

Ma

KEY STAGE

2

LEVELS

3–5

Mathematics tests

Paper 1

Calculator **not** allowed

First name						
Middle name						
Last name						
Date of birth	Day		Month		Year	
School name						
DfE number						

For marker's use only

Page	Marks
5	
7	
9	
11	
13	
15	
17	
19	
21	
23	
Total marks	

2014

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Instructions

You **may not** use a calculator to answer any questions in this test.

Work as quickly and as carefully as you can.

You have **45 minutes** for this test.

If you cannot do one of the questions, **go on to the next one.**

You can come back to it later, if you have time.

If you finish before the end, **go back and check your work.**

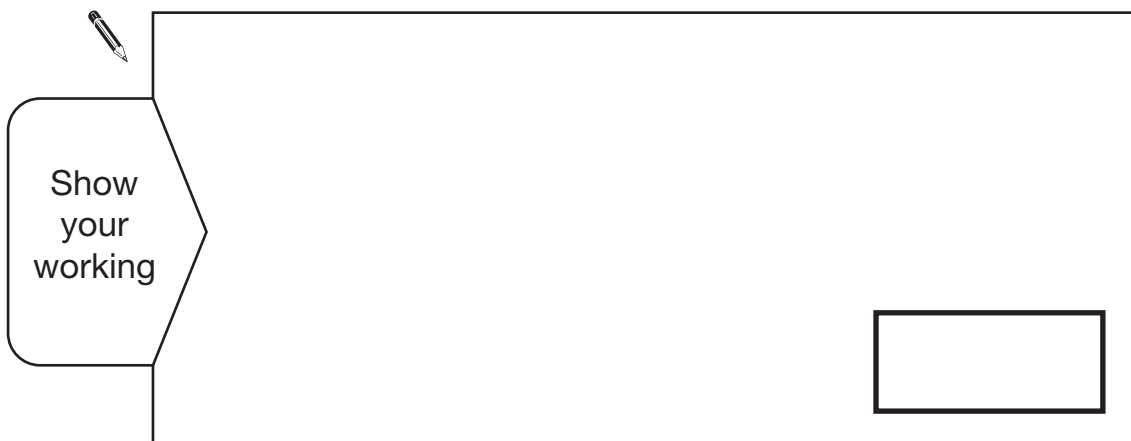
Follow the instructions for each question carefully.



This shows where you need to put the answer.

If you need to do working out, you can use any space on a page.

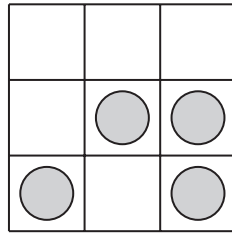
Some questions have an answer box like this:



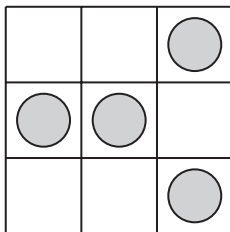
For these questions you may get a mark for showing your working.

1

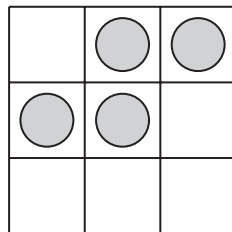
This grid has a pattern of four circles on it.



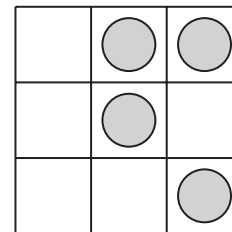
Write the letter of the grid below that has the same pattern as the grid above.



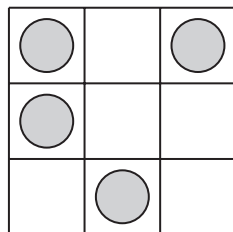
A



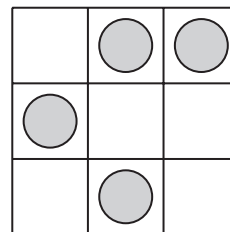
B



C



D



E



1

1 mark

2

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

Write the two missing numbers.



