

MATHEMATICS

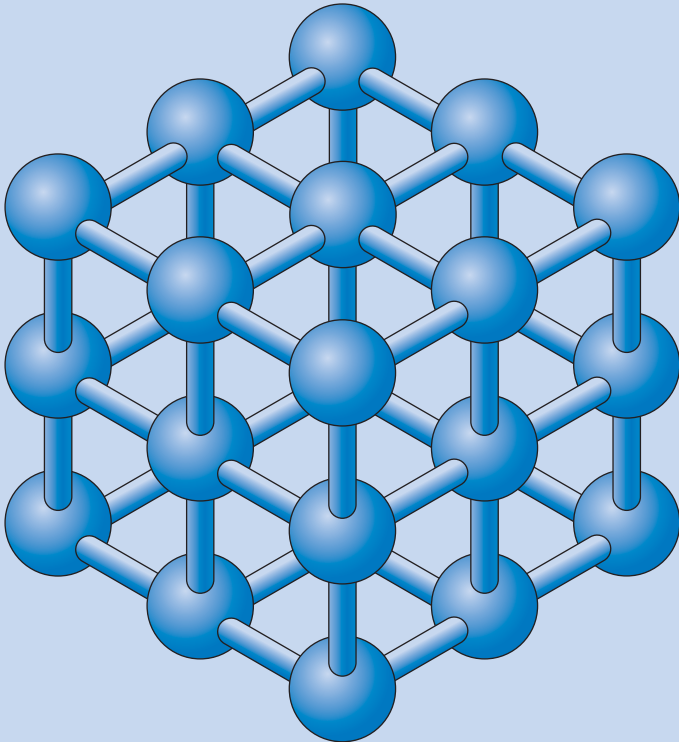
KEY STAGE 2 2005

TEST B **LEVELS 3-5**

CALCULATOR ALLOWED

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

BORDERLINE CHECK



First Name

Last Name

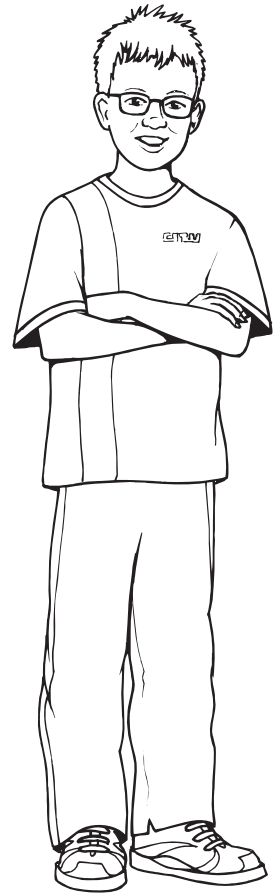
School



Josh



Sapna



Robbie

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:



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

1

Write these prices in order from smallest to largest.

99p

£10.50

£0.75

£9

£2.05



smallest

largest



1 mark

1

2

Circle the numbers that add up to 100



64

32

16

8

4

2

1

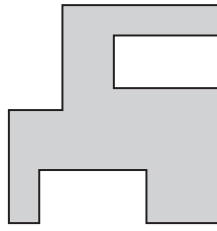


1 mark

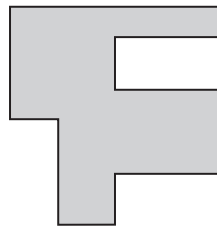
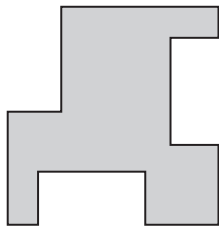
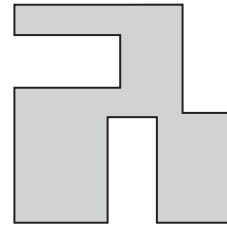
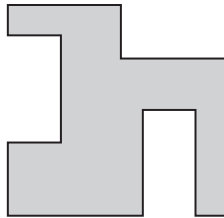
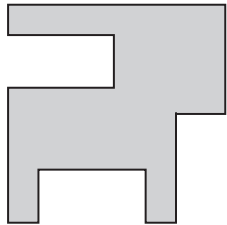
2

3

Here is a shape.



Put a tick (✓) on the shape below which is the same as the one above.



3

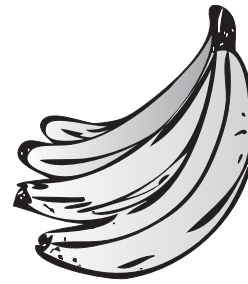
1 mark

4

These are the prices of coconuts and bananas.




coconuts
78p each



bananas
£1.20 for 1kg

Josh buys **one coconut** and **half a kilogram** of **bananas**.

