

Ma

KEY STAGE
2

LEVELS
3–5

Mathematics test

Test A

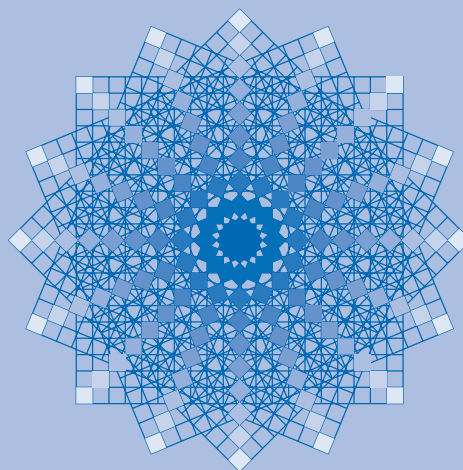
Calculator **not** allowed

First name _____

Last name _____

School _____

DCSF no. _____



For marker's use only

Page	Marks
5	
7	
9	
11	
13	
15	
17	
19	
21	
TOTAL	

2010

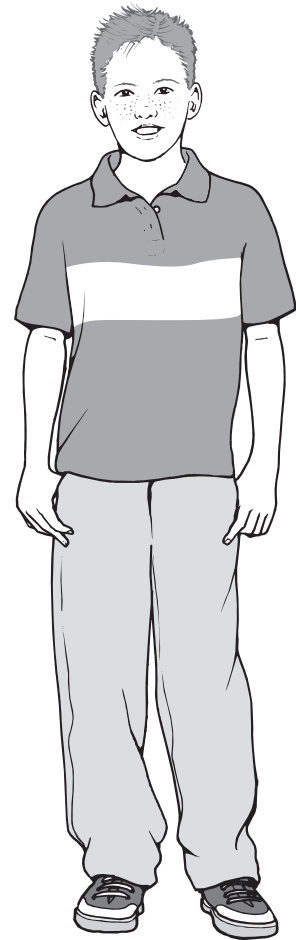
These three children appear in some of the questions in this test.



Sarah



Amy



Liam

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:

A diagram showing a large rectangular box for an answer. To the left of the box is a circular bubble containing the text 'Show your **working**. You may get a mark.' with a right-pointing arrow. A small pencil icon is positioned above the bubble. In the bottom right corner of the large box is a smaller, empty rectangular box for the final answer.

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

1

Write these prices in order, starting with the smallest.

72p

£2.70

£0.27

£7.20

£2.07



smallest

1 mark

1

2

Amy chooses two of these cards.

11

23

33

43

She adds the numbers on her two cards together.

She rounds the result to the nearest 10

Her answer is 60

Which two cards did Amy choose?



and

1 mark

2

3

This table shows six different types of cat and where they are found in the world.

	Europe and Middle East	Asia	Africa
Jungle cat	✓	✓	✗
Wildcat	✓	✓	✓
Tiger	✗	✓	✗
Lion	✗	✓	✓
Cheetah	✗	✗	✓
Leopard	✓	✓	✓

Use this table to answer these questions.

Which type of cat is found **only** in Africa?



3a

1 mark

Which types of cat are found in all three parts of the world?



3b

1 mark

4

Liam, Sarah and Amy buy lunch at a salad bar.

salad bar			
Salads		Desserts	
cheese	£1.20	banana	25p
egg	90p	apple pie	50p
tuna	£1.60	yogurt	35p

Liam has £2.50 to spend.

He buys a tuna salad and an apple pie.

How much money has he got left?


 p

4a

1 mark

Sarah buys a cheese salad and a yogurt.

Amy buys an egg salad.

How much **more** does Sarah pay than Amy?



Show
your **working**.
You may get
a mark.

4bi

4bii

2 marks

5

Write these times in order, starting with the shortest.

