

# MATHEMATICS

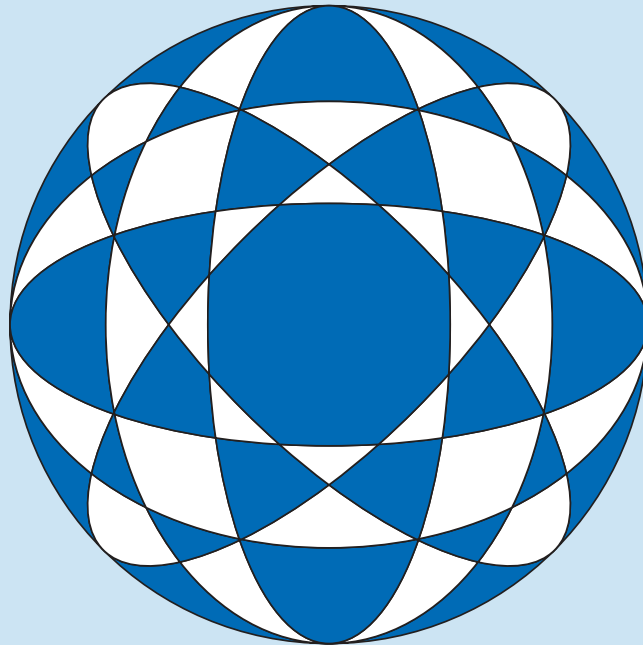
KEY STAGE 2 2004

TEST A

LEVELS  
**3-5**

CALCULATOR NOT ALLOWED

PAGE	MARKS
5	
7	
9	
11	
13	
15	
17	
19	
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:**



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

A large empty rectangular box for working out, with a smaller empty rectangular box for the answer in the bottom right corner. A pencil icon is positioned at the top left of the large box. A speech bubble with an arrow points from the text 'Show your working...' to the large box.

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

**1**

Write in the missing numbers.

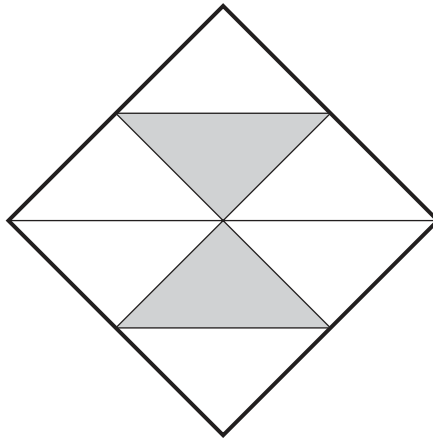

$$\square + 85 = 200$$

$$4 \times \square = 120$$

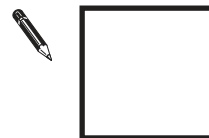
$$120 - 51 = \square$$

  
1a  
1 mark  
1b  
1 mark  
1c  
1 mark**2**

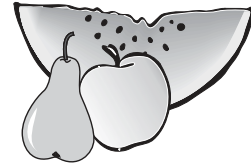
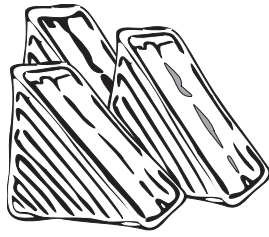
Here is a square.



What fraction of the square is shaded?

  
2  
1 mark

3



These are the prices of sandwiches, drinks and fruit.

Sandwiches	Drinks	Fruit
cheese £1.45	milk 55p	apple 15p
tuna £1.70	cola 45p	pear 20p
salad £1.20	juice 65p	melon 25p

Shereen buys a **tuna** sandwich, **milk** and a **pear**.

How much does she pay?



3a

1 mark

Mike has 80p to spend on a **fruit** and a **drink**.

What **two** things can he buy for exactly **80p**?

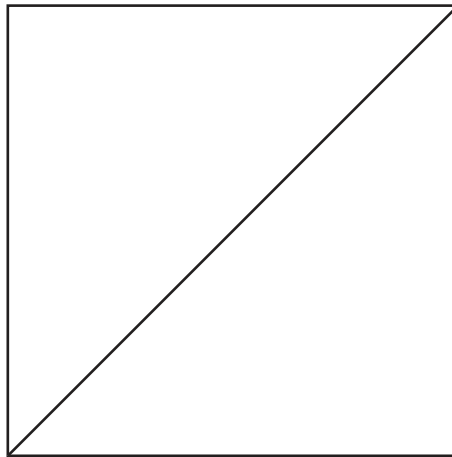


..... and .....

