

Ma

KEY STAGE

2

LEVELS

3–5

## Mathematics tests

## Test A

Calculator **not** 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	
<b>Total</b>	

2013

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



Alfie



Chen



Megan

## 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.

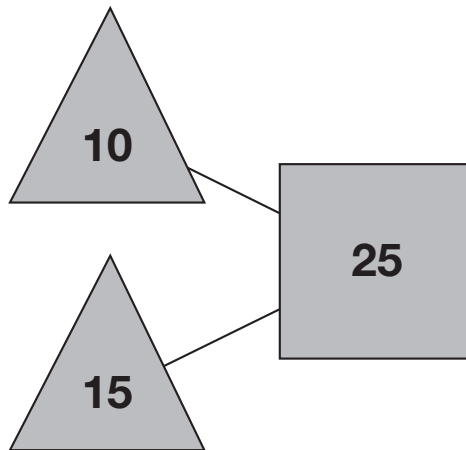
**Some questions have an answer box like this:**



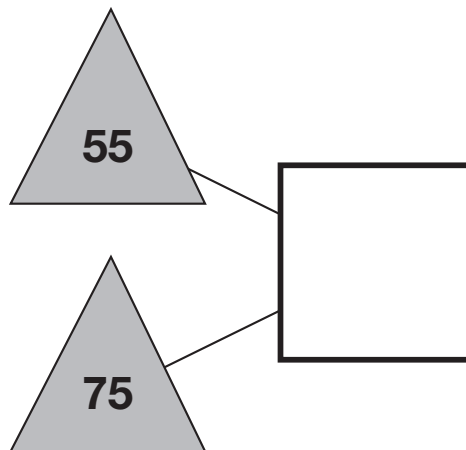
For these questions you may get a mark for showing your working.

**1**

The numbers in the two triangles add up to the number in the square.

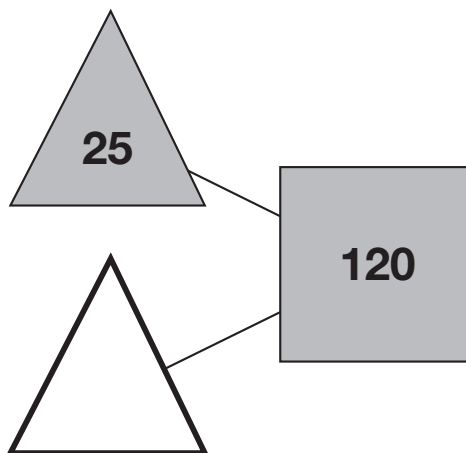


Using the **same** rule, write in the missing numbers.