24 days

10 weeks

1 month

48 hours



shortest

5

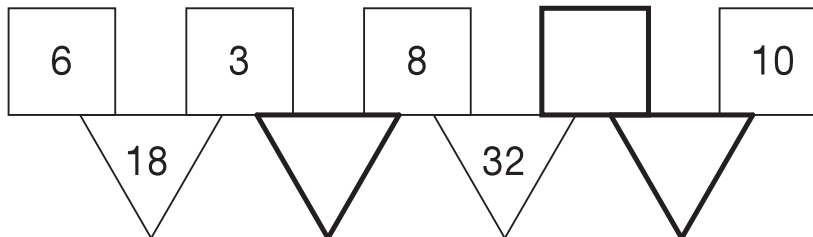
1 mark

6

In this diagram the rule is

***'to make the number in a triangle,
multiply the numbers in the two squares above it'.***

Write in the three missing numbers.



6i

6ii

2 marks

7

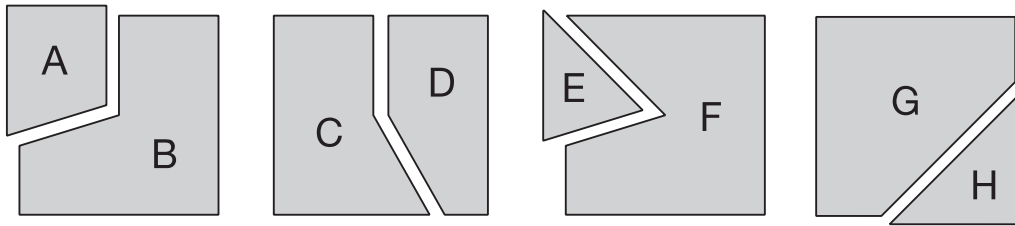
Calculate **336 – 192**

7

1 mark

8

Each of these four squares has been cut into two new shapes.

Write the letters of all the new shapes that are **hexagons**.

8a

1 mark

Write the letters of all the new shapes that are **pentagons**.

8b

1 mark

A book has five stories in it.

This is the contents page.

Contents	
	page
Rocket Ship	5
Night Journey	17
Secret Palace	25
Jack	41
Deep Water	59

Deep Water finishes on page 68

Which is the longest story?



9

1 mark

10

Here is a Carroll diagram for sorting numbers.

Write these **five** numbers in the correct places on the diagram.

25 247 7002 49 990

	odd	not odd
a 3-digit number		
not a 3-digit number		

10i

10ii

2 marks

11

Calculate 634×6 

11

1 mark



Big Wheel
£2.50
each ride

Rollercoaster
£1.50
each ride

Liam spends £14 altogether on the Big Wheel and the Rollercoaster.

He goes on the Big Wheel twice.

How many times does he go on the Rollercoaster?

Show
your **working**.
You may get
a mark.



12i

12ii

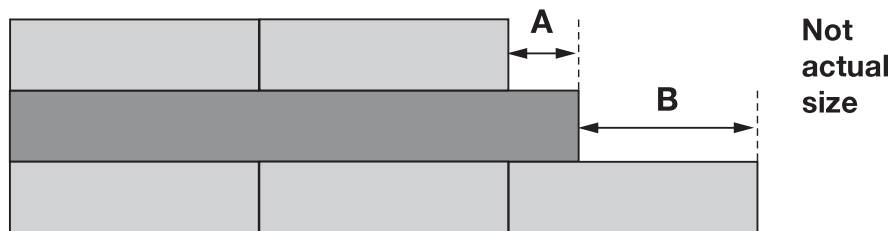
2 marks

13

Liam has two different sizes of rectangle.



He makes this pattern with them.



Calculate the lengths of **A** and **B**.



A =

 cm

13a

1 mark

B =

 cm

13b

1 mark

14

Here are five number cards.

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

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

$$2$$

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

$$3\frac{1}{2}$$

Use **three** of the number cards to make this calculation correct.

$$\left(\square + \square \right) \times \square = 10$$

14

1 mark

15

An iced cake costs 10p more than a plain cake.