3b

1 mark

4



Measure accurately the length of the **diagonal** of this square.

Give your answer in **centimetres**.



1 mark

4

5

Use **each** number card **once** to make the answer to each calculation an **even** number.

3

4

5



5

×

12

÷

9

+

5i

5ii

2 marks

6



Alan has **45 beans**.

He plants **3 beans** in each of his pots.

How many pots does he need?



pots

6a

1 mark

Leila puts **4 seeds** in each of her pots.

She uses **6 pots** and has **1 seed** left over.

How many seeds did she start with?

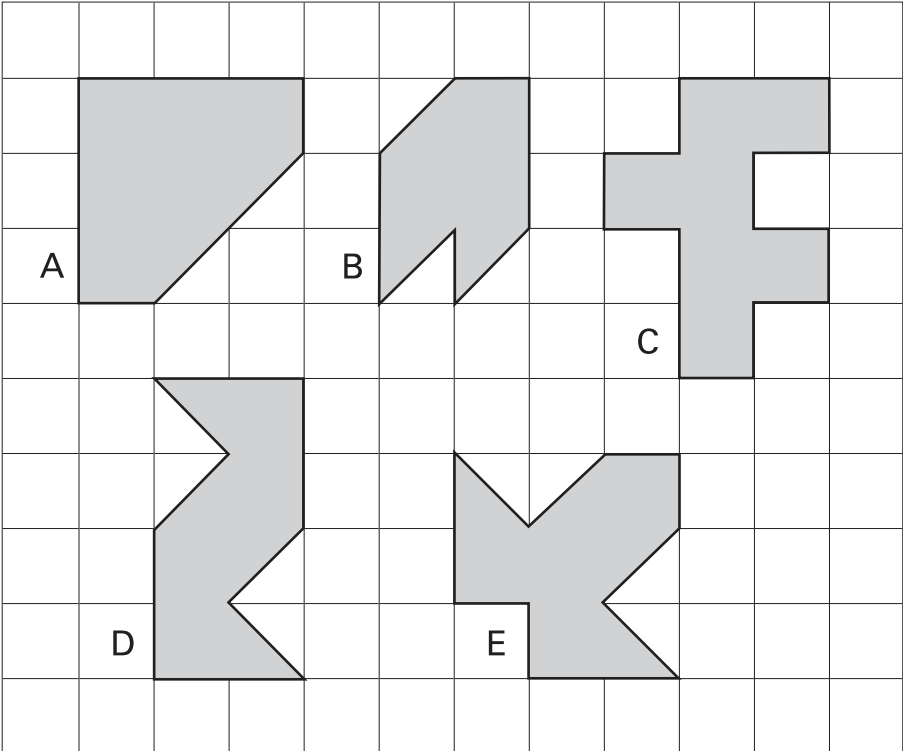


6b


1 mark

**7**

Here are five shapes on a square grid.



Write the letters of the **two** shapes which have a line of symmetry.

 ..... and .....

