

Ma

KEY STAGE

2

LEVELS

3-5

Mathematics test

Test A

Calculator not allowed

First name _____

Last name _____

School _____

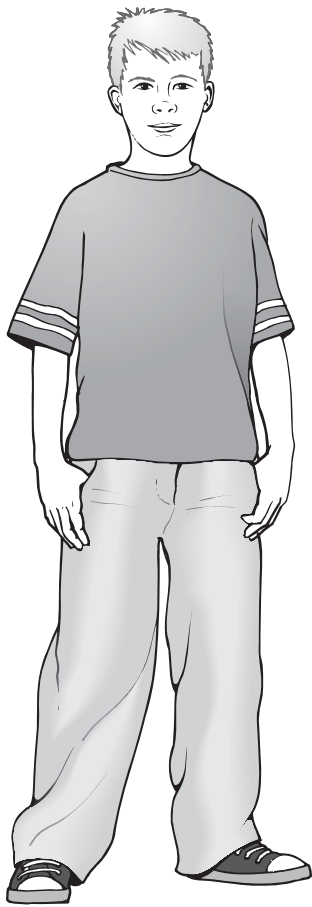


2009

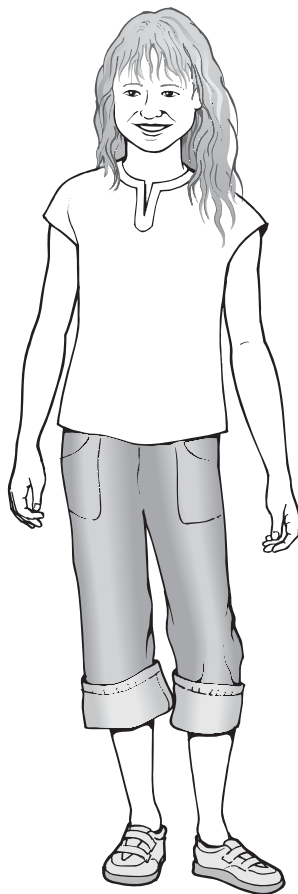
For marker's use only

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

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



Stefan



Lara



Amir

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

Circle the time that is 30 minutes **before** midnight.



12:30am

12:30pm

11:30am

11:30pm

3am

 ¹
1 mark

2

Here are four digit cards.

4

6

2

7

Use all four digit cards to make this sum correct.



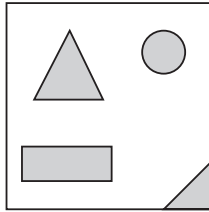
+

= 100

 ²
1 mark

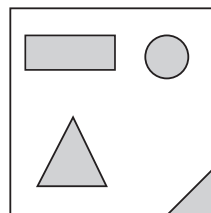
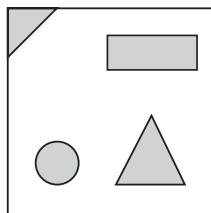
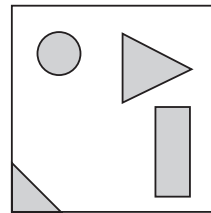
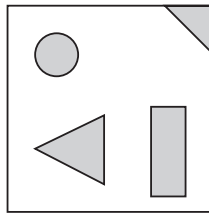
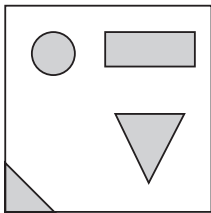
3

Stefan makes this design on a square tile.



He turns the tile.

Put a tick (✓) on the tile below that has the same design as Stefan's tile.