Sarah bought two of each cake.

They cost £1 altogether.

What is the cost of an **iced** cake?

Show
your **working**.
You may get
a mark.

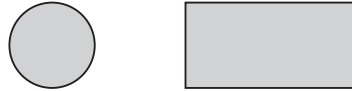
p

15i

15ii

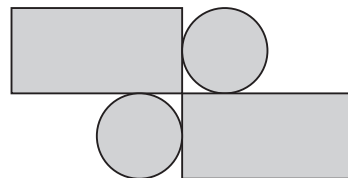
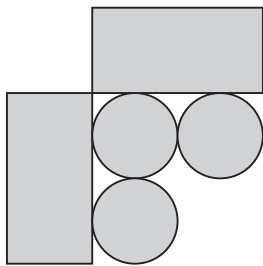
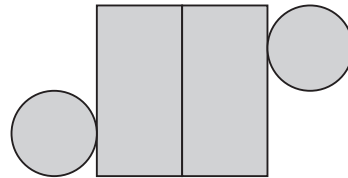
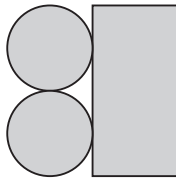
2 marks

Amy has some circular tiles and some rectangular tiles.



She makes these patterns with them.

For each pattern, put a tick (✓) if it has a line of symmetry.
Put a cross (✗) if it does not.



16i

16ii

2 marks

17

Three **different** numbers add up to 40

The numbers are all even.

Each number is less than 20

Write what the three **different** numbers could be.



+

+

= 40

17

1 mark

18

Liam makes a sequence of numbers starting with 300

He subtracts 125 each time.

Write the next two numbers in Liam's sequence.