7i

7ii

2 marks

**8**

Calculate **13.6 – 2.8**



8

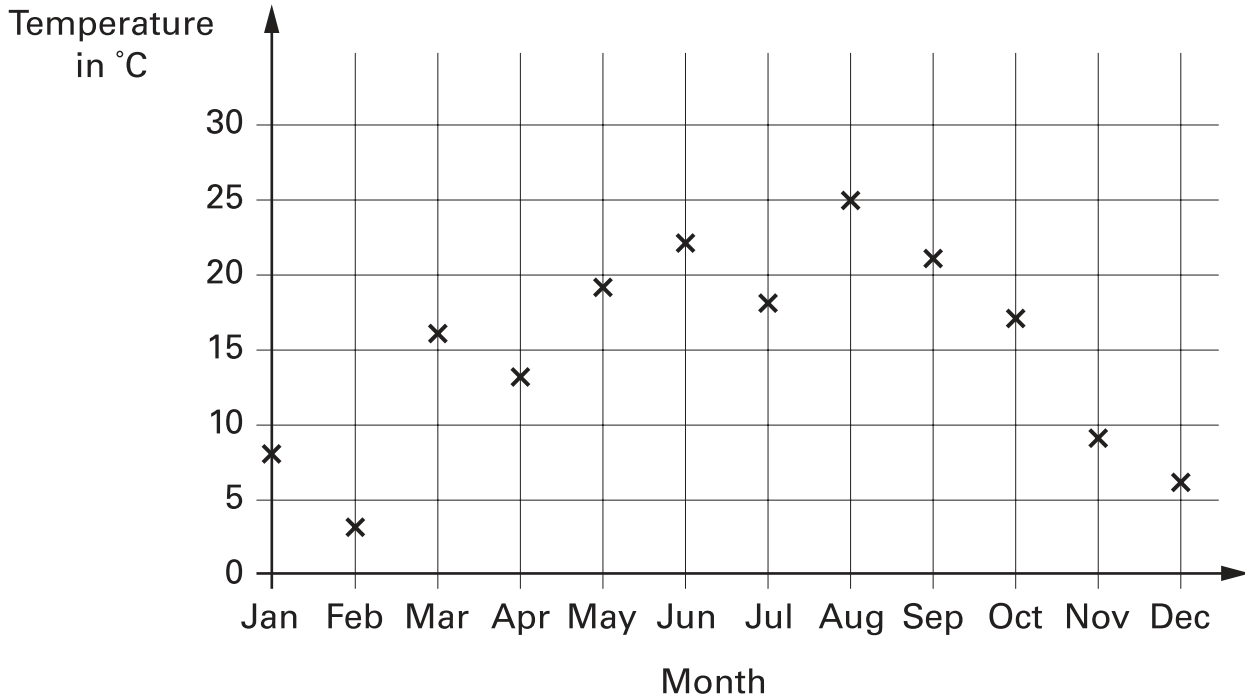
1 mark



9

Abbie takes the temperature outside at midday on the first day of each month.

The graph shows her results from January to December.



How many months on the graph show a temperature between  $10^{\circ}\text{C}$  and  $20^{\circ}\text{C}$ ?



9a

1 mark

Find the difference in temperature shown on the graph between **July** and **August**.



9b

1 mark

10

A shop sells three types of sunglasses.



What is the **difference** in price between the **most** expensive and **least** expensive sunglasses?

 £


10a  
1 mark


The shop also sells sun hats.



Ryan buys the **£4.69 sunglasses** and a **sun hat**.

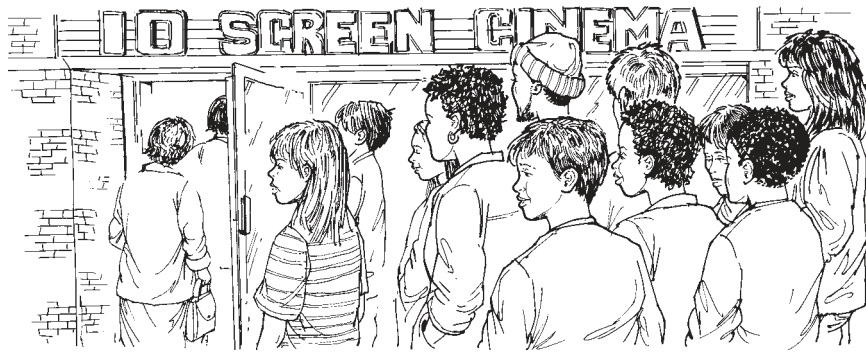
How much change does he get from **£10**?



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

10bi  
10bii  
2 marks

11



A film starts at 6:45pm.

It lasts 2 hours and 35 minutes.

What time will the film finish?



	pm
--	----



11

1 mark

12

Here is a sorting diagram for numbers.