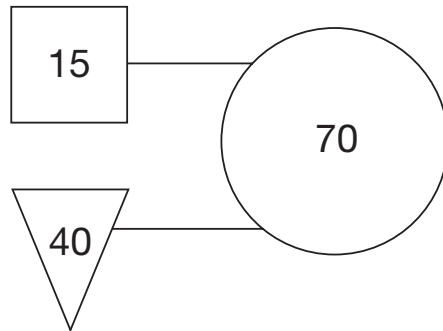
3

1 mark

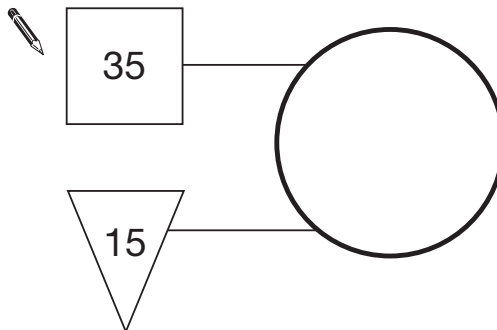
4

In this diagram the rule is

***'double the number in the square
and add the number in the triangle
to make the number in the circle'.***

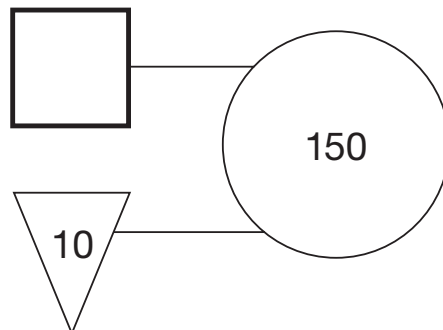


Use the same rule to write in the missing numbers below.



4a

1 mark



4b

1 mark

5

This table shows where 100 people went on holiday in 2007 and 2008.

	2007	2008
Spain	18	26
England	38	17
Scotland	21	13
Wales	19	28
USA	4	16

Look at the table.

How many **more** people went to Wales than to Scotland in 2008?



5a

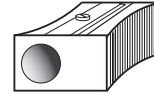
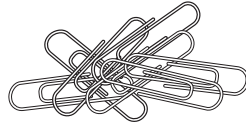
1 mark

Which country had the **greatest increase** in visitors from 2007 to 2008?



5b

1 mark



One battery weighs the same as **60** paperclips.

One pencil sharpener weighs the same as **20** paperclips.

How many pencil sharpeners weigh the same as one battery?



6a

1 mark

How many paperclips weigh the same as **2** batteries and **4** pencil sharpeners together?



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

6bi

6bii

2 marks

7

Calculate $48 \div 3$

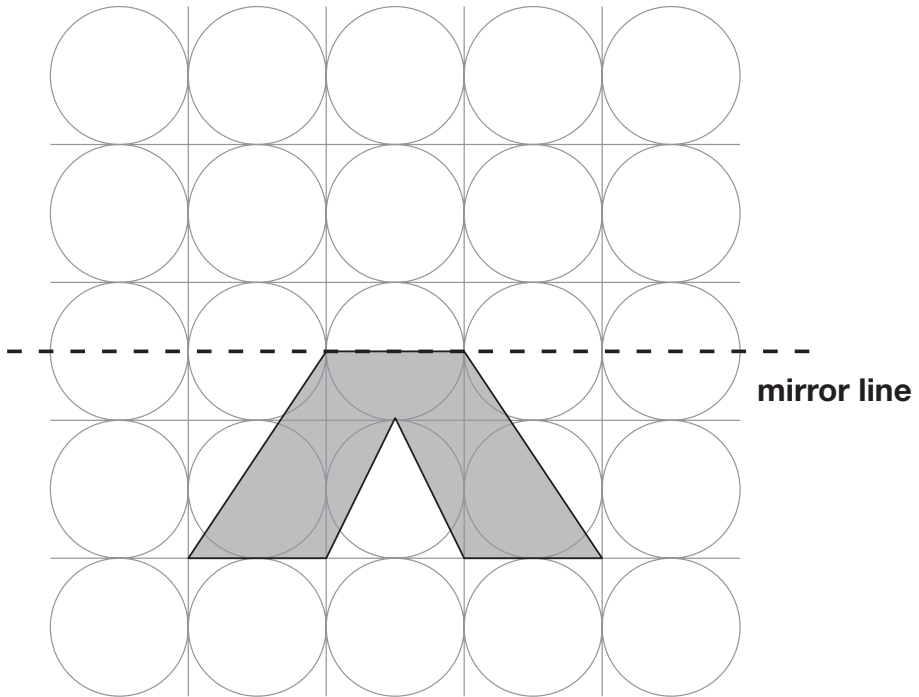


7

1 mark

8

Draw the reflection of the shaded shape in the mirror line.



8

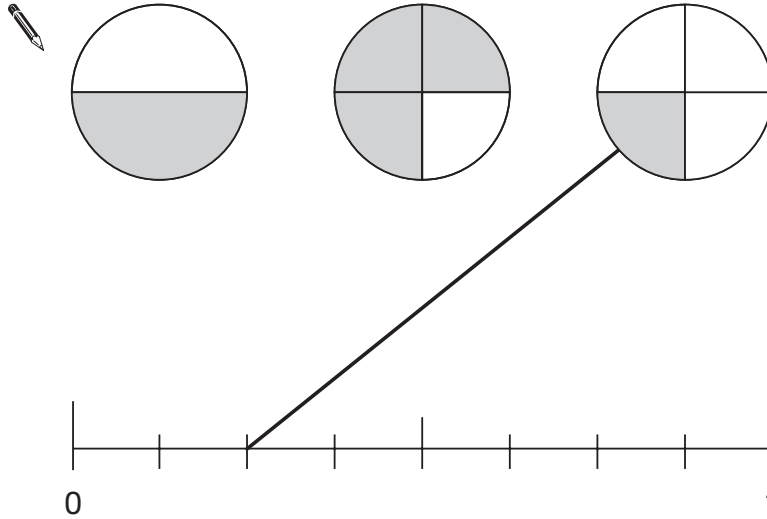
1 mark

9

A fraction of each shape is shaded.