How much does he spend altogether?



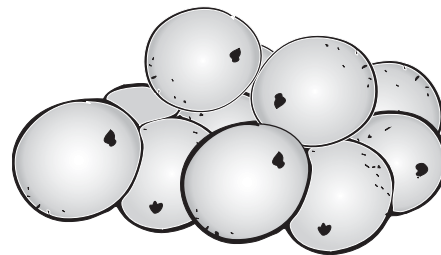
Show
your **method**.
You may get
a mark.

£

4ai

4aii

2 marks



Oranges cost **25p** each.

How many oranges can Josh buy for **£1.50**?



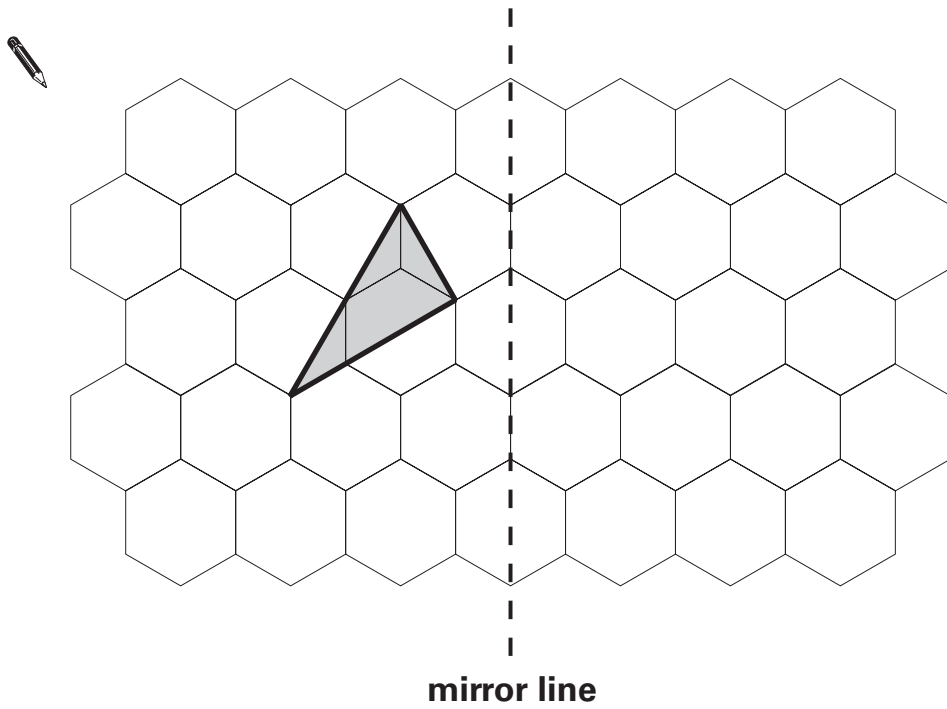
4b

1 mark

5

This grid is made of hexagons.

Draw the reflection of the shaded shape on the grid.



5


1 mark

6

Each missing digit in these calculations is **2, 5** or **7**

Write in the missing digits.

You may use each digit more than once.

 $\square + \begin{array}{|c|c|} \hline 1 & 8 \\ \hline \end{array} = \begin{array}{|c|c|} \hline \square & \square \\ \hline \end{array}$



6a

1 mark

$\begin{array}{|c|c|} \hline \square & \square \\ \hline \end{array} \times \begin{array}{|c|} \hline 3 \\ \hline \end{array} = \begin{array}{|c|c|} \hline \square & \square \\ \hline \end{array}$



6b

1 mark




7

This table shows information about four solid shapes.

Complete the table.