610

650

690

2a

1 mark

2b

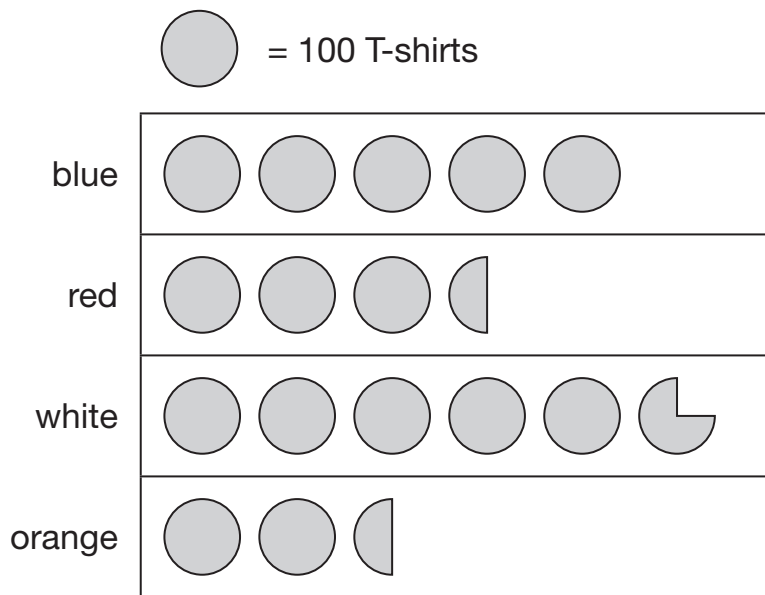
1 mark

Total out of 3 _____

3

A shop sells T-shirts.

This chart shows how many T-shirts were sold in a month.



Write the colours of the T-shirts that sold **more than 400** in the month.



3a

1 mark

How many red T-shirts and orange T-shirts were sold **altogether**?



3b

1 mark

How many **more** white than blue T-shirts were sold?



3c

1 mark

4

Seb has to see the doctor at 10:05 am.

He gets to the doctor's surgery at 9:52 am.

How many minutes **early** is he?



minutes

4a

1 mark

He leaves the doctor's surgery at 10:25 am.

He gets to school 45 minutes later.

What time does he arrive at school?



am

4b

1 mark

Total out of 5 _____

5

Write the **three** missing numbers in this multiplication grid.



×	8	5	
4		20	28
5	40		35
3	24	15	21

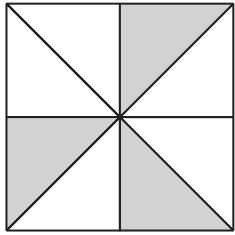
5i

5ii

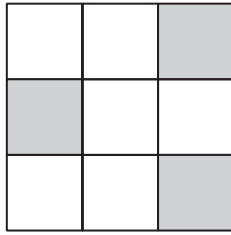
2 marks

6

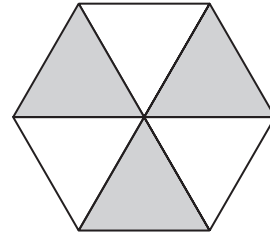
Each of these diagrams is divided into equal parts.
Some of the parts are shaded.



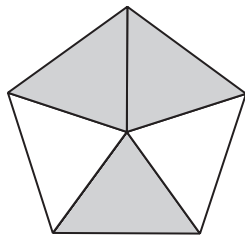
A



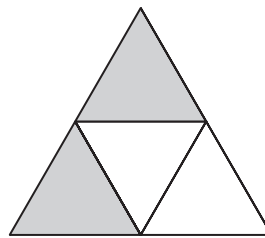
B



C



D



E

Write the letters of all the diagrams that have exactly $\frac{1}{2}$ shaded.



6a

1 mark

Which of the diagrams has exactly $\frac{1}{3}$ shaded?



6b

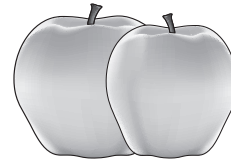
1 mark

Total out of 4 _____

7

Liam buys **two** apples.

