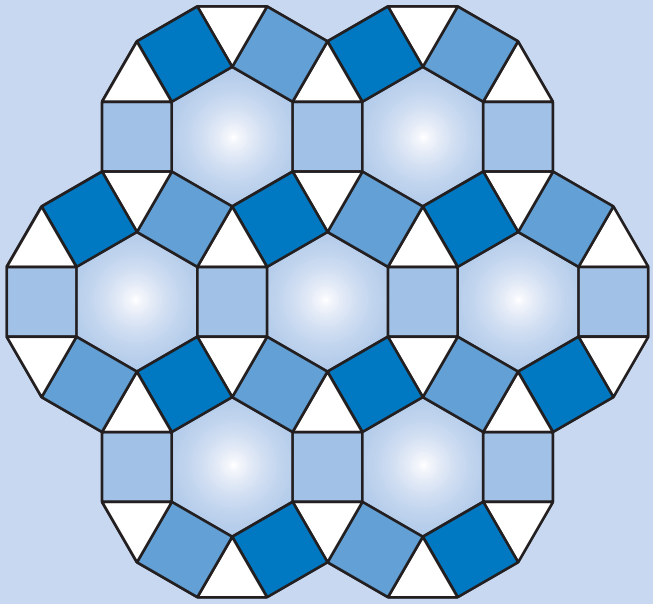
MATHEMATICS

KEY STAGE 2 2003

TEST A **LEVELS 3–5**

CALCULATOR NOT ALLOWED

PAGE	MARKS
5	
7	
9	
11	
13	
15	
17	
19	
21	
TOTAL	



First Name

Last Name

School

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.

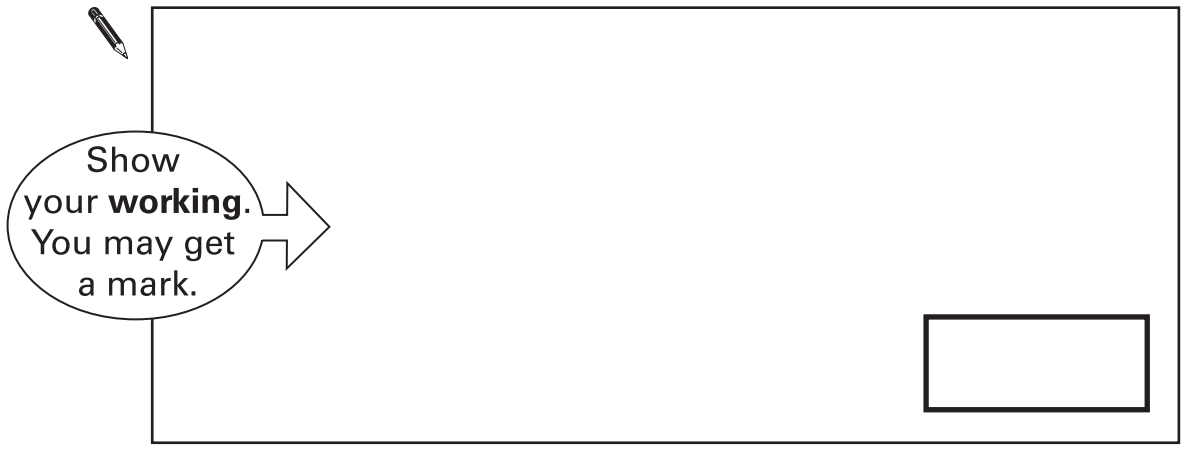
If you finish before the end, **go back and check your work**.

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 Write in the missing numbers.