Match each fraction to the correct place on the number line.

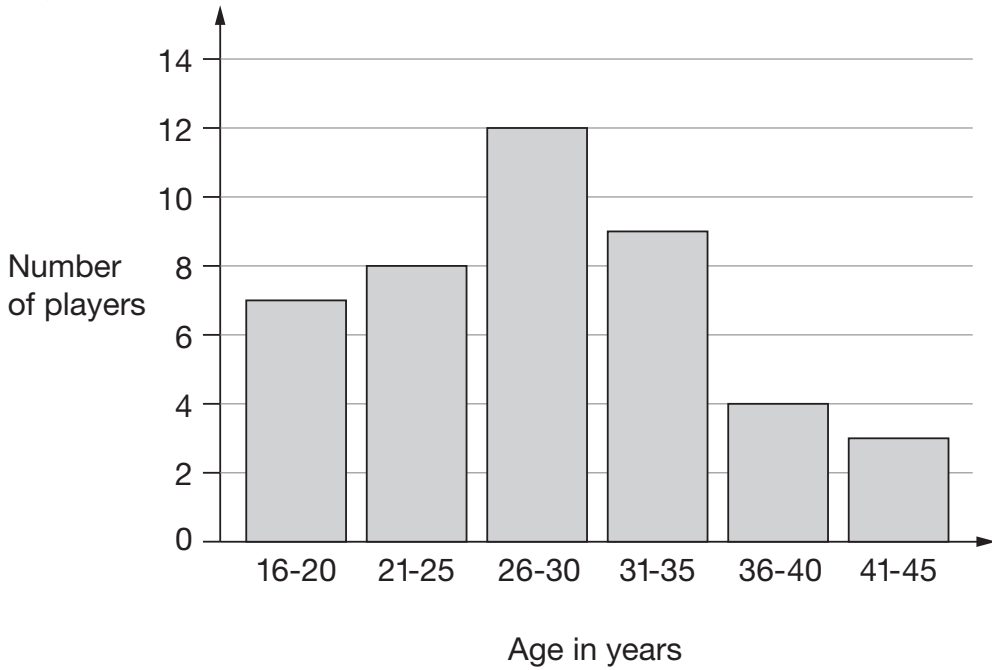
One has been done for you.



9
1 mark

10

This graph shows the age of players at a football club.



How many players are aged 30 or younger?



10a

1 mark

A player aged 36 and a player aged 39 join the club.

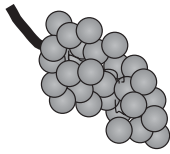
Add this information to the graph above.

10b

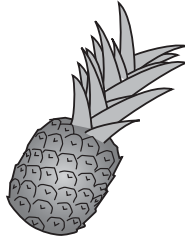
1 mark

11

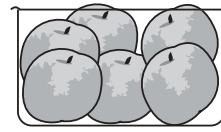
Amir and Lara buy some fruit.



grapes
£2.50
for 1 kilogram



pineapples
£1.40
each



peaches
£1.99
for a box

Amir buys 2 pineapples and a box of peaches.

How much does he pay?



£

11a

1 mark

Lara buys half a kilogram of grapes and one pineapple.

How much change does she get from £5?



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

£

11bi

11bii

2 marks

12

Amir says,

*'All numbers that end in a 4
are multiples of 4.'*



Is he correct?
Circle **Yes** or **No**.

 Yes / No

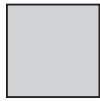
Explain how you know.

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

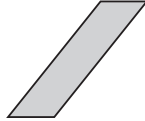
12

1 mark

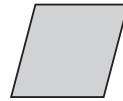
Here are six quadrilaterals with their mathematical names.



square



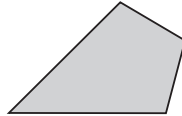
parallelogram



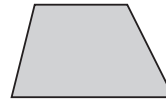
rhombus



oblong



kite



trapezium

Lara chooses one of the quadrilaterals.

