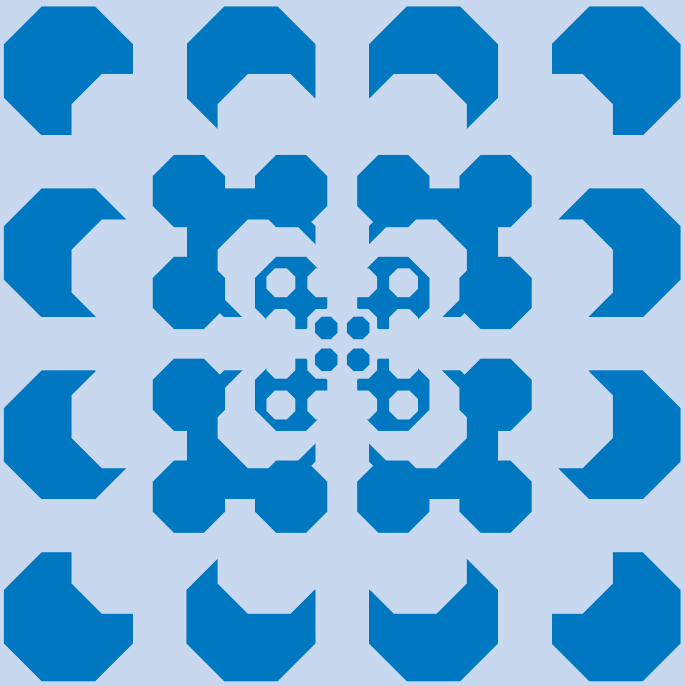
MATHEMATICS

KEY STAGE 2 2006

TEST A | LEVELS 3–5

CALCULATOR NOT ALLOWED

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

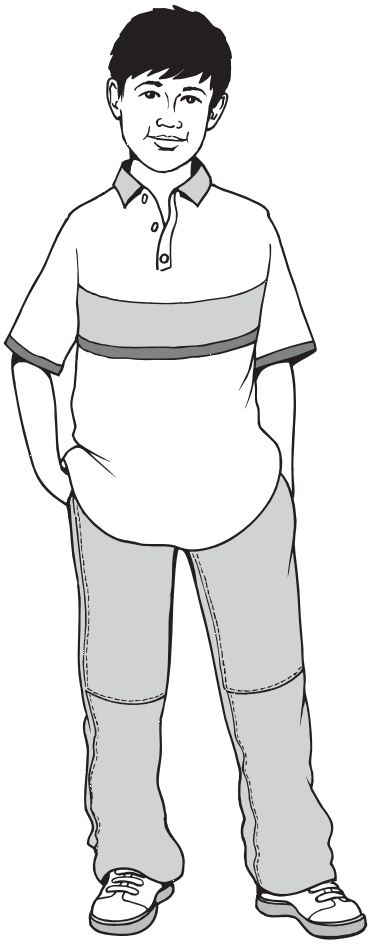


First Name

Last Name

School

Lin



David

Rosie

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.

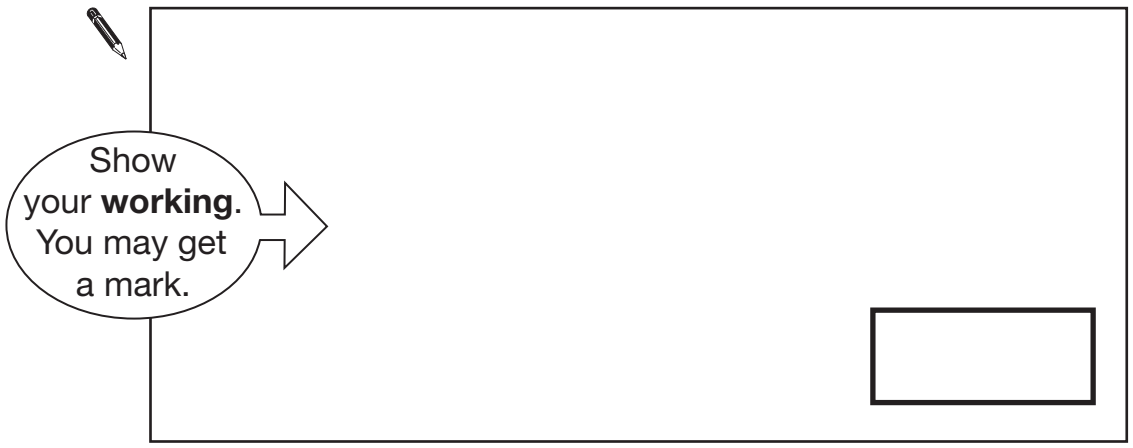
If you finish before the end, **go back and check your work**.