One has been done for you.

	number of flat surfaces	number of curved surfaces
 sphere	0	1
cone		
cuboid		
cylinder		

 7i

 7ii

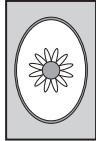
2 marks

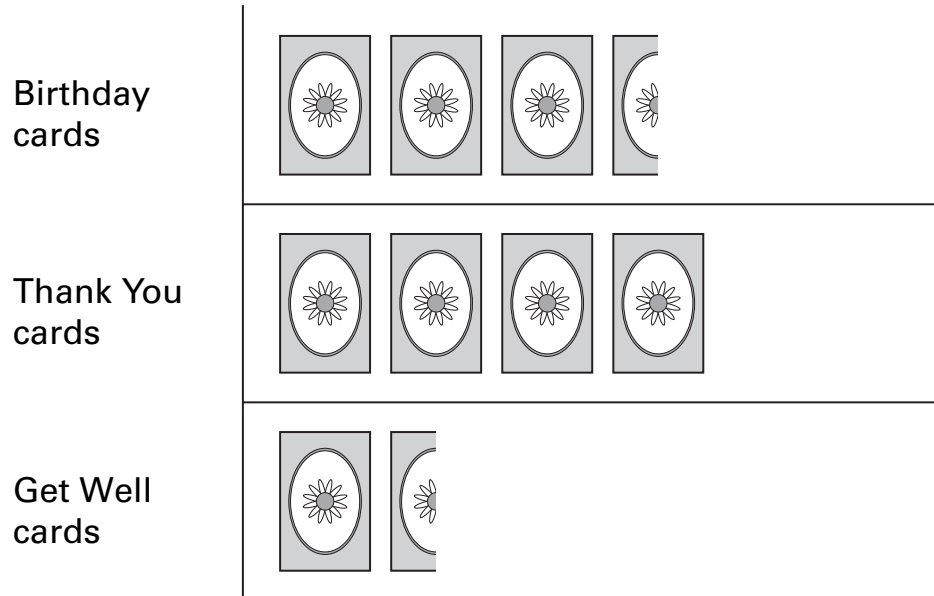
8

A shop sells different kinds of greeting cards.



This pictogram shows how many they sold in a week.


stands for
100 cards



Estimate how many Birthday cards were sold.

8a
1 mark

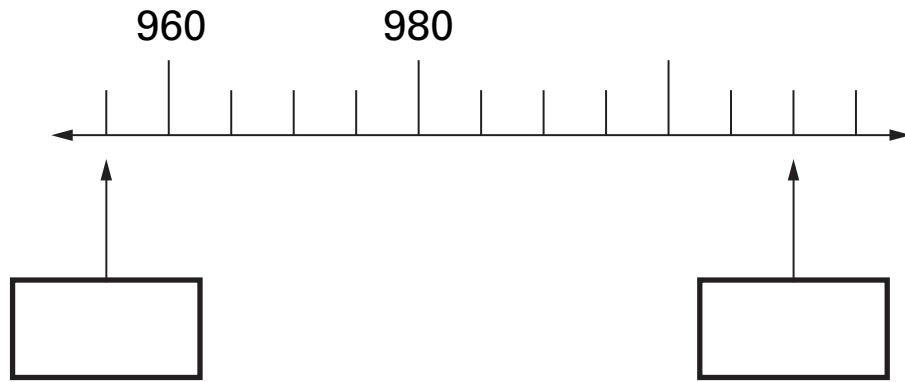
Estimate how many more Thank You cards than Get Well cards were sold.

8b
1 mark

9

Here is part of a number line.

Write the two missing numbers in the boxes.



9a

1 mark

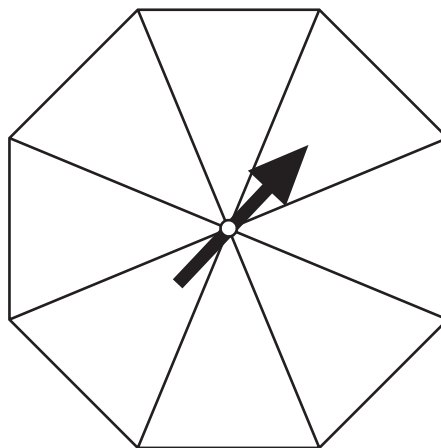
9b

1 mark

10

Here is a spinner which is a regular octagon.

Write 1, 2 or 3 in each section of the spinner so that **1 and 2 are equally likely** to come up and **3 is the least likely** to come up.



10i

10ii

2 marks

11

Josh thinks of a number.
 He adds 4
 He multiplies his result by 3
 Then he takes away 9
 His final answer is 90



What number did Josh start with?