She says,

***'It has two acute angles.
All four sides are the same length'.***

Which quadrilateral did Lara choose?



13a

1 mark

Stefan chooses one of the quadrilaterals.

He says,

***'It has more than one obtuse angle.
It has no parallel sides'.***

Which quadrilateral did Stefan choose?



13b

1 mark

14

Circle two decimals that have a difference of 0.5



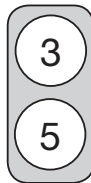
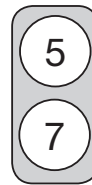
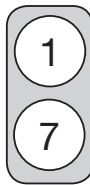
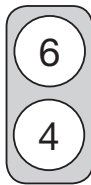
0.2 0.25 0.4 0.45 0.6 0.75

14

1 mark

15

Each of these cards has two numbers on it.



Stefan chooses one card without looking.

He adds the two numbers together.

What is the **most likely** total of the numbers on his card?

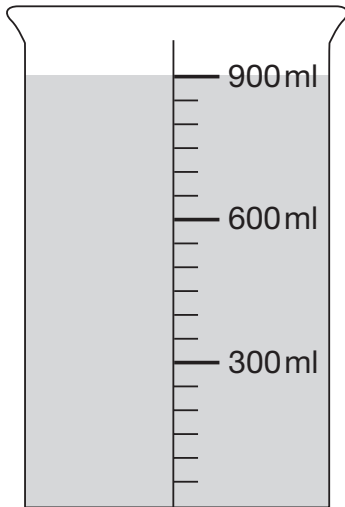


15

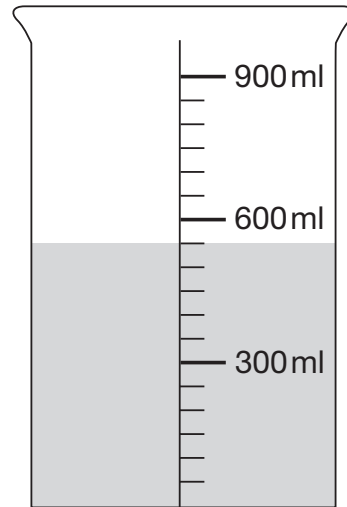
1 mark

16

This container has 900 millilitres of water in it.



Lara pours out some water so that it looks like this.



How much water has Lara poured out?

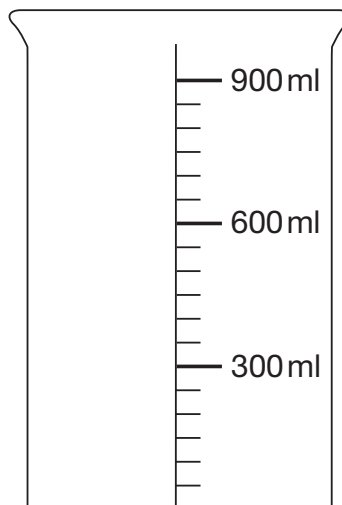


16a

1 mark

Then she pours out another 150ml of water.

Draw an arrow (→) to show the new level of the water.



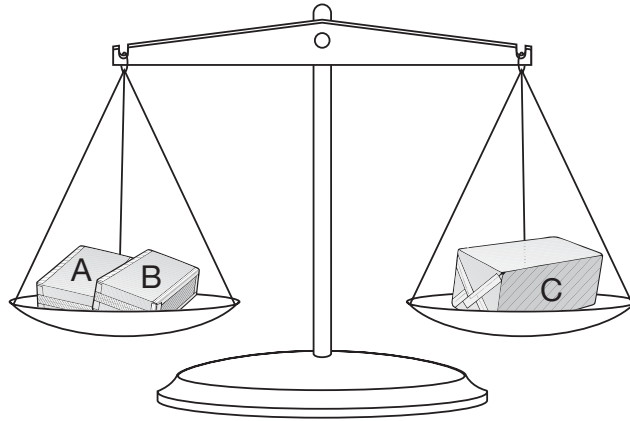
16b

1 mark

17

Amir has three parcels.

Parcels A and B together weigh the same as parcel C.



The three parcels weigh 800 grams altogether.

Parcel A weighs 250g.

How much does parcel B weigh?



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

A large rectangular box for showing working. In the bottom right corner of this box, there is a smaller rectangular box containing the letter 'g'.