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

901 1091 910 109 190

smallest

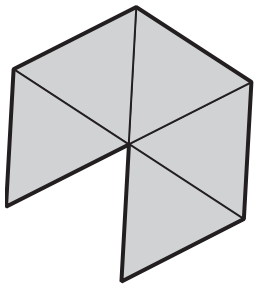
1

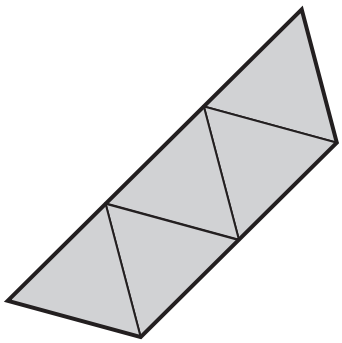
1 mark

2 These two shapes are made from equilateral triangles.

Draw **one** line of symmetry on each shape.

Use a ruler.





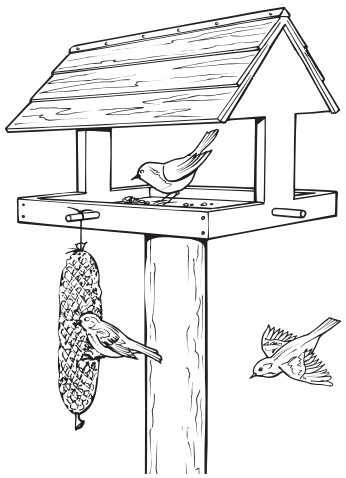
2

1 mark

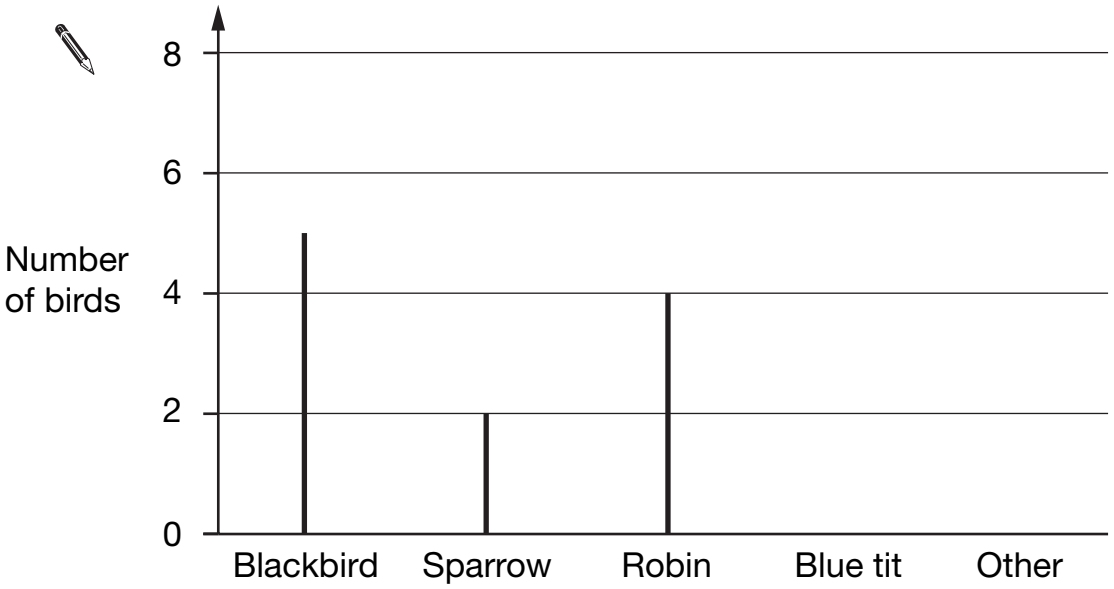
3 Rosie collects data about birds visiting a bird table.