300

175

50

18a

1 mark

18b

1 mark

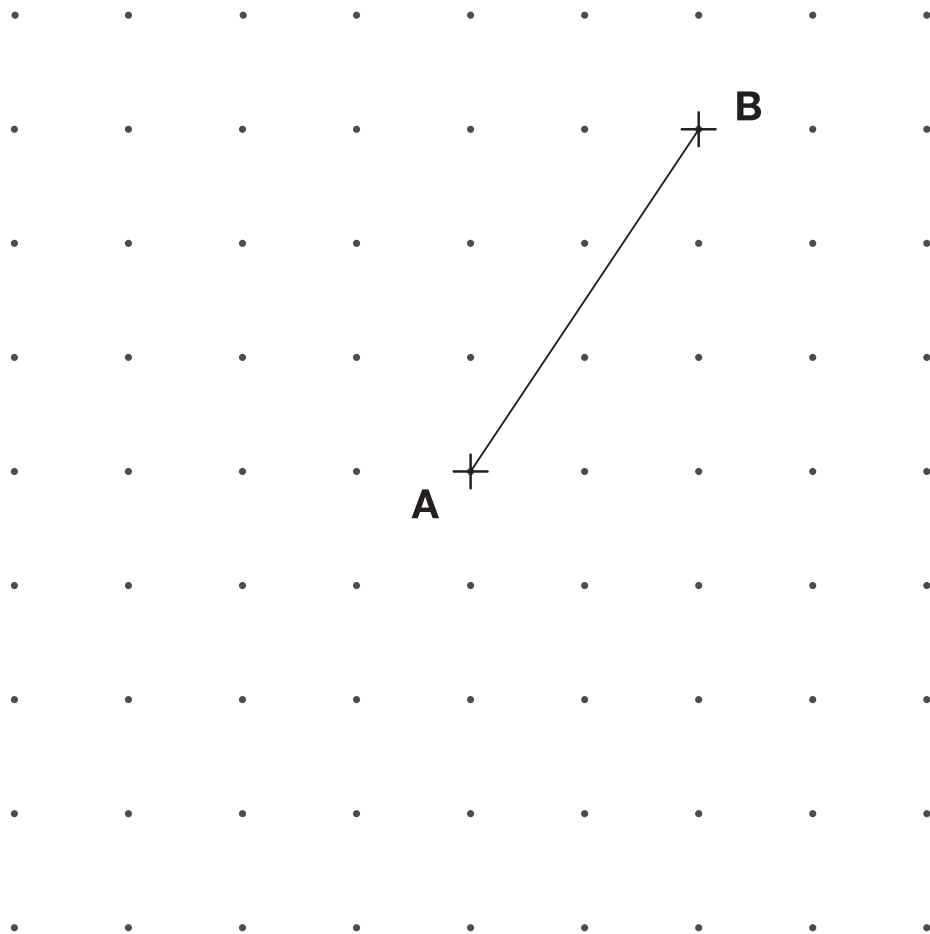
19

Here is a grid of dots.

Point **A** and point **B** are joined by a straight line.

Draw a line to join point **A** to another dot on the grid so that the two lines make a right angle.

Use a ruler.



19

1 mark

20

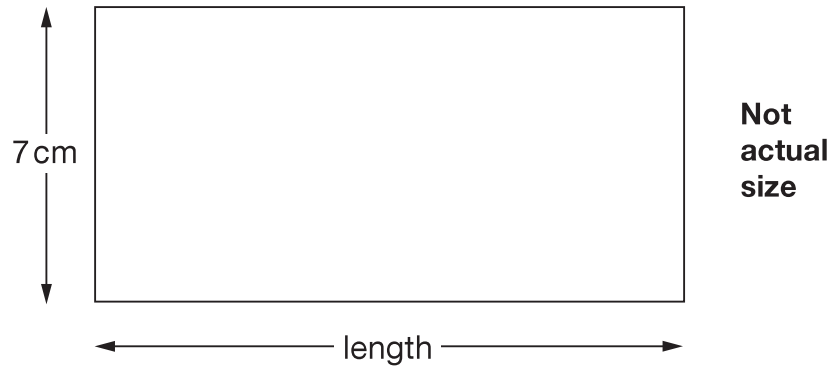
Circle the fraction that is greater than $\frac{1}{2}$ but less than $\frac{3}{4}$

 $\frac{7}{8}$ $\frac{2}{5}$ $\frac{1}{3}$ $\frac{5}{8}$ $\frac{3}{6}$

20

1 mark

21



The perimeter of this rectangle is 50 centimetres.

Calculate the length of the rectangle.



Show your **working**.
You may get a mark.

cm

21i

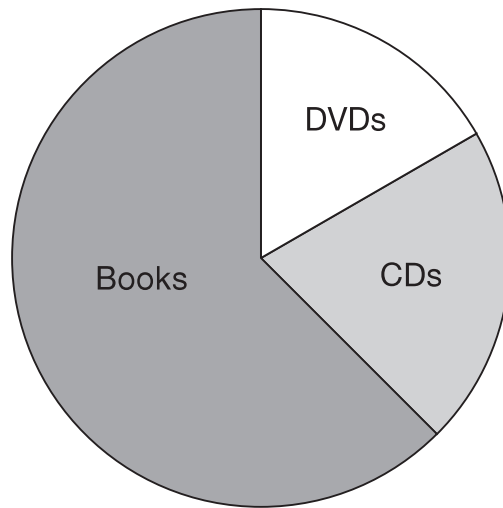
21ii

2 marks

22

A shop sells books, CDs and DVDs.

This pie chart shows the sales of each in one week.



Estimate the **fraction** of the total sales that were DVDs.



22a

1 mark

In this week, 200 **CDs** were sold.

Estimate how many books were sold.



22b

1 mark

23

Write the missing number to make this calculation correct.