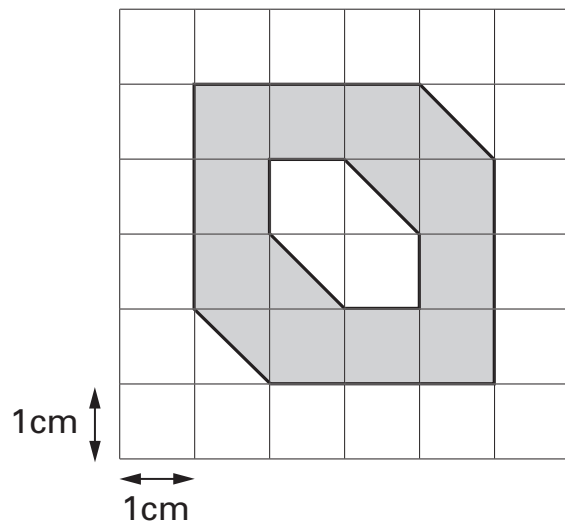


11

1 mark

12

Here is a 1cm square grid.
 Some of the grid is shaded.



What is the **area** that is shaded?





12

1 mark



13



Sapna and Robbie have some biscuits.

Altogether they have **14** biscuits.

Sapna has **2 more** biscuits than Robbie.

How many biscuits do Sapna and Robbie each have?



Sapna Robbie

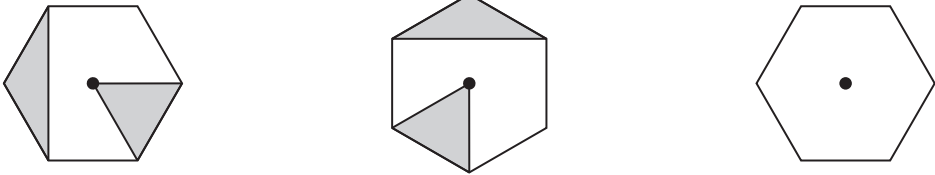


13
1 mark

14

This pattern is made by turning a shape clockwise through 90° each time.

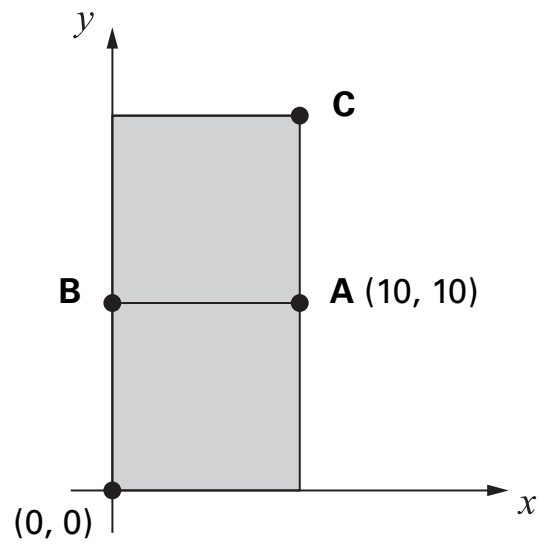
Draw the two missing triangles on the last shape.



14
1 mark

15

The diagram shows two identical squares.



A is the point $(10, 10)$

What are the coordinates of **B** and **C**?



B is

15a

1 mark

C is

15b

1 mark

16Write all the factors of 30 which are **also** factors of 20

.....

16i

16ii

2 marks

1717 multiplied by itself gives a **3-digit** answer.

1	7	×	1	7	=	2	8	9
---	---	---	---	---	---	---	---	---

What is the **smallest** 2-digit number that can be multiplied by itself to give a **4-digit** answer?

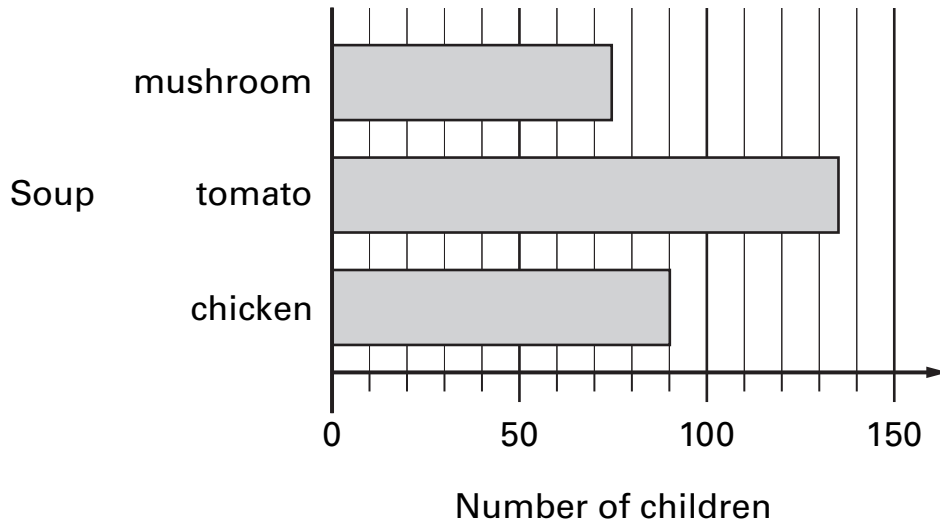
		×			=				
--	--	---	--	--	---	--	--	--	--