1a

---

1 mark

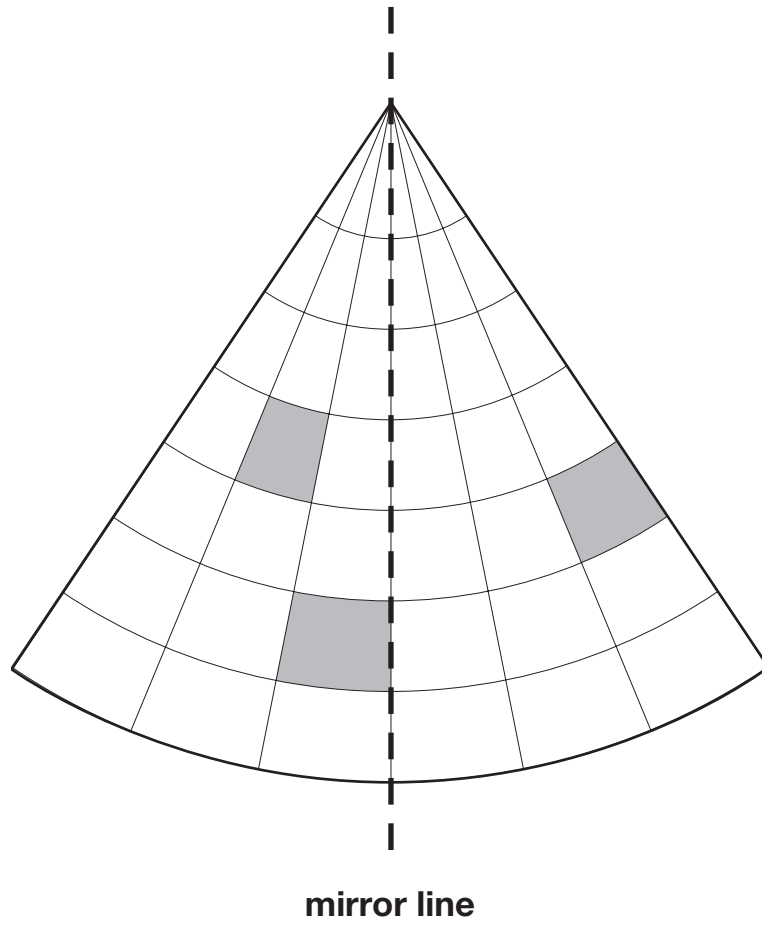
1b

---

1 mark

2

Draw the reflection of **all** the shaded shapes in the mirror line.



2

1 mark

Total out of 3 \_\_\_\_\_

3

Circle the number that is closest to 300



338

3030

288

313

130

3  
1 mark

4

The number **20** goes in **two** of the squares of this multiplication grid.

Tick (✓) the two squares where 20 goes.



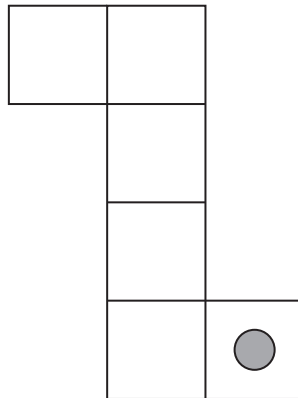
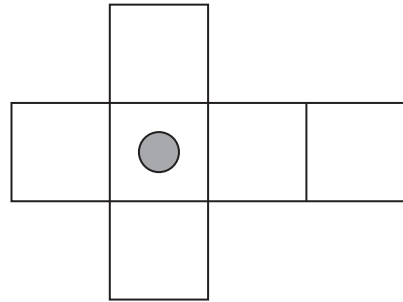
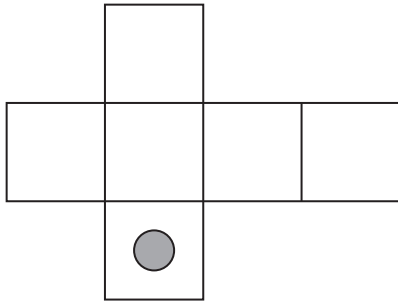
×	1	2	3	4	5
1					
2					
3					
4					
5					

4  
1 mark

5

Here are three nets of a cube.

On each net draw **one more dot** so that each cube will have dots on **opposite** faces.