Here are her results.

Blackbird	𝍸
Sparrow	||
Robin	𝍸 |
Blue tit	|||
Other	𝍸 |



Draw **two** more lines to complete the graph.



3a

1 mark

Rosie saw **20 birds** altogether.

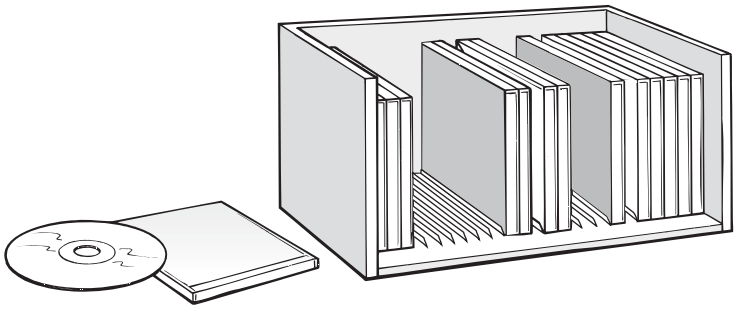
What **fraction** of the birds were blackbirds?

3b

1 mark

Total out of 4 ____

4 Here is a CD rack.



One rack holds **25** CDs.

David has **83** CDs.

How many racks does he need to hold **all** his CDs?

4a

1 mark

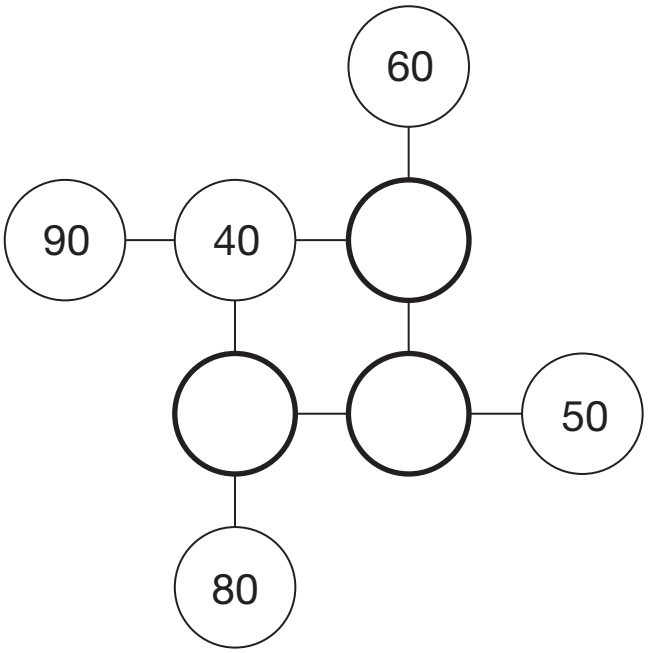
Lin has **6** racks **full** of CDs.

How many CDs does Lin have altogether?

4b

1 mark

5 Complete this diagram so that the three numbers in each line add up to **150**



5

1 mark

6 A clock shows this time.

How long is it from this time until 5 pm?

6a

1 mark

What time was it quarter of an hour before the time on the clock?

pm

6b

1 mark

Total out of 5

7 Lin needs to solve this problem.

'How many children are in the class?'