He pays with a £1 coin and gets 64p change.



How much does **one** apple cost?

Show
your
working



7i

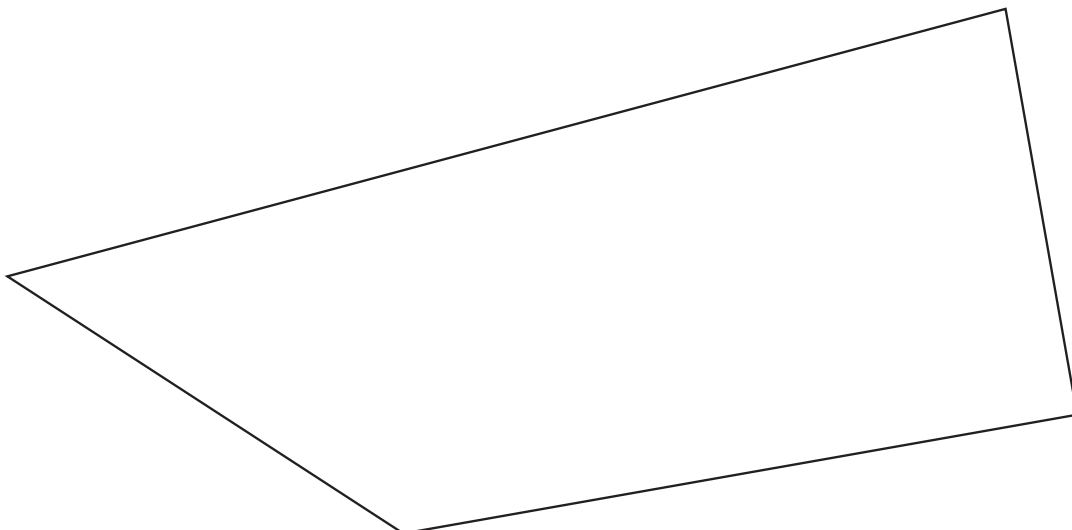
7ii

2 marks

8

In this shape, one of the angles is **obtuse**.

Tick (✓) the obtuse angle.



8

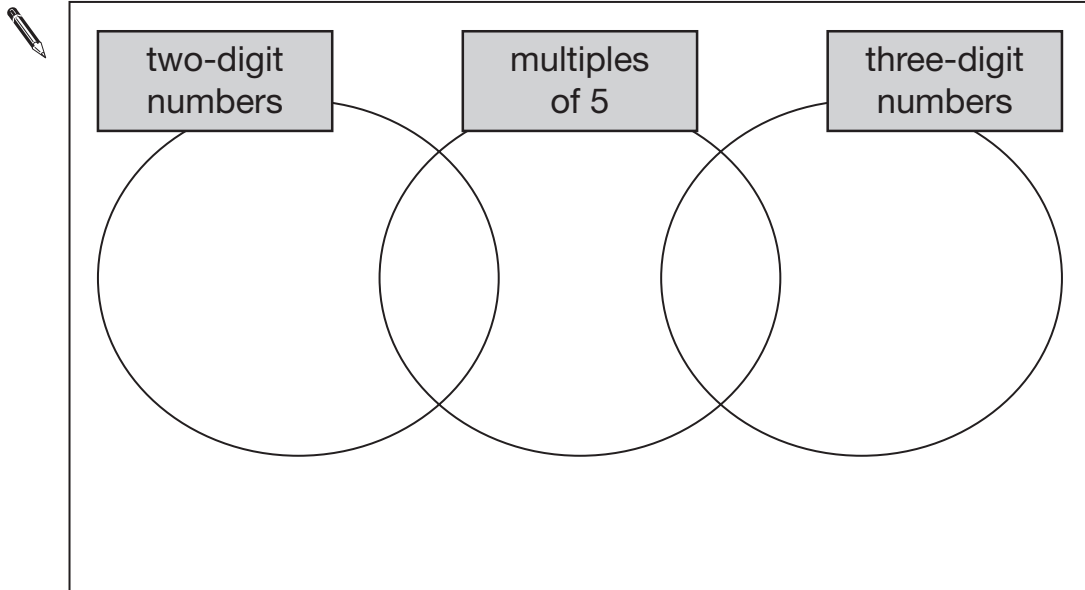
1 mark

9

Here is a diagram for sorting numbers.

