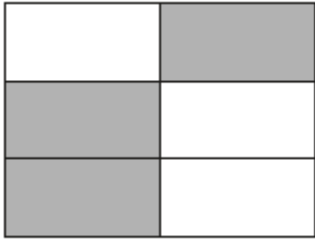
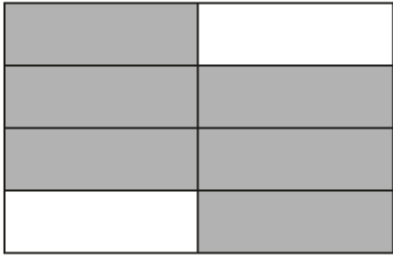


Click here or use the link to view your video.

[bit.ly/Q8\\_P2\\_2017\\_SiM](https://bit.ly/Q8_P2_2017_SiM)

9

Tick two shapes that have  $\frac{3}{4}$  shaded.



1 mark



Click here or use the link to view your video.

[bit.ly/Q9\\_P2\\_2017\\_SiM](https://bit.ly/Q9_P2_2017_SiM)

10

Round 84,516

to the nearest 10

to the nearest 100

to the nearest 1,000

2 marks



Click here or use  
the link to view  
your video.

[bit.ly/Q10\\_P2\\_2017\\_SiM](https://bit.ly/Q10_P2_2017_SiM)

11

Here is a rule for the time it takes to cook a chicken.

Cooking time = 20 minutes plus an extra  
40 minutes for each kilogram

How many minutes will it take to cook a 3kg chicken?

minutes

1 mark

What is the mass of a chicken that takes 100 minutes to cook?

kg

1 mark



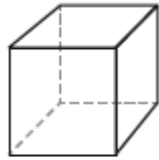
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[bit.ly/Q11\\_P2\\_2017\\_SiM](https://bit.ly/Q11_P2_2017_SiM)

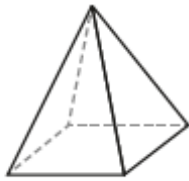
12

Here are diagrams of some 3-D shapes.

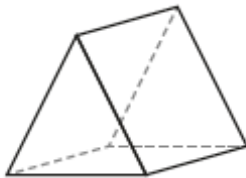
Tick each shape that has the same number of faces as vertices.



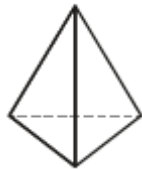
Cube



Square-based pyramid



Triangular prism



Triangular-based pyramid

2 marks



Click here or use the link to view your video.

[bit.ly/ Q12\\_P2\\_2017\\_SiM](https://bit.ly/Q12_P2_2017_SiM)

13

Ally and Jack buy some stickers.



**Pack of 12 stickers**  
**£10.49**



**12 stickers**  
**99p each**

Ally buys a pack of 12 stickers for £10.49

Jack buys 12 single stickers for 99p each.

How much more does Jack pay than Ally?

Show your method

£
---

2 marks

 Click here or use the link to view your video.  
[bit.ly/Q13\\_P2\\_2017\\_SiM](https://bit.ly/Q13_P2_2017_SiM)

14

Amina planted some seeds.

For every 3 seeds Amina planted, only 2 seeds grew.

Altogether, 12 seeds grew.

How many seeds did Amina **plant**?

1 mark



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the link to view  
your video.

[bit.ly/Q14\\_P2\\_2017\\_SiM](https://bit.ly/Q14_P2_2017_SiM)



15

At the end of a film, the year is given in Roman numerals.



Write the year MMVI in figures.

1 mark

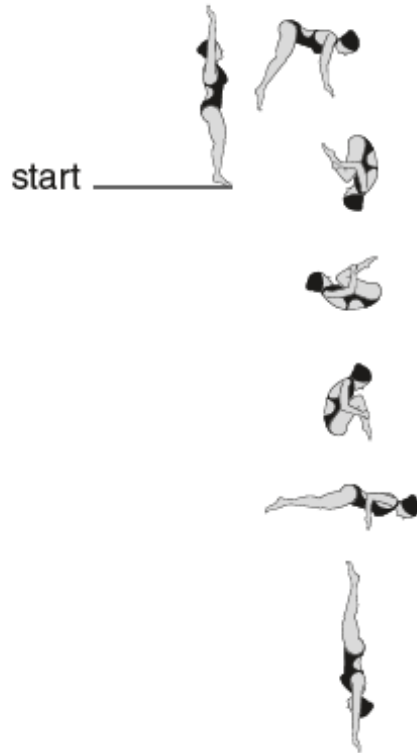


Click here or use  
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your video.

[bit.ly/Q15\\_P2\\_2017\\_SiM](https://bit.ly/Q15_P2_2017_SiM)

16

Layla completes one-and-a-half somersaults in a dive.



How many degrees does Layla turn through in her dive?

1 mark

Click here or use the link to view your video.

