Ma

KEY STAGE
2

LEVELS
3–5

2013

Mathematics tests

Test B

Calculator 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	

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

Alfie   Chen   Megan

Instructions

You **may** 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**.

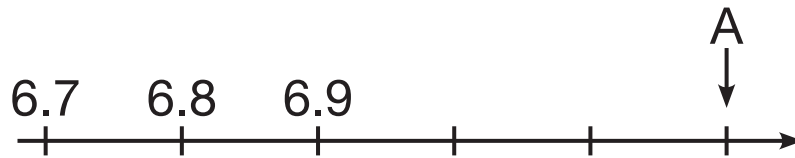**Follow the instructions for each question carefully**.

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:

Show
your
method

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

1

6.7   6.8   6.9   A

What number is marked at A?

1

1 mark

2 At a tournament there are 7 players in each team.

There are 112 players altogether.

How many teams is this?

2

1 mark

3 Here are six digit cards.

| 1 | 2 | 3 | 4 | 5 | 6 |

Use **four** of the cards to make this addition correct.

☐☐ + ☐☐ = 40

3

1 mark

Total out of 3 _____

4   Here are five calculations.

A $12 \times 12 - 10$

B $13 \times 13 - 20$

C $14 \times 14 - 40$

D $15 \times 15 - 80$

E $16 \times 16 - 160$

Write the letter of the calculation that has the **greatest** answer.

4a

_____

1 mark

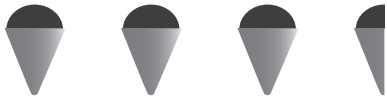Write the letter of the calculation that has the answer **closest to 100**

4b

_____

1 mark

5 This pictogram shows the number of ice creams a shop sold in one day.

stands for 10 ice creams

vanilla	
strawberry	
chocolate	

How many **more** chocolate than strawberry ice creams were sold?

5a

1 mark

How many ice creams were sold **altogether**?

5b

1 mark

Total out of 4 _____

6 Here are four lines: A, B, C and D.

A

B

C

D

Which two lines have a total length of 18cm?

_____ and _____

6a

1 mark

Draw a straight line that is 3 centimetres longer than line **B**.

Use a ruler.

6b

1 mark

7 Books are 25p each at a car boot sale.

Alfie wants to buy 12 books.

He only has £2.35

How much **more** money does Alfie need?

Show your method

7i

7ii

2 marks

8 Write the missing number.

$\div 11 = 17$

8

1 mark

Total out of 5 ____

9 These are the opening times at Black Tower Castle.

Monday	Closed
Tuesday to Friday	11am to 6:30pm
Saturday	10am to 6pm
Sunday	10:30am to 4:30pm

How many hours is the castle open on Saturdays?

	hours

9a

1 mark

Alfie arrived at the castle at 5pm on a Thursday.
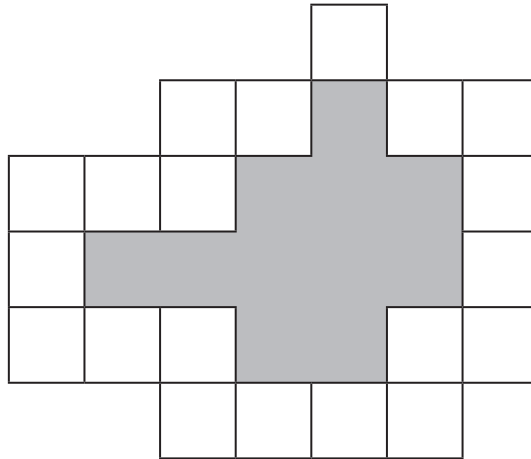
How long could he stay before closing time?

9b

1 mark

10 Here is a set of 20 squares around a shaded space.

What is the area of the shaded space?

✎ | squares |

1 mark

Total out of 3 _____

11 Five children took part in a chess competition.

They each played six games.