55 + ☐ = 120

1a

1 mark

600 × 4 = ☐

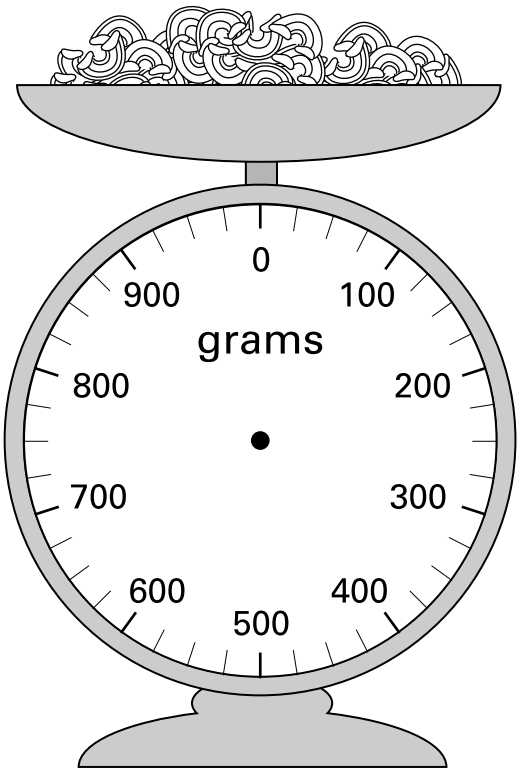
1b

1 mark

2 Jamie is cooking pasta.

He weighs 350 grams of pasta.

Draw an arrow on the scale to show 350 grams.

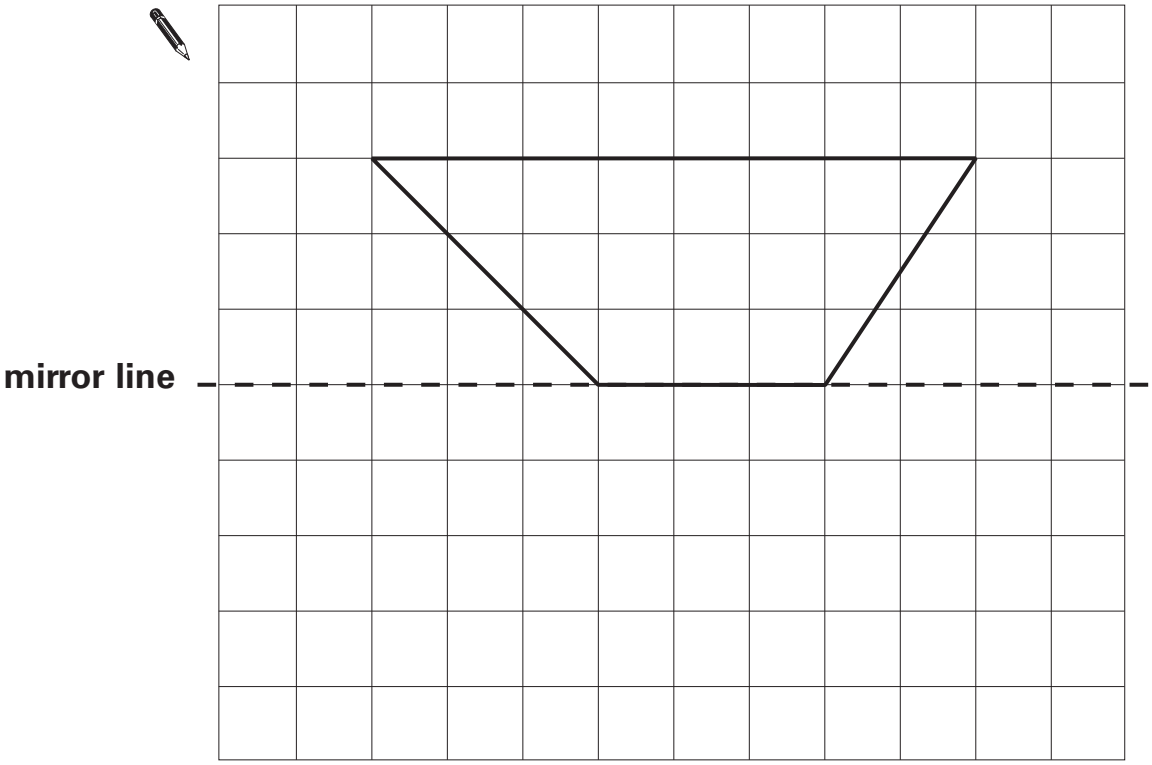


2

1 mark

3 Complete the diagram below to make a shape that is symmetrical about the mirror line.

Use a ruler.