Write **each** number in its correct place on the diagram.

2 20 201 2000



9i

9ii

2 marks

Total out of 5 _____

10

Write the missing numbers to make these calculations correct.


$$200 \times \boxed{} - 200 = 200$$

10a

1 mark

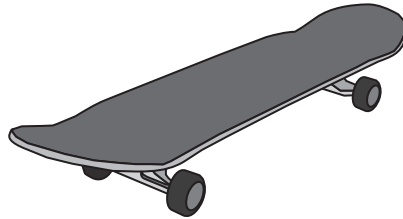
$$(100 - \boxed{}) \times 100 = 100$$

10b

1 mark

11

Seb saved up for a new skateboard that cost £40



The table shows how much money he saved each week.

Week number	1	2	3	4	5	6	7	8	9	10
Amount saved	£5	£4	£2	£4	£3	£4	£6	£4	£3	£5

In which week did Seb reach **half** the amount he needed for the skateboard?



11a

1 mark

If Seb had saved an extra £1 each week, in which week would he have reached his target of £40?



11b

1 mark

Total out of 4 _____

12

This weather chart shows the highest and lowest temperatures in a town on five days in March.

	Temperature °C	
	highest	lowest
Monday	+7	0
Tuesday	+7	-2
Wednesday	+8	-2
Thursday	+9	+1
Friday	+4	-5

Which day has the greatest difference between the highest and the lowest temperatures?



12a

1 mark

What is the difference between the lowest temperatures on Thursday and Friday?



degrees

12b

1 mark

13

Chen and Megan each buy a sandwich.

Chen gets 5p change from £2

Megan gets £2.25 change from £5

How much **more** does Megan pay than Chen?



Show
your
working

13i

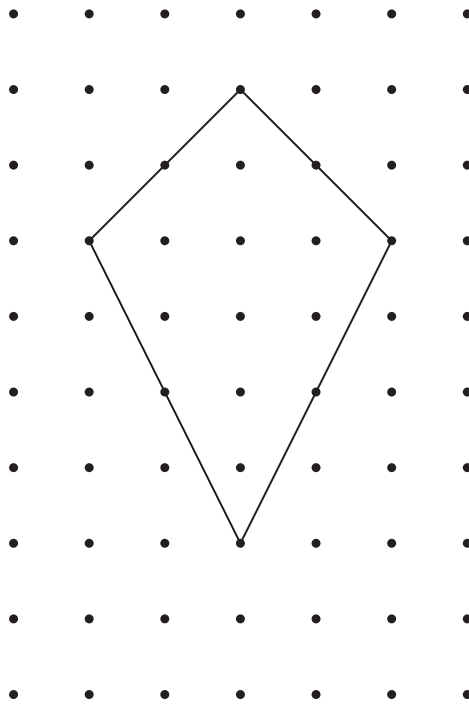
13ii

2 marks

Total out of 4 _____

14

Here is a shape on a grid.



For each statement, put a tick (✓) if it is true.
Put a cross (✗) if it is not true.



The shape is a quadrilateral.

The shape has 2 lines of symmetry.

The shape is a parallelogram.

The shape has one right angle.