This table shows how many games each child won, drew or lost.

	won	drew	lost
Alfie	1	3	2
Megan	2	2	2
Chen	3	3	0
Donna	4	0	2
Tom	0	5	1

How many children drew more games than they lost?

11a

1 mark

Each child scores two points for a win,

one point for a draw,

no points for a loss.

Who scored the most points?

11b

1 mark

12

Here are three digit cards.

| 5 | 6 | 7 |

Use each card **once** to make these statements correct.

4 6 < ☐ 2

5 6 > ☐ 0

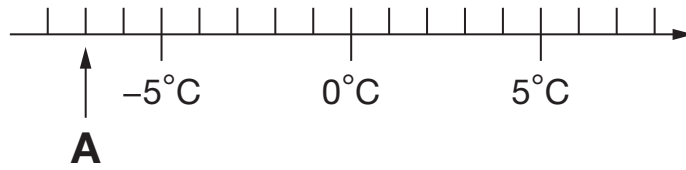7 6 < ☐ 7

Total out of 3 _____

13   Here is part of a temperature scale.

What is the temperature shown at **A**?

°C

13a

1 mark

What temperature is 20 degrees **higher** than **A**?

°C

13b

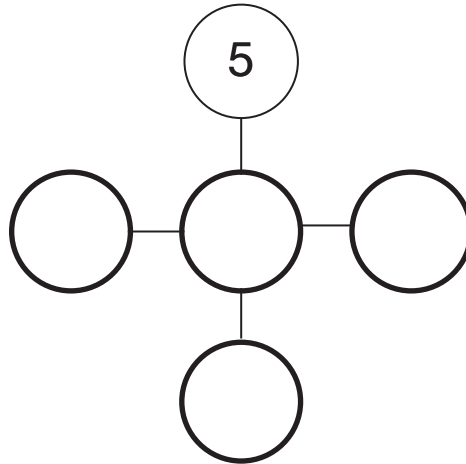1 mark

14 Here are five number discs.

1   3   5̶   7   9

Look at the cross pattern below.

Use each disc **once** so that the total across is the same as the total down.

One has been done for you.

5

Total out of 3 ____

15 Megan wants to fill a bucket with water.

A bucket holds 6 litres.

A jug holds 500 millilitres.

How many jugs of water does Megan need to fill an empty bucket?

Show your method

15i

15ii

2 marks

16 Write in the missing number.

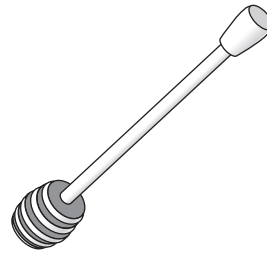$$164.5 - \boxed{} = 76.88$$

16

1 mark

17

A shop sells jars of honey and honey dippers.

jar of honey   honey dipper

Chen bought **three** jars of honey and a dipper.

The total cost was £5.40

The dipper cost 75p.

How much did each jar of honey cost?