3

1 mark

4 Which of these numbers give **80** when **rounded** to the **nearest 10**?

Circle all the correct numbers.

84 87 72 76 90

4

1 mark

5 Calculate **309 – 198**

5

1 mark

6 This table shows how many journeys a taxi driver made on five days and how much money he collected.

	number of journeys	money collected
Monday	23	£85
Tuesday	36	£112
Wednesday	18	£69
Thursday	31	£124
Friday	35	£109

How much money did he collect on the day that he made the most journeys?

6a

1 mark

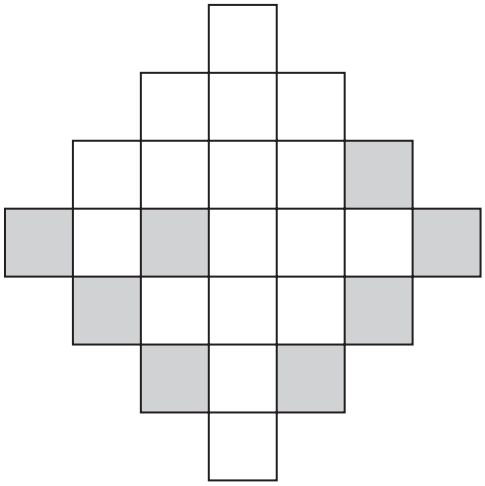
How much more money did he collect on Monday than on Wednesday?

6b

1 mark

7 Here is a grid with eight squares shaded in.

Shade in **two more** squares to make a symmetrical pattern.



7

1 mark

8 Each of these bags contains **£1.60**

Each bag contains only one type of coin.

Complete this table to show how many coins are in each bag.

One has been done for you.

Type of coin	Number of coins
1p	**160**
10p	
20p	

8

1 mark

9

Tom and Nadia have 16 cards each.

Tom gives Nadia **12** of his cards.

How many cards do Tom and Nadia each have now?

Tom ☐ **Nadia** ☐

9a

1 mark

Lucy also has 16 cards.

She gives a **quarter** of her cards to Kiran.

How many cards does Lucy give to Kiran?

☐

9b

1 mark

10 Here is a repeating pattern of shapes.

Each shape is numbered.

The pattern continues in the same way.

Write the numbers of the next two **stars** in the pattern.

 ☐ and ☐

10a

1 mark

Complete this sentence.

Shape number 35 will be a circle because ...

.....

.....

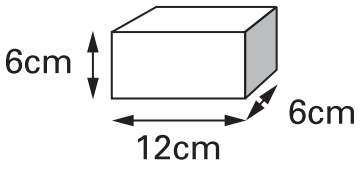
.....

10b

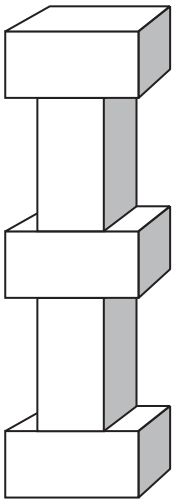
1 mark

11 Martin has some bricks.

They are 12cm long, 6cm high and 6cm deep.



He builds this tower with **five** bricks.



How tall is the tower?

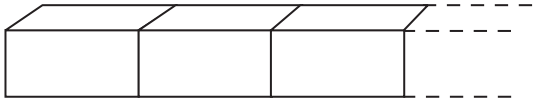
cm

11a

1 mark

Each brick is 12cm long.

Martin makes a line of bricks **132cm long**.



How many bricks does he use?

11b

1 mark

12

A bottle holds **1 litre** of lemonade.

Rachel fills **5** glasses with lemonade.

She puts **150 millilitres** in each glass.

How much lemonade is left in the bottle?

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

ml

12i

12ii

2 marks

13 Calculate **2307 × 8**

13

1 mark

14 Some children ran in two races on sports day.

Here are their times.