[bit.ly/Q16\\_P2\\_2017\\_SiM](https://bit.ly/Q16_P2_2017_SiM)

**17**

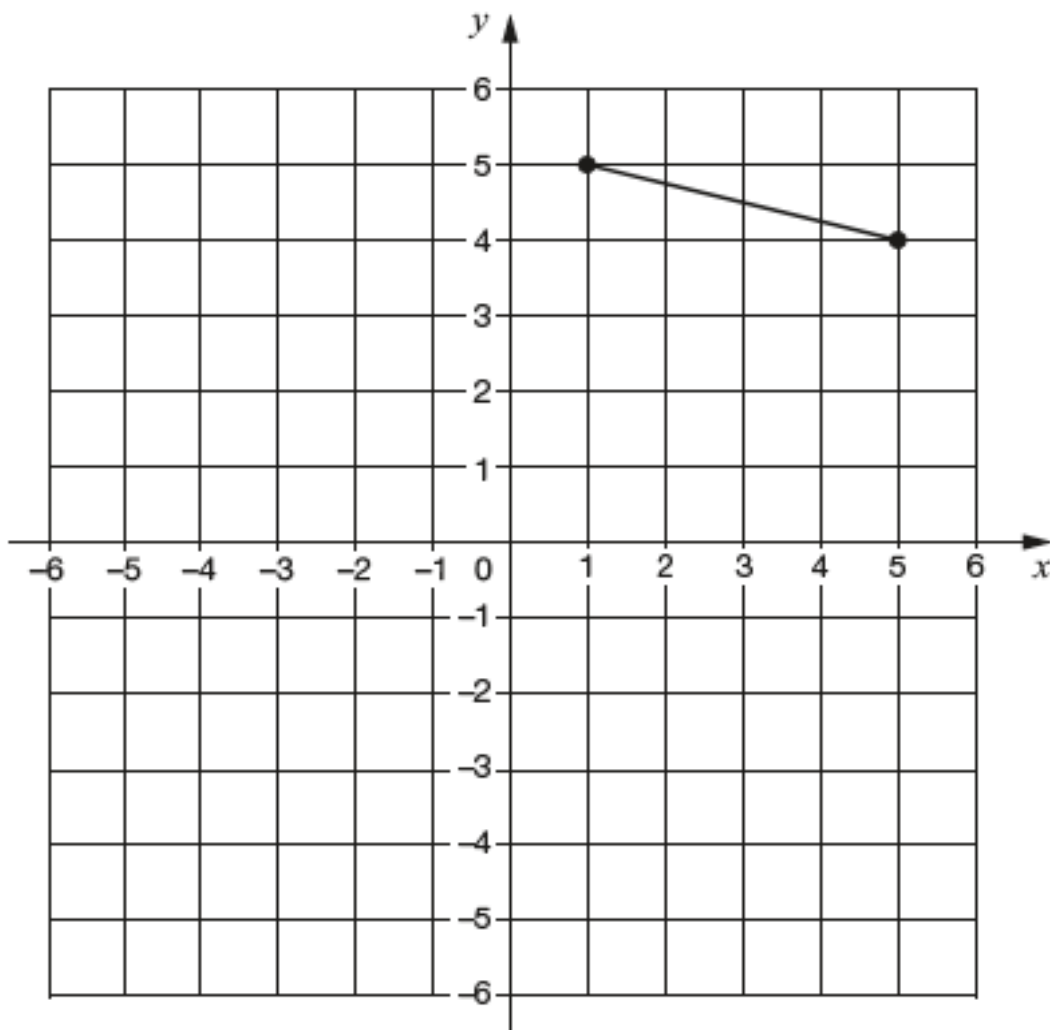
The vertices of a quadrilateral have these coordinates.

(1, 5)      (5, 4)      (1, -3)      (-3, 4)

One side of the quadrilateral has been drawn on the grid.

Complete the quadrilateral.

Use a ruler.



1 mark



Click here or use the link to view your video.

[bit.ly/Q17\\_P2\\_2017\\_SiM](https://bit.ly/Q17_P2_2017_SiM)

18

A cat sleeps for **12 hours** each day.

**50%** of its life is spent asleep.



Write the missing percentage.

A koala sleeps for **18 hours** each day.

 %

of its life is spent asleep.



1 mark



Click here or use the link to view your video.

[bit.ly/Q18\\_P2\\_2017\\_SiM](https://bit.ly/Q18_P2_2017_SiM)

**19**

Amina posts three large letters.


The postage costs the same for each letter.

She pays with a £20 note.

Her change is £14.96

What is the cost of posting **one** letter?

Show your method



£

2 marks



Click here or use the link to view your video.

[bit.ly/Q19\\_P2\\_2017\\_SiM](https://bit.ly/Q19_P2_2017_SiM)

20

Adam says,

0.25 is smaller than  $\frac{2}{5}$



Explain why he is correct.

A large, empty, cloud-shaped outline intended for the student to write their explanation.

1 mark

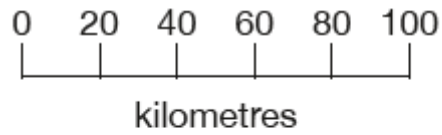


Click here or use the link to view your video.