Show your method

17i

17ii

2 marks

Total out of 5 _____

18   Write the two missing digits in this multiplication.

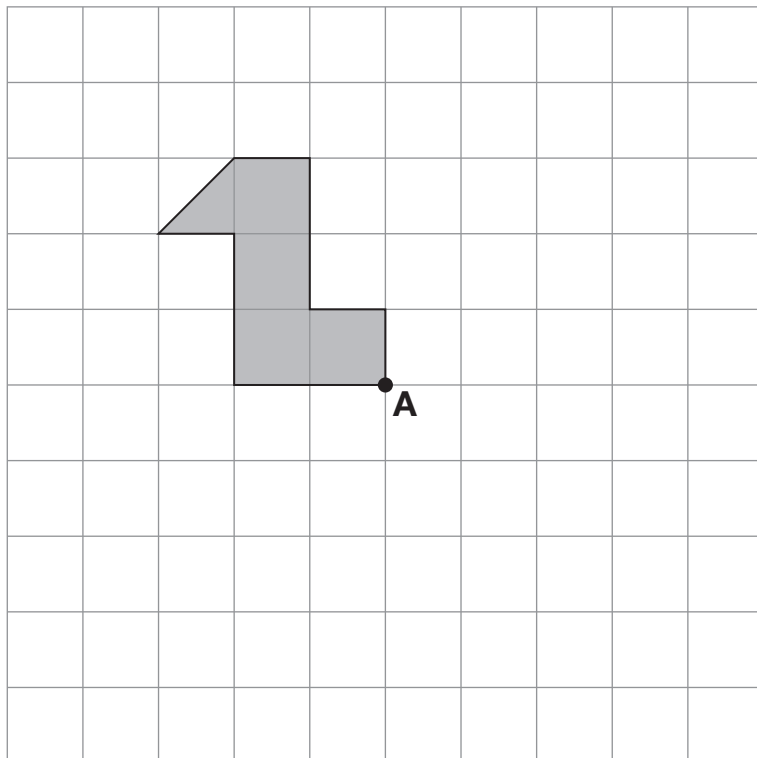$$\boxed{}\,\boxed{9} \times \boxed{}\,\boxed{9} = 2001$$

19   Here is a shaded shape drawn on a square grid.

The shape is rotated 180º about point A.
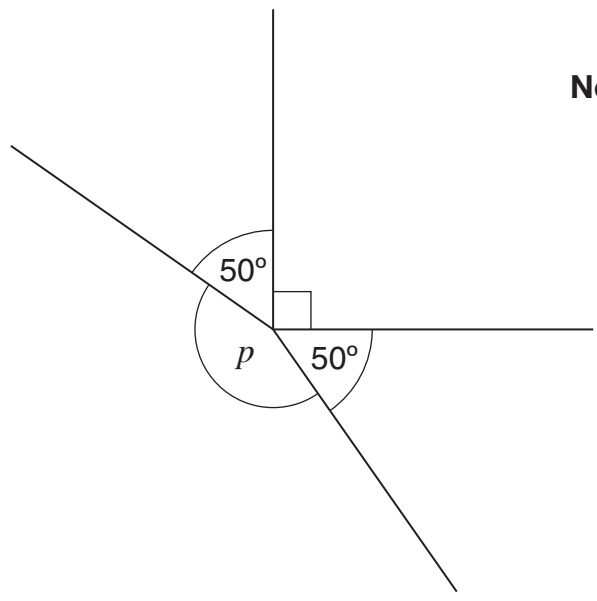
Draw the shape in its new position on the grid.

20 Calculate $(47.9 + 71.8) \div (6.65 \times 2)$

21

Not to scale

50°

p 50°

Calculate the size of angle p in the diagram.

Do **not** use a protractor (angle measurer).
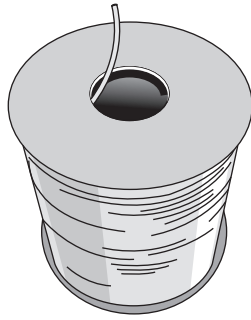
Show your method
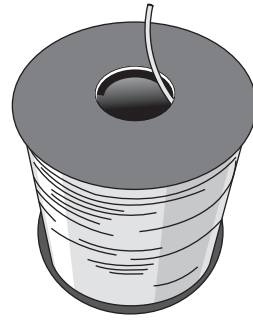
○

Total out of 6 ____

22 A shop sells rolls of wire.

roll A   roll B

Two rolls, A and B, each have 45 metres of wire on them.

The wire on roll A is cut into 1.25m lengths.

The wire on roll B is cut into 2.25m lengths.

How many **more** lengths of wire are cut from roll A than roll B?

Show your method

22i

22ii

2 marks

23

36 and 64 are both square numbers.