Tick (✓) **all** the information that Lin needs to solve her problem.

- ☐ There are 9 girls in the class.
- ☐ 5 girls in the class wear glasses.
- ☐ There are twice as many boys as girls in the class.

7a

1 mark

David needs to solve this problem.

'How much do two oranges and one apple cost?'

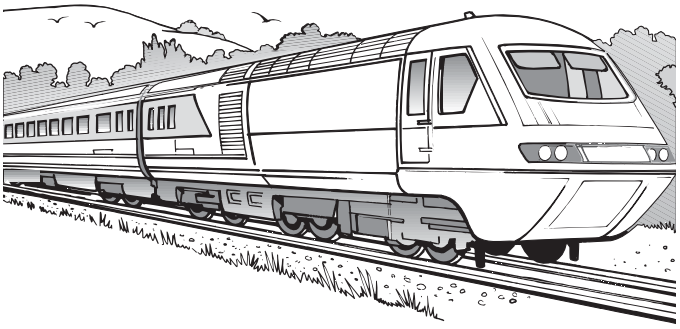
Tick (✓) **all** the information that David needs to solve his problem.

- ☐ An orange costs 5p more than an apple.
- ☐ An apple costs 20p
- ☐ David has £1

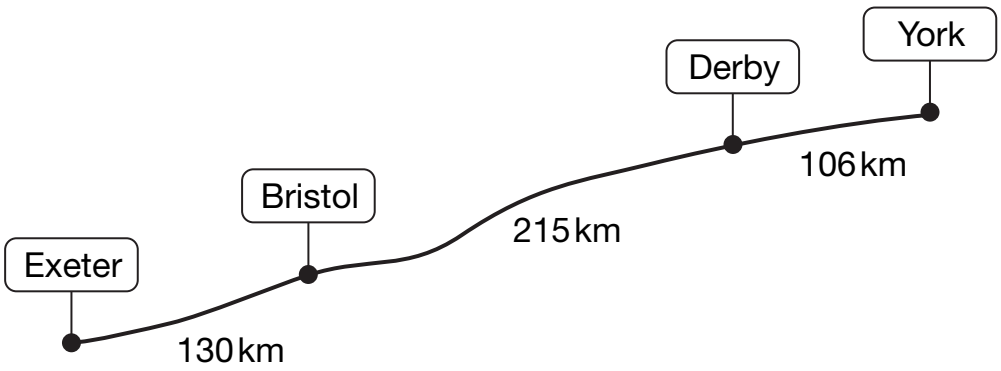
7b

1 mark

8



The diagram shows distances on a train journey from Exeter to York.



How many kilometres is it altogether from **Exeter** to **York**?

km

8a

1 mark

What is the distance from **Derby** to **York** rounded to the nearest 10 km?