Write a number **less than 100** in each space.



	even	not even
a square number		
not a square number		

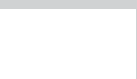


12i



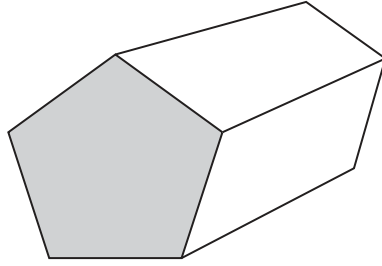
12ii

2 marks

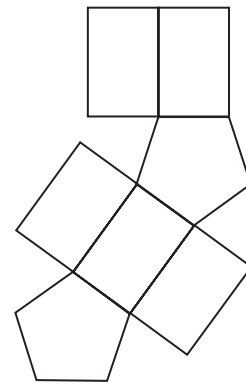
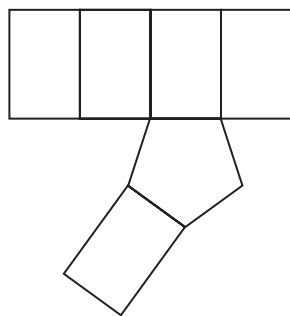
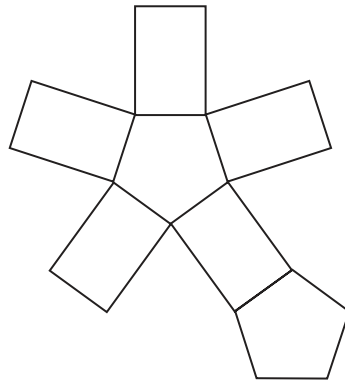
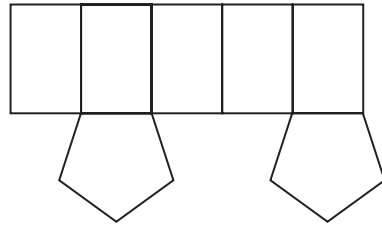
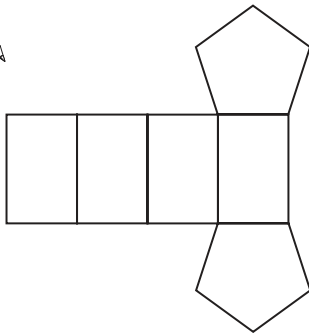


13

This is a drawing of a pentagonal prism.



Tick (✓) the one shape that is a net for the pentagonal prism.




13

1 mark

14

Write in the missing numbers in this multiplication grid.

	<b>×</b>	5	<input type="text"/>	<input type="text"/>
4		20	36	32
<input type="text"/>		35	63	56
<input type="text"/>		30	54	48

14i

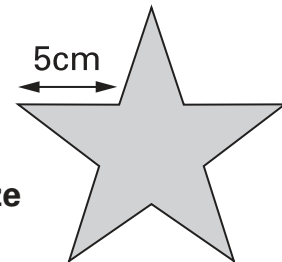
14ii

2 marks

15

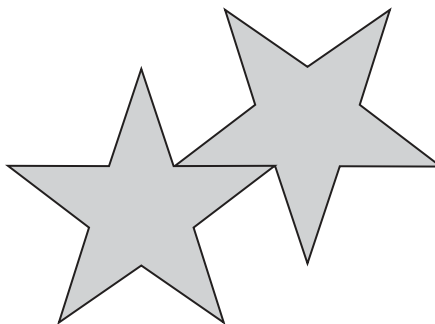
Millie has some star-shaped tiles.

Each edge of a tile is 5 centimetres long.



Not actual size

She puts two tiles together to make this shape.



Work out the perimeter of Millie's shape.

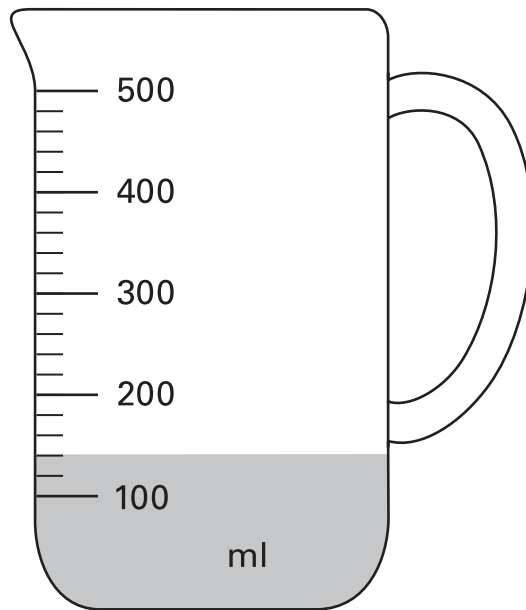



15

1 mark

**16**

Mr Khan makes a blackcurrant drink for a party.  
He pours blackcurrant squash into a jug.