They have a sum of 100

Find two **square** numbers that have a sum of **130**

✏️ [ ] **and** [ ]

23

1 mark

24

364 is a multiple of 7 but not a multiple of 3

384 is a multiple of 3 but not a multiple of 7

Find a number between 364 and 384 that is **both** a multiple of 7 **and** a multiple of 3
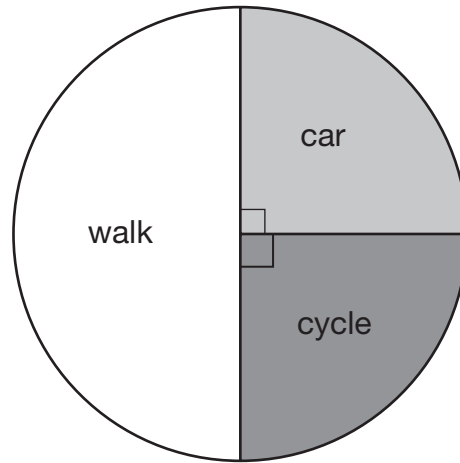
✏️

Show your method
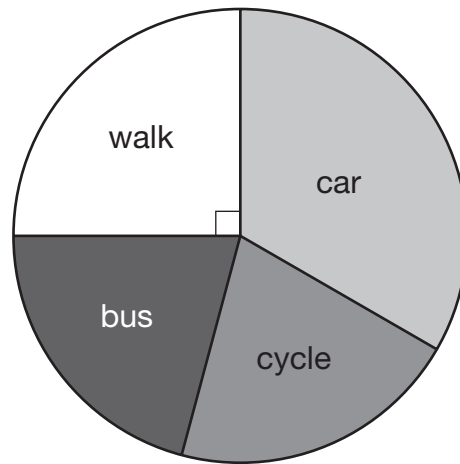
[ ]

24i

24ii

2 marks

Total out of 5 ____

25 Megan asked children from two different schools,

'How do you travel to school?'

Here are her results.

Foxwood school
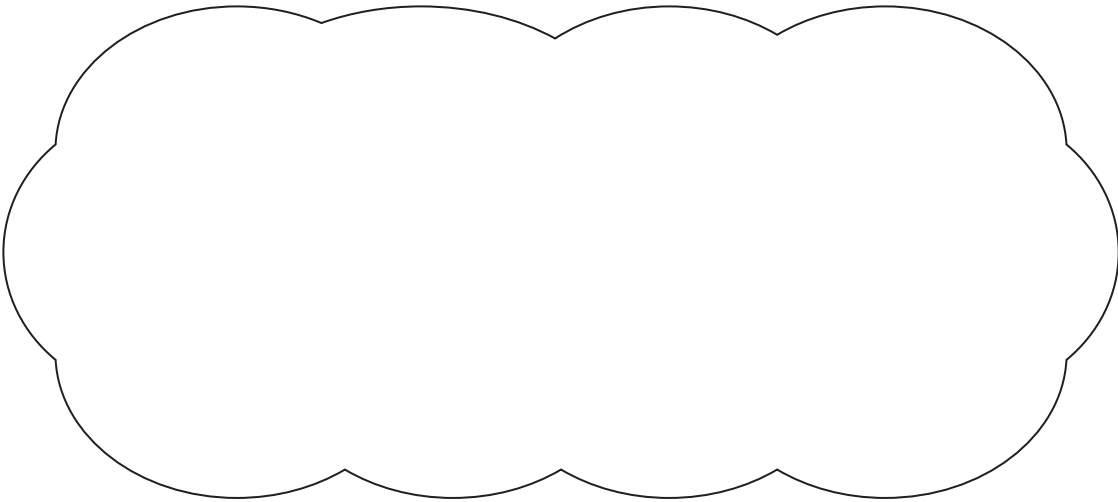**80** children

Midtown school
240 children

Megan says,

'The number of children walking to Foxwood school is more than the number walking to Midtown school.'

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

Yes / No

Explain how you know.

25a

1 mark

At Midtown school, one third of children travel by car.

The number of children who cycle is the same as the number who go on the bus.

How many children **cycle** to Midtown school?

Show your method

25bi

25bii

2 marks

Total out of 3 _____

Standards & Testing Agency

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