5i

\_\_\_\_\_

5ii

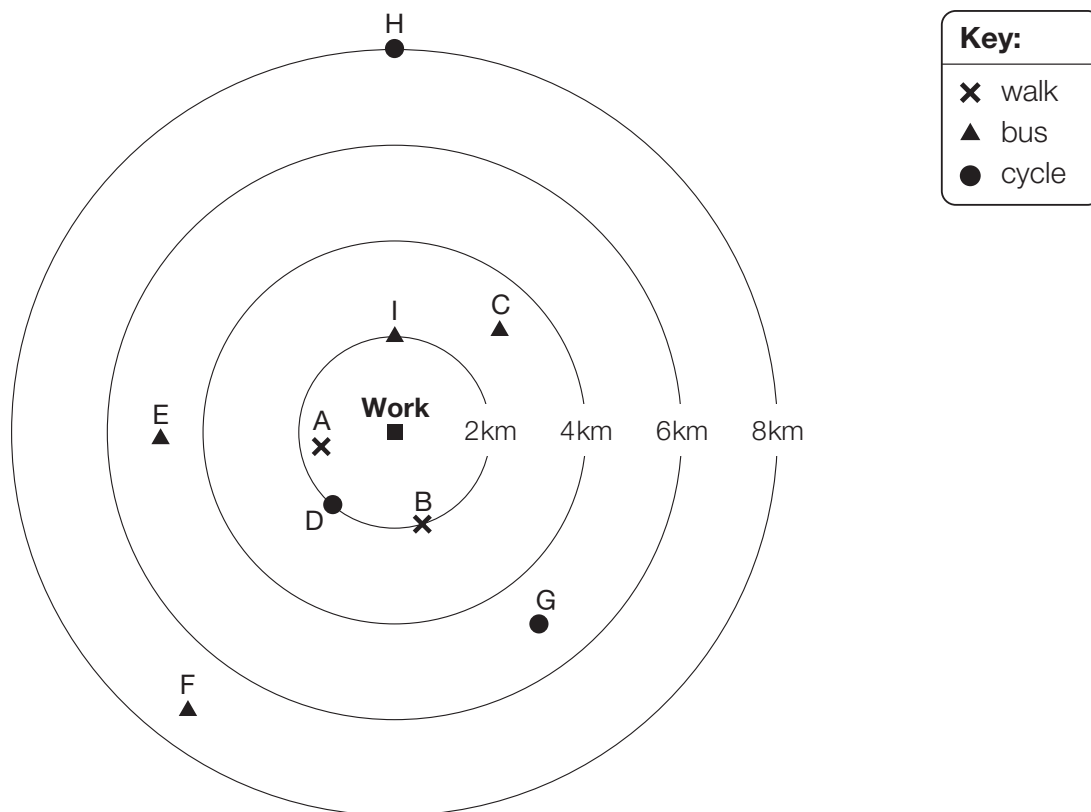
\_\_\_\_\_

2 marks

Total out of 4 \_\_\_\_\_

6

This diagram shows how nine people travel to work and how far away they live.



How many people live **more** than 4km from work?



6a  
1 mark

How far from work does person **G** live?



6b  
1 mark

Write the letter of the person who lives 2km from work and cycles.



6c  
1 mark



7

Megan and Chen are washing cars.

Megan gets £39 and Chen gets £55

They share what they get **equally** between them.

How much does each of them get?



Show  
your  
working

£

7i

7ii

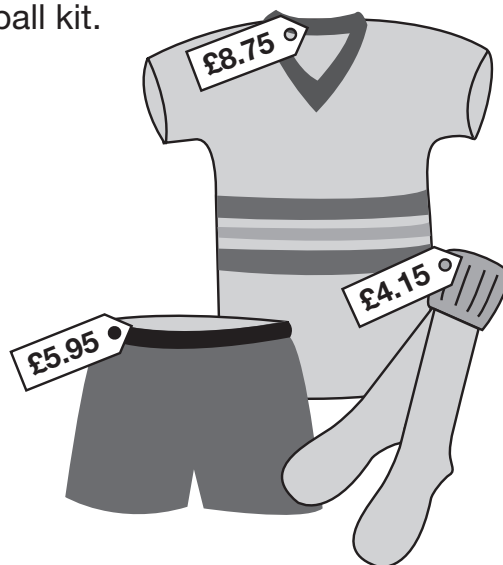
2 marks

Total out of 5 \_\_\_\_\_

8

The table shows the cost of a new football kit.

Item	Cost
Shirt	£8.75
Shorts (1 pair)	£5.95
Socks (1 pair)	£4.15



Altogether, how much does the complete football kit cost?



£

8

1 mark

9

Here are some sentences about an amount of money.

Mark each sentence with a tick (✓) if it is correct.  
Put a cross (✗) if it is not correct.

One has been done for you.

£1.03 can be made with exactly 1 coin.



£1.03 can be made with exactly 2 coins.

£1.03 can be made with exactly 3 coins.

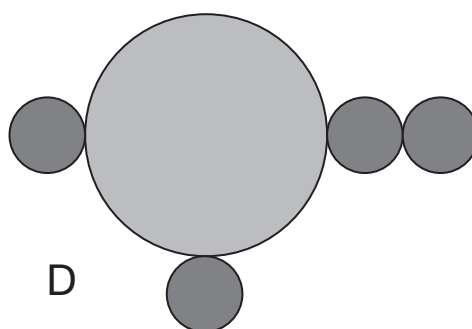
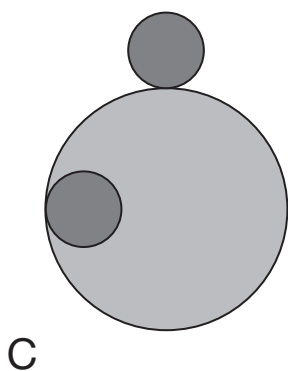
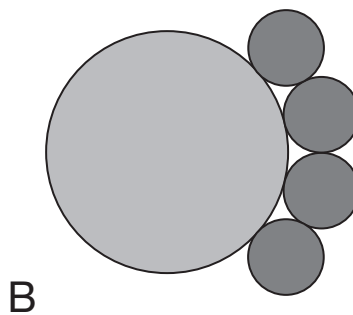
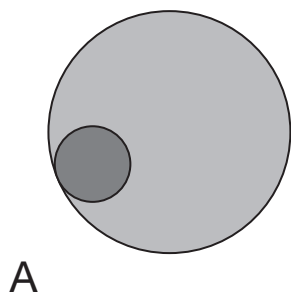
£1.03 can be made with exactly 4 coins.