17i

17ii

2 marks

18

Write **all** the numbers between 50 and 100 that are **factors of 180**



18i

18ii

2 marks

19

Calculate **602 × 57**



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



19i

19ii

2 marks

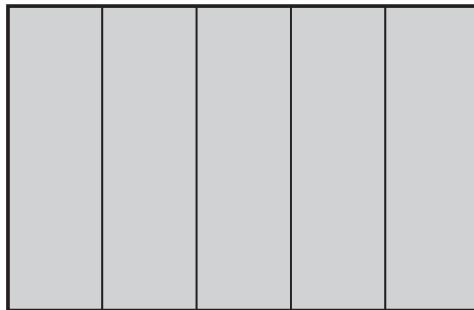
20

Lara has some identical rectangles.

They are 7 centimetres long and 2 centimetres wide.



She uses **five** of her rectangles to make the large rectangle below.



What is the **perimeter** of the large rectangle?



20a

1 mark

What is the **area** of the large rectangle?



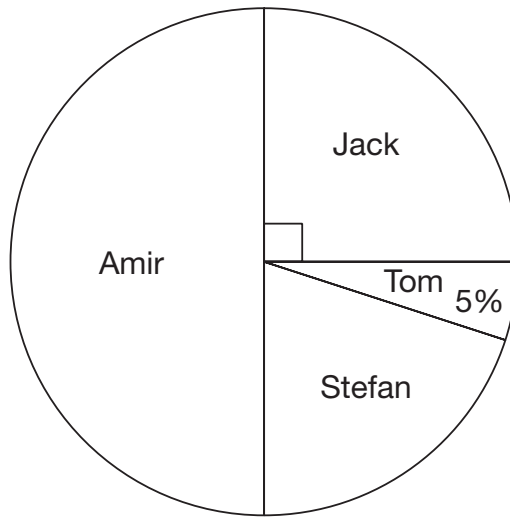
20b

1 mark

21

40 children predicted who would win the boys' race at sports day.

This pie chart shows their predictions.



What percentage of the children predicted that Stefan would win?



%

21a

1 mark

10 children predicted the winner of the race **correctly**.

Who won the race?



Explain how you know.



21b

1 mark

22Two of the fractions below are **equivalent**.

Circle them.



$\frac{2}{3}$

$\frac{6}{10}$

$\frac{9}{12}$

$\frac{10}{15}$

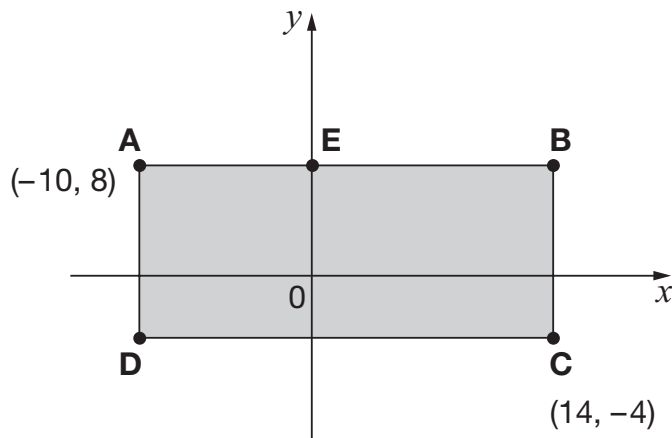
$\frac{16}{20}$

22

1 mark

23**ABCD** is a rectangle drawn on coordinate axes.

The sides of the rectangle are parallel to the axes.

What are the coordinates of **D** and **E**?

D is

 (,)

23a

1 mark

E is

 (,)

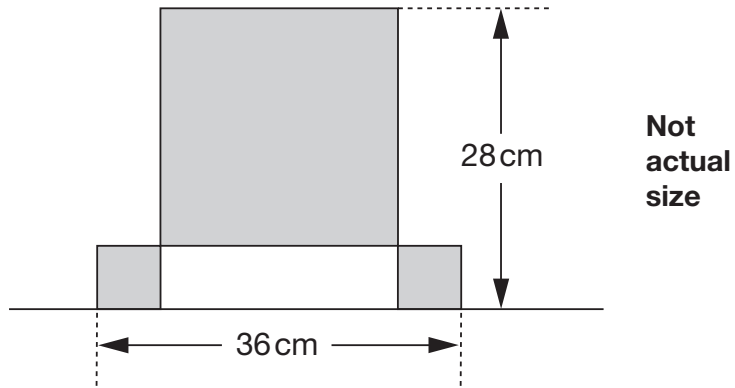
23b

1 mark

24

This design has **one large square** and **two identical small squares**.

The design measures 36 centimetres by 28 centimetres.



Calculate the length of a side of the **large** square.

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

cm

24i

24ii

2 marks

End of test