	100m race	800m race
Elise	15.9 seconds	3 minutes 02 seconds
Jake	19.7 seconds	2 minutes 58 seconds
Teri	16.8 seconds	3 minutes 01 seconds
Neil	17.1 seconds	2 minutes 59 seconds
Barry	18.4 seconds	2 minutes 57 seconds

Who finished the 100m race in **second** place?

14a

1 mark

In the 800m race, how many seconds did Barry finish ahead of Elise?

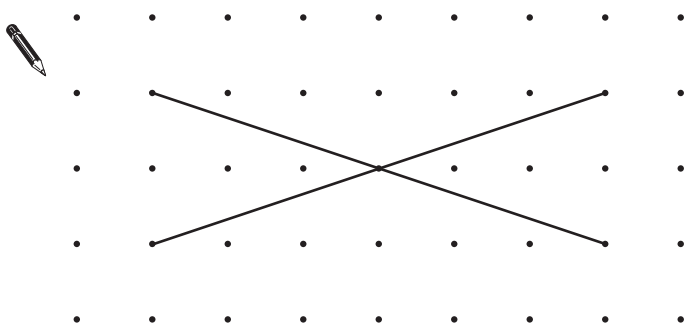
seconds

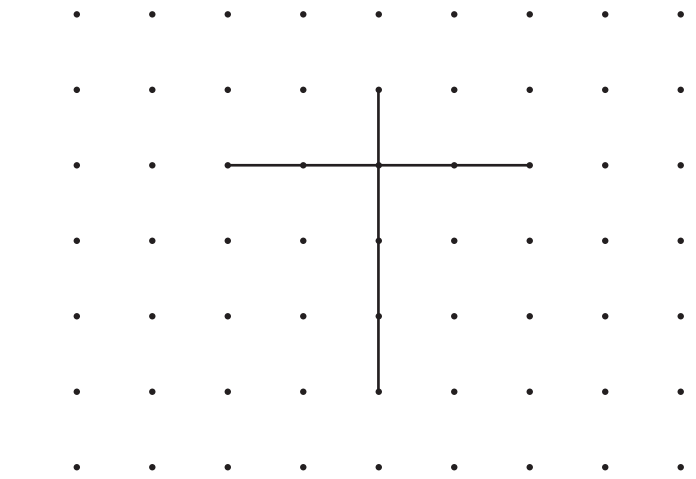
14b

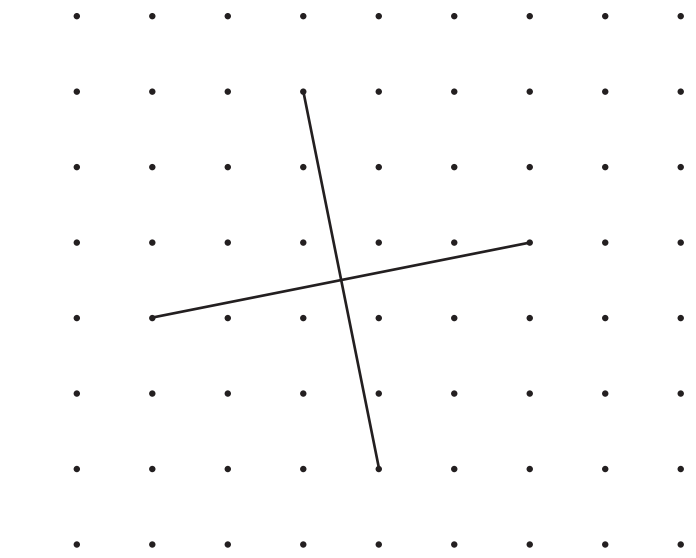
1 mark

15 These diagrams show the **diagonals** of three **quadrilaterals**.

Write the names of the quadrilaterals in the boxes.







15i

15ii

2 marks

16 Here are four digit cards.

7	5	2	1

Choose two cards each time to make the following two-digit numbers.