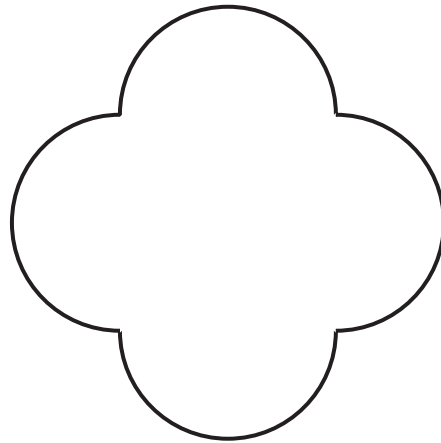
14i

14ii

2 marks

15

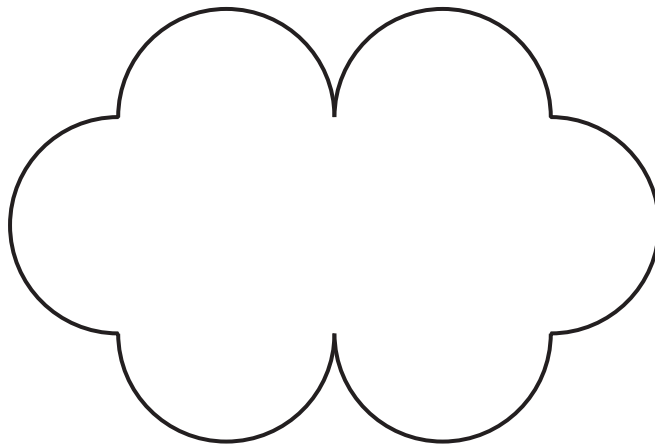
This shape is made out of four identical curves.



**Not
actual
size**

The perimeter of the shape is 28 centimetres.

A new shape is made out of curves of the same size.



What is the perimeter of the new shape?



Show
your
working

cm

15i

15ii

2 marks

Total out of 4 _____

16

Calculate 465×52



Show
your
working

16i

16ii

2 marks

17

Write these numbers in order, starting with the smallest.

8.12

1.8

8.118

8.2

1.28



smallest

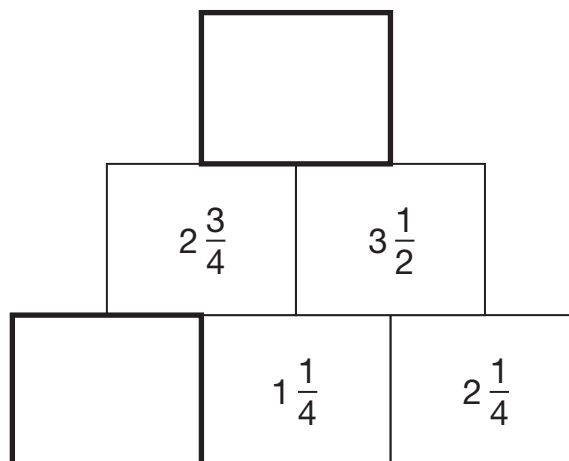
17

1 mark

18

In this diagram, the number in each box is the **sum** of the two numbers below it.

Write the missing numbers.



18a

1 mark

18b

1 mark

Total out of 5 _____

19

Liam did a survey of 55 people to see how many were left-handed.

Liam says,

'The results show that exactly 10% of the people in the survey are left-handed.'

Explain why Liam cannot be correct.

A large, empty, cloud-shaped box with a scalloped border, intended for the student to write their explanation.

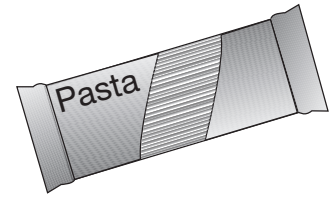
19

1 mark

20

Chen is cooking some pasta.

The recipe says he needs 350 grams of pasta for 4 people.



How many **kilograms** of pasta does he need for **12 people**?



Show
your
working

A large rectangular box for showing working. In the bottom right corner of this box, there is a smaller rectangular box containing the text "kg".

20i

20ii

2 marks

Total out of 3 _____

21

Chen is thinking of three numbers.

He says,

'The range is 5

The mode is 2'

What are his three numbers?



21

1 mark

22

n stands for a whole number.

$2n$ is greater than 30

$5n$ is less than 100

Write **all** the numbers that n stands for.

22i



22ii

2 marks

[END OF TEST]

Please do not write on this page.

Total out of 3 _____



Standards
& Testing
Agency

2014 key stage 2 levels 3–5 mathematics: paper 1 – calculator not allowed
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