17

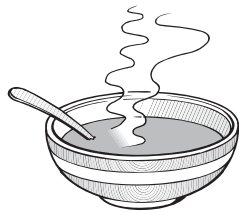
1 mark

18

All the children at Park School chose their favourite soup.
The graph shows the results.



How many **more** children chose **chicken** soup than **mushroom** soup?



18a

1 mark

Robbie says,

'More than half of the children chose tomato soup'.

Is he correct?
Circle Yes or No.



Yes / No

Explain how you can tell from the graph.



.....

.....

.....

18b

1 mark

19




Sapna makes a fruit salad using bananas, oranges and apples.

For every one banana, she uses 2 oranges and 3 apples.

Sapna uses 24 fruits.

How many **oranges** does she use?

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

oranges

19i

19ii

2 marks

20

7.4

8.1

9.4

10

Which two of these numbers, when multiplied together, have the answer closest to 70?



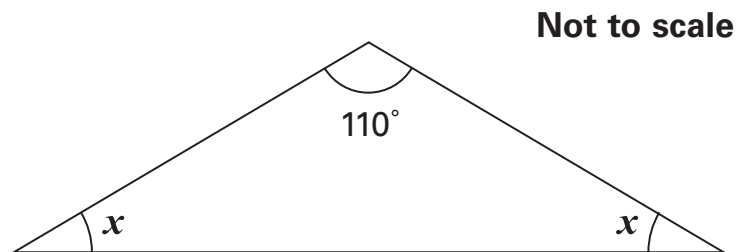
and

20

1 mark

21

Here is an isosceles triangle.



Calculate the size of angle x .

Do **not** use a protractor (angle measurer).

 $x =$

21

1 mark

22

On Monday all the children at Grange School each play one sport.

They choose either hockey or rounders.



There are **103** children altogether in the school.

27 girls choose hockey.

Write all this information in the table.
Then complete the table.



	hockey	rounders	Total
boys	22		
girls			53
Total			

22i

22ii

2 marks

23

Write in the missing numbers.



30% of 60 is

30% of

is 60

23a

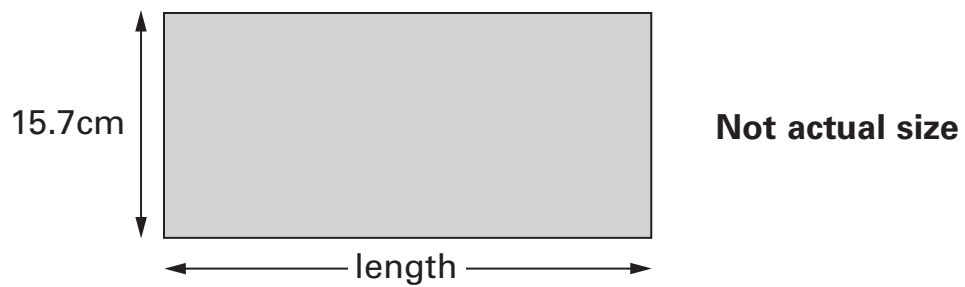
1 mark

23b

1 mark

24

Here is a rectangle with a width of 15.7 centimetres.

The **perimeter** of this rectangle is 85 centimetres.

Calculate the length of the rectangle.



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

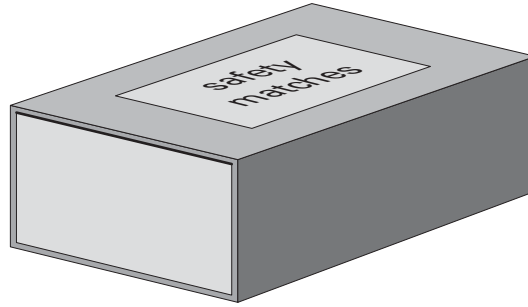
cm

24i

24ii

2 marks

25



A box contains 220 matches and weighs 45 grams.

The empty box weighs 12 grams.

Calculate the weight of **one** match.

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

g

25i

25ii

2 marks

End of test



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QCA/05/1360 (mark schemes pack)