The first one is done for you.

an even number **5** **2**

a multiple of 9 ☐☐

a square number ☐☐

a factor of 96 ☐☐

16i ☐

16ii ☐

2 marks

17 The first two numbers in this sequence are 2.1 and 2.2

The sequence then follows the rule

'to get the next number, add the two previous numbers'

Write in the next two numbers in the sequence.

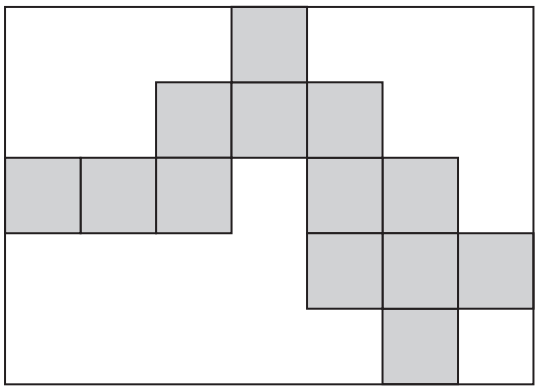
2.1 2.2 4.3 6.5 ☐ ☐

17i

17ii

2 marks

18 Here is a rectangle with 13 identical shaded squares inside it.



What fraction of the rectangle is shaded?

☐

18

1 mark

19 A packet contains **1.5 kilograms** of guinea pig food.

Remi feeds her guinea pig **30 grams** of food each day.

How many days does the packet of food last?

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

days

19i

19ii

2 marks

20 An isosceles triangle has a perimeter of 12cm.

One of its sides is 5cm.

What could the length of each of the other two sides be?

Two different answers are possible.

Give **both** answers.

cm and **cm**

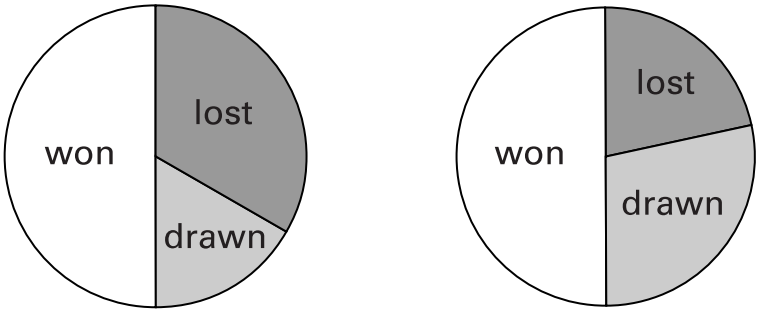
cm and **cm**

20i

20ii

2 marks

21 The pie charts show the results of a school's netball and football matches.



Netball Football

The netball team played **30** games.

The football team played **24** games.

Estimate the percentage of games that the **netball team lost**.

% 21a

1 mark

David says,

'The two teams won the same number of games'.

Is he correct?
Circle Yes or No.

Yes / No

Explain how you know.

. . . . . .

. . . . . .