9

1 mark

**10**

Here are four designs made from two sizes of circles.



Write the letters of **all** the designs that have line symmetry.



\_\_\_\_\_

10i

10ii

2 marks

Total out of 4 \_\_\_\_\_

11

Write in the missing numbers.



Number	Rounded to the nearest <b>whole</b> number
5.05	
5.55	
4.45	
4.54	

11i

11ii

2 marks

12

Complete these calculations.



$$15 \times 100 = \boxed{\phantom{000}}$$

$$\boxed{\phantom{000}} \times 10 = 1500$$

$$\boxed{\phantom{000}} \div 100 = 150$$

$$150 \div 10 = \boxed{\phantom{000}}$$

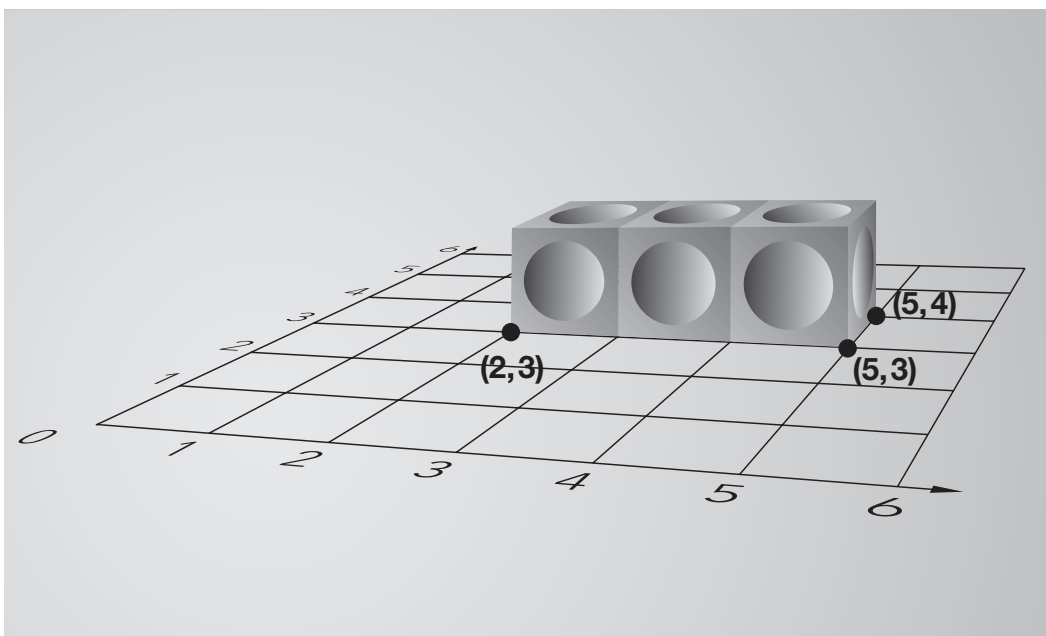
12i

12ii

2 marks

13

Alfie places three cubes on a coordinate grid.  
The base of his shape is a rectangle.



Complete this sentence:

The four **vertices** of the rectangle are

$(2, 3)$ ,  $(5, 3)$ ,  $(5, 4)$

and

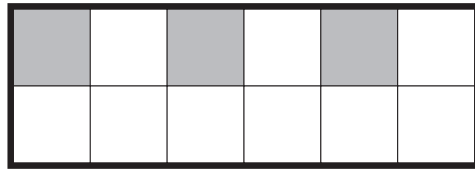
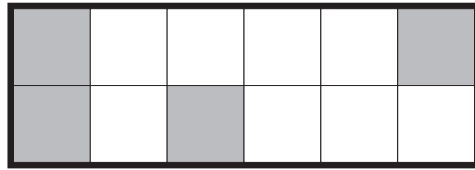
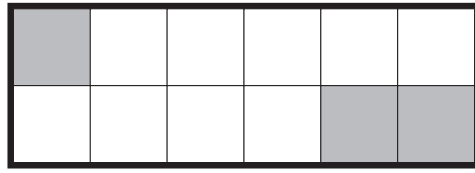



1 mark

13

Total out of 5 \_\_\_\_\_

14

Tick (✓) each shape that is exactly  $\frac{1}{4}$  shaded.