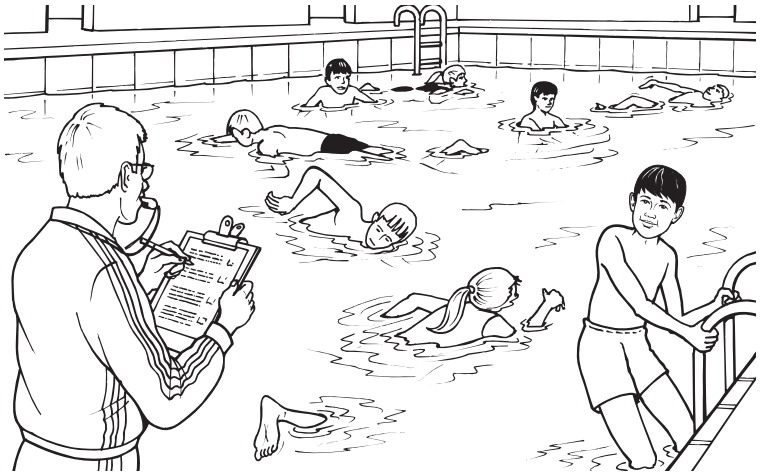
km

8b

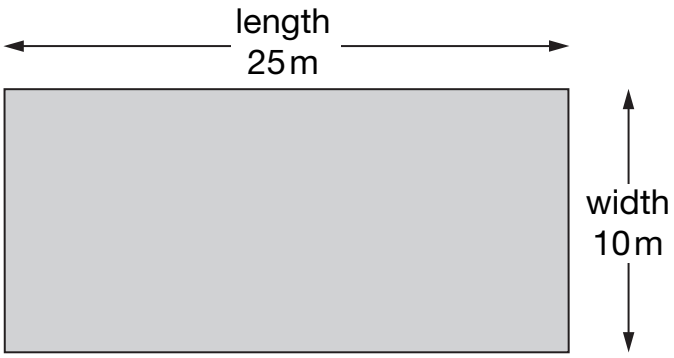
1 mark

Total out of 4

9



A rectangular swimming pool is 25 metres long and 10 metres wide.



David swims **5 lengths**.

Rosie swims **12 widths**.

How much **further** does David swim than Rosie?

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

metres

9i

9ii

2 marks

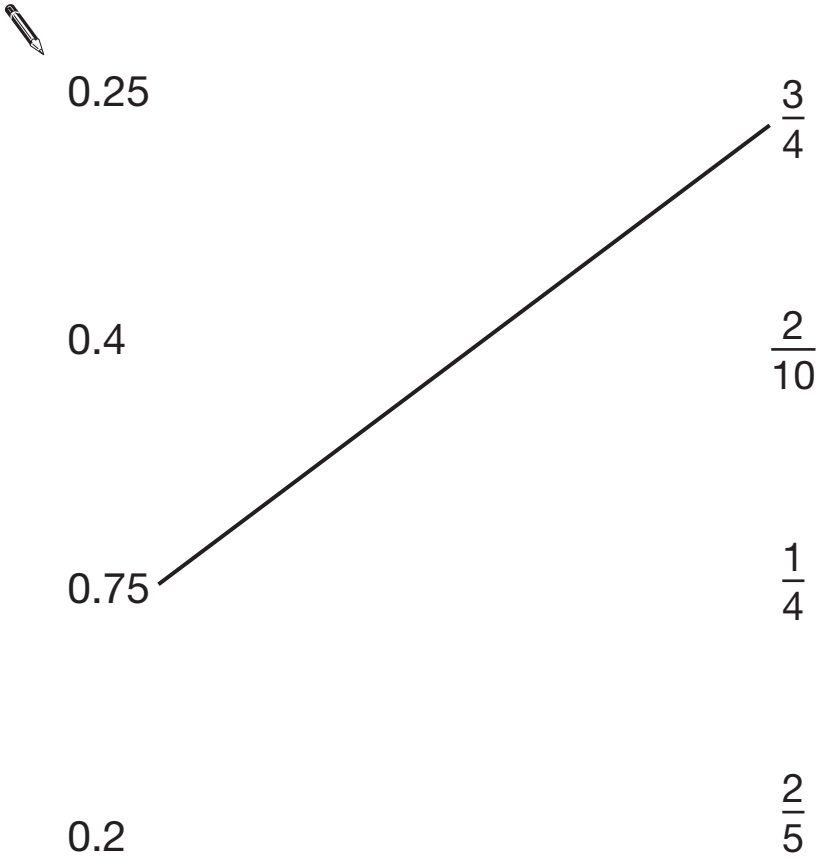
10 Calculate **2006 – 289**

10

1 mark

11 Match each decimal number to its equivalent fraction.

One has been done for you.



11

1 mark

Total out of 4 ____

12 Five children have ticked this table to show on which days they are free to go out.

	Emma	David	Lin	Jack	Rosie
Mon		✓	✓		✓
Tue	✓		✓	✓	
Wed		✓			✓
Thu			✓	✓	✓