. . . . . 21b

1 mark

22 Write in the missing number.

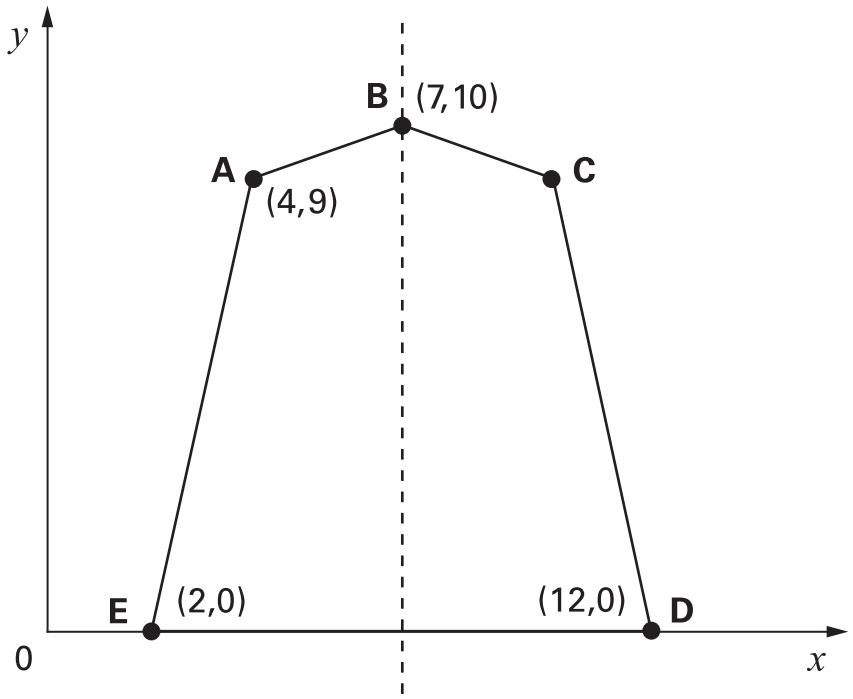
$$50 \div \square = 2.5$$

22

1 mark

23 Here is a pentagon drawn on a coordinate grid.

The pentagon is symmetrical.



What are the coordinates of point **C**?

(,)

23

1 mark

24 Three-quarters of a number is **48**

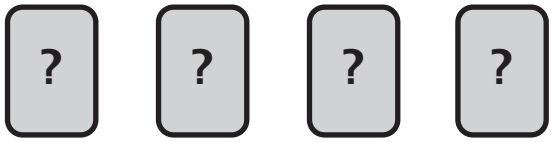
What is the number?

24

1 mark

25 Debbie has a pack of cards numbered from 1 to 20

She picks four different number cards.

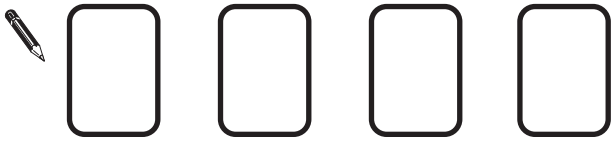


Exactly three of the four numbers are multiples of 5

Exactly three of the four numbers are even numbers.

All four of the numbers add up to less than 40

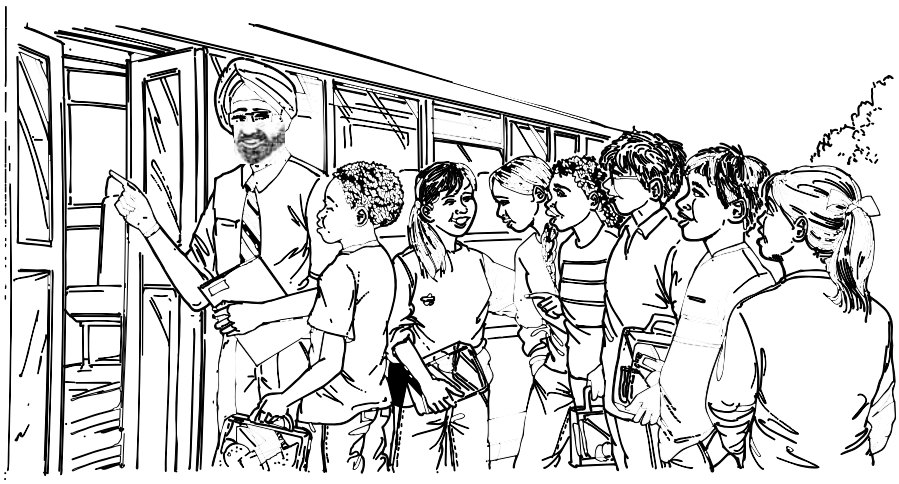
Write what the numbers could be.



25

1 mark

26



30 children are going on a trip.

It costs **£5** including lunch.

Some children take their own packed lunch.
They pay only **£3**

The 30 children pay a total of **£110**

How many children are taking their own packed lunch?

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

children

26i

26ii

2 marks

End of test

QCA key stage 2 team, 83 Piccadilly, London W1J 8QA

Order refs:
QCA/03/1013 (pupil pack)
QCA/03/1009 (mark schemes pack)