14

---

1 mark

15

Four children are in a race.

Chen is 2 metres ahead of Alfie.

Nina is 5 metres behind Megan.

Alfie is 3 metres behind Megan.

Write the names of the runners in order, starting with the child who is furthest ahead.



\_\_\_\_\_

furthest ahead

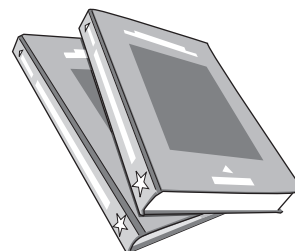
15

1 mark

16

Alfie buys **two** books, each at the same price.

He pays with a £10 note and gets £2.30 change.



What is the cost of **one** book?



Show  
your  
working

£

16i

16ii

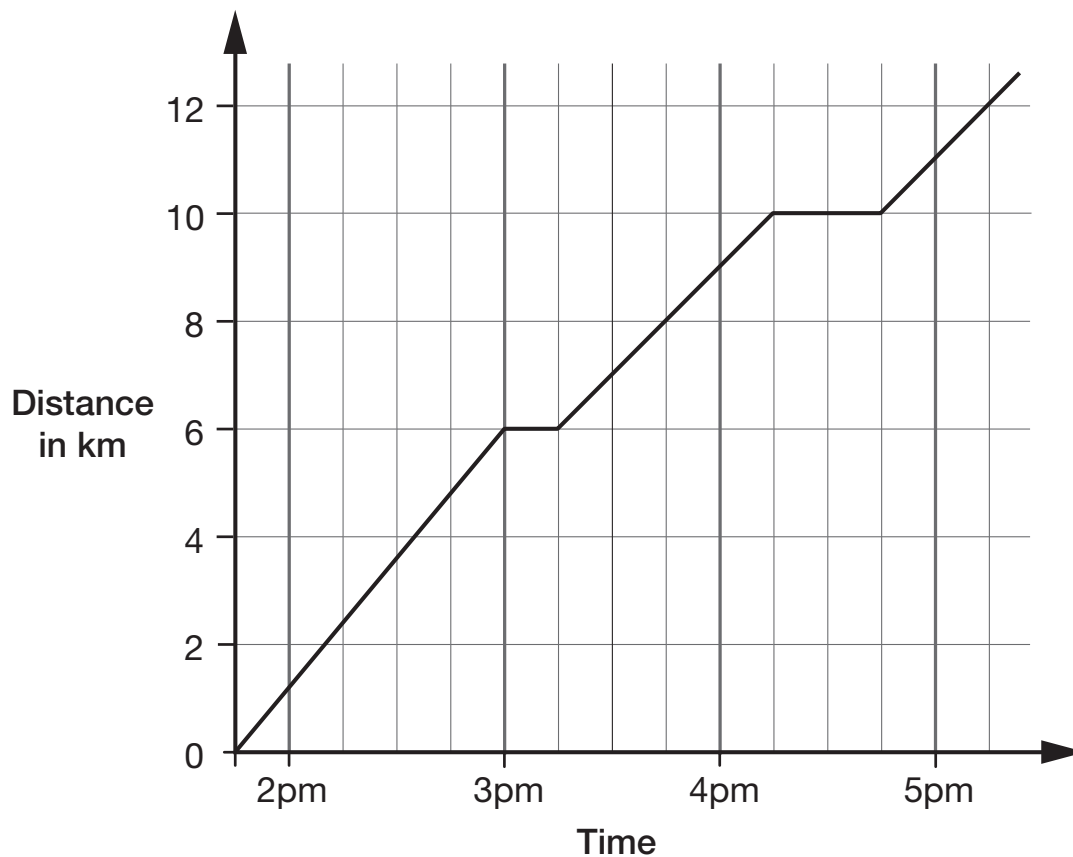
2 marks

Total out of 4

15

17

This graph shows the distance Alfie and Chen walked in an afternoon. They started at 1:45pm and had two breaks.