How much water must he add to make **500 millilitres** of drink?



16

1 mark

**17**

Calculate  **$31.6 \times 7$**



17

1 mark

18

Mari is the presenter of a weekly radio show.



She always plays **five** new songs for every **two** old songs.

Last week she played 15 **new** songs.

How many songs did she play **altogether**?

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

18i

18ii

2 marks

19

Julie says,

*'I added three odd numbers and my answer was 50'*

Explain why Julie cannot be correct.



.....

.....

.....

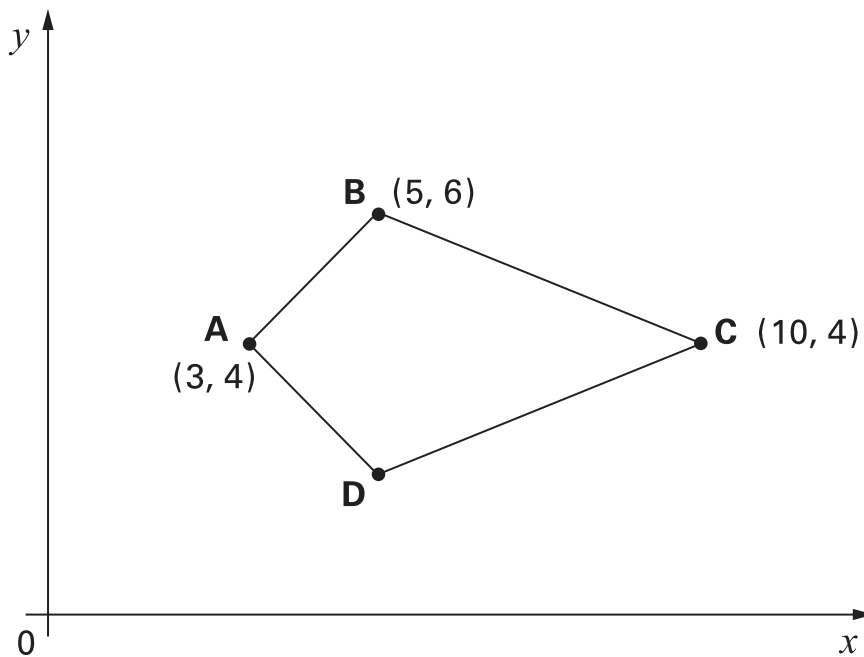


1 mark

19

20

Here is a kite.



Write the coordinates of point D.



(   ,   )



1 mark

20



21

Calculate  $900 \div (45 \times 4)$



21

1 mark

22

Liam thinks of a number.

He **multiplies the number by 5** and then **subtracts 60** from the result.



His answer equals the number he started with.

What was the number Liam started with?



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

22i

22ii

2 marks



Here is a part of a train timetable.

Edinburgh	–	09:35	–	–	13:35	–	–
Glasgow	09:15	–	11:15	13:15	–	13:45	15:15
Stirling	09:57	–	11:57	13:57	–	14:29	15:57
Perth	10:34	10:51	12:34	14:34	14:50	15:15	16:35
Inverness	–	13:10	–	–	17:05	–	–

How long does the first train from Edinburgh take to travel to Inverness?




23a

1 mark

Ellen is at Glasgow station at 1:30pm.

She wants to travel to Perth.

She catches the next train.

At what time will she arrive in Perth?




23b

1 mark

24

Calculate 5% of £3600



£

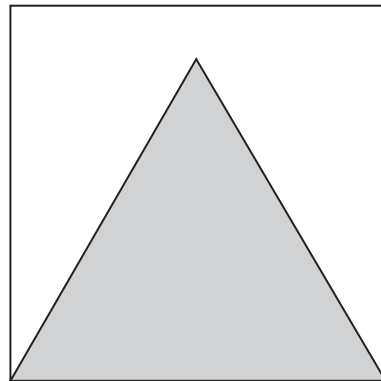


24

1 mark

25

Here is an equilateral triangle inside a square.



Not actual size

The perimeter of the triangle is 48 centimetres.

What is the perimeter of the square?



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



cm



25i



25ii

2 marks



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**Order refs:**

QCA/04/1253 (pupil pack)

QCA/04/1252 (mark schemes pack)