[bit.ly/Q20\\_P2\\_2017\\_SiM](https://bit.ly/Q20_P2_2017_SiM)

21

On a map, 1cm represents 20 km.



The distance between two cities is **250 km**.

On the map, what is the distance between the two cities?

Show your method

A large grid for showing the method. A small box on the right side of the grid is labeled "cm".

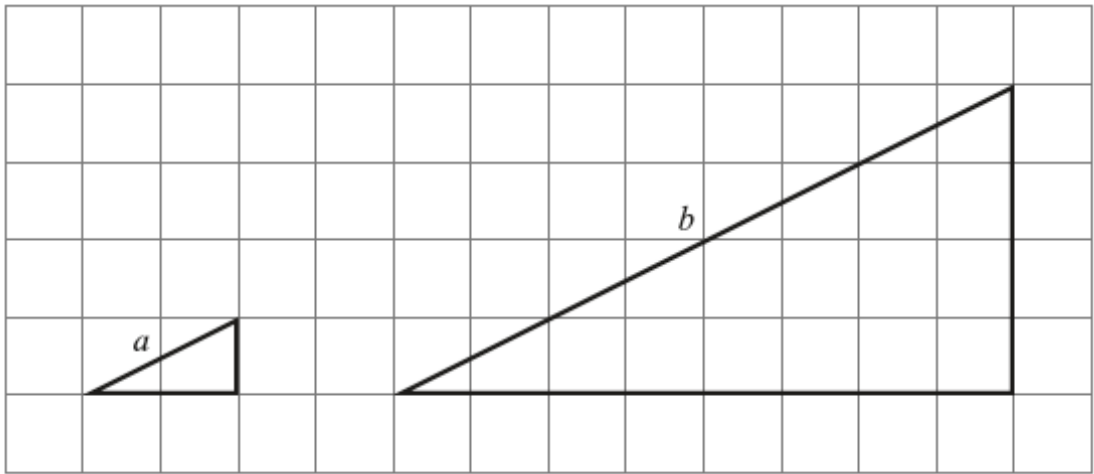
2 marks

Click here or use the link to view your video.

[bit.ly/Q21\\_P2\\_2017\\_SiM](https://bit.ly/Q21_P2_2017_SiM)

22

Here are two similar right-angled triangles.



Write the ratio of side *a* to side *b*.

$a:b =$    $:$

1 mark



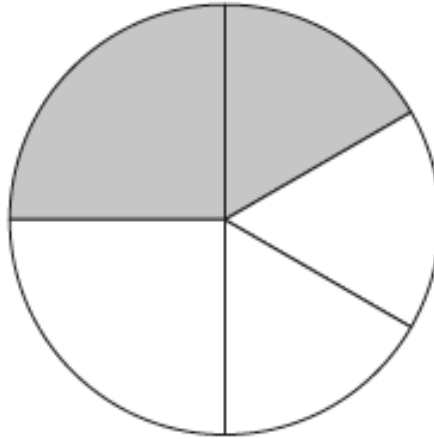
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[bit.ly/Q22\\_P2\\_2017\\_SiM](https://bit.ly/Q22_P2_2017_SiM)



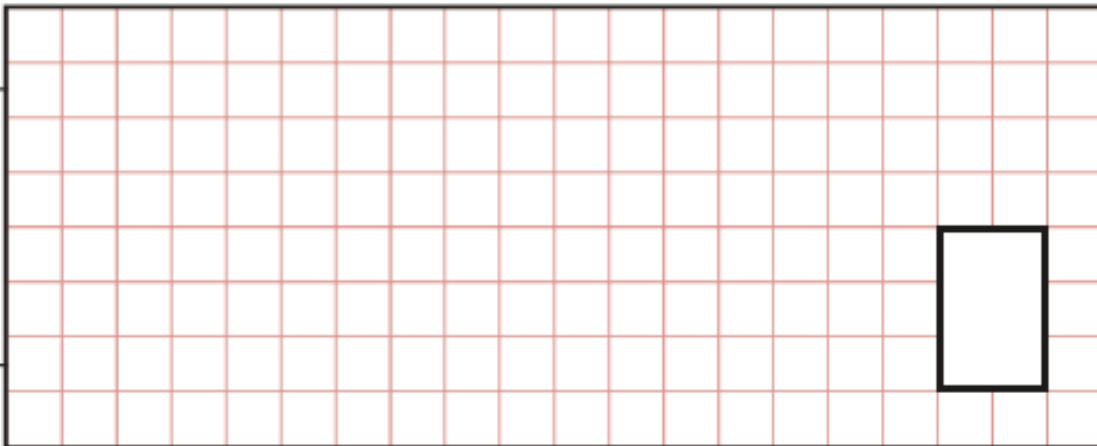
23

In this circle,  $\frac{1}{4}$  and  $\frac{1}{6}$  are shaded.



What fraction of the whole circle is **not** shaded?

Show  
your  
method



2 marks



Click here or use  
the link to view  
your video.

[bit.ly/Q23\\_P2\\_2017\\_SiM](https://bit.ly/Q23_P2_2017_SiM)