How many kilometres did they walk **between** the first and second breaks?


 km

17a

1 mark

At what time did Alfie and Chen start their second break?




17b

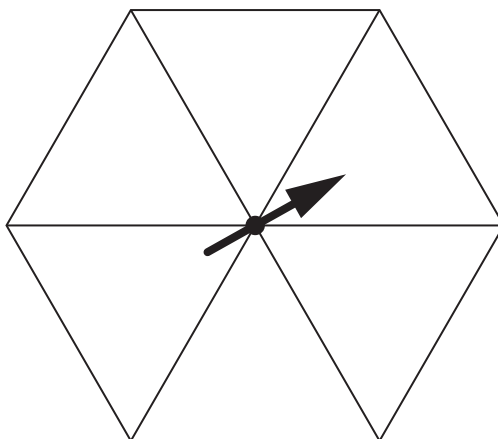
1 mark



18

Here is a spinner.

Write a whole number in each section of the spinner so that it is **certain** you will get a number less than 4 and it is **impossible** you will get an even number.



18

1 mark

19

Calculate  $816 \div 24$ 

Show  
your  
working

19i

19ii

2 marks

Total out of 5 \_\_\_\_\_

17

**20**

Chen and Megan each have a parcel.

Chen's parcel weighs  $1\frac{1}{2}$  kg.

Megan's parcel weighs 1.2kg.

How many more **grams** does Chen's parcel weigh than Megan's parcel?



Show  
your  
working

grams

20i

20ii

2 marks

**21****20%** of Megan's number is **64**What is **50%** of Megan's number?Show  
your  
working

21i

21ii

2 marks

**22**

Write these in order of size, starting with the smallest.

$\frac{2}{3}$

0.5

$\frac{3}{5}$

0.65



smallest

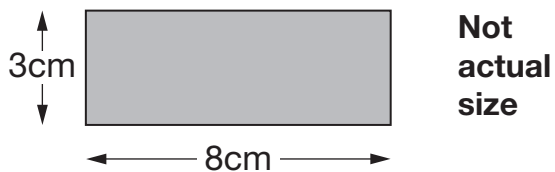
22

1 mark

Total out of 5 \_\_\_\_\_

**23**

Alfie has some rectangles.



He makes this shape using three of the rectangles.



What is the **perimeter** of Alfie's shape?

Show  
your  
working

cm

23i

23ii

2 marks

24



A cake costs 15p more than a biscuit.

Megan bought a cake and two biscuits for 90p.

How much do a cake and a biscuit each cost?



Show  
your  
working

Cost of a cake

p

Cost of a biscuit

p

24i

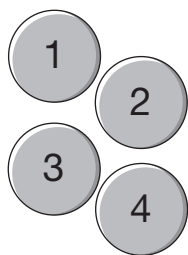
24ii

2 marks

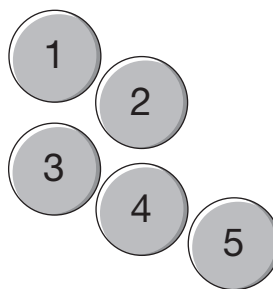
Total out of 4 \_\_\_\_\_

25

Chen and Megan each have a set of numbered counters.



Chen



Megan

They each take one of their own counters without looking.

Chen says,

***'I am more likely than Megan to get a 4'***

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



Yes / No

Explain how you know.

A large, cloud-shaped area with a scalloped border, intended for the student to write their explanation.

1 mark

25

[BLANK PAGE]

Please do not write on this page.



Standards  
& Testing  
Agency

2013 Key Stage 2 levels 3–5 mathematics: Test A – Calculator not allowed

Print version product code: STA/13/6022/p ISBN: 978-1-4459-5683-1

Electronic PDF version product code: STA/13/6022/e ISBN: 978-1-4459-5684-8

© Queen's Printer and Controller of HMSO 2013

Material contained in these booklets may be reproduced for educational and training purposes within a school setting, provided you acknowledge the copyright ownership of the material and you give the title of the source document. Reproduction or re-use of the material is not permitted for any commercial purpose.

**For more copies**

Additional printed copies of this booklet are not available. It can be downloaded from STA's orderline at <http://orderline.education.gov.uk>.