11 ×

= 1111

23

1 mark

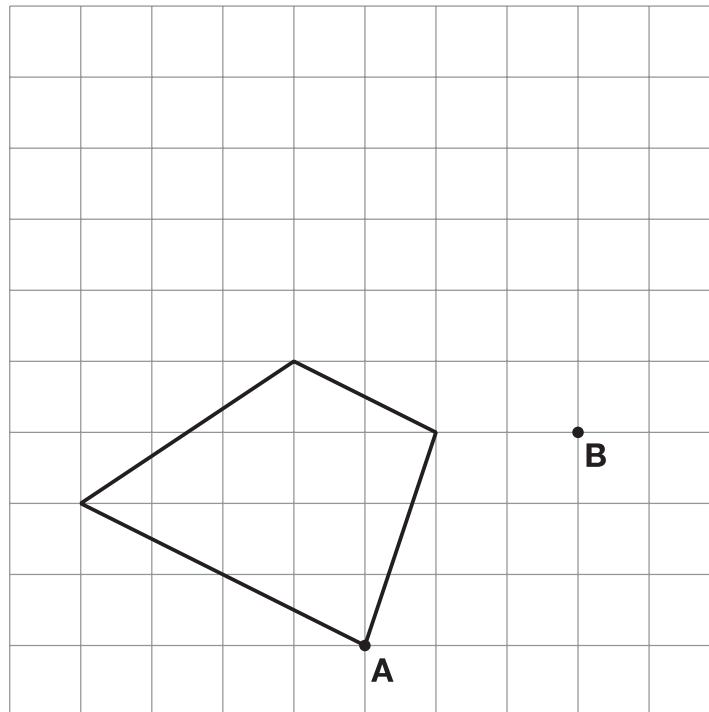
24

Here is a quadrilateral on a square grid.

The quadrilateral is translated so that point **A** moves to point **B**.

Draw the quadrilateral in its new position.

Use a ruler.

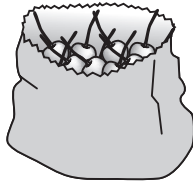


24

1 mark

25

Sarah had a bag of cherries.



She ate 5 cherries, then gave half of what she had left to Liam.

Liam ate 5 of his cherries, then gave half of what he had left to Amy.

Amy got 2 cherries.

How many cherries did Sarah have in her bag at the start?



Show
your **working**.
You may get
a mark.



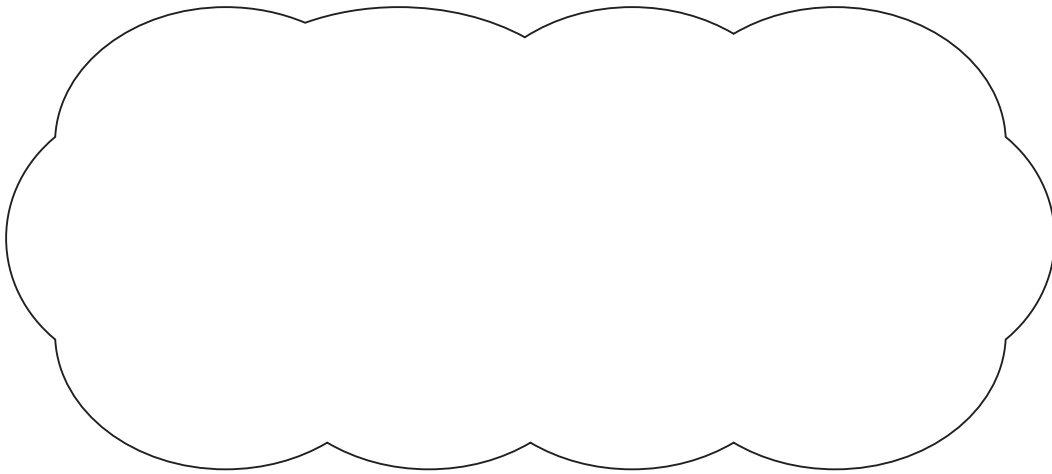
25i

25ii

2 marks

26

If you know **40%** of a number, explain how you could work out the original number.

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

26

1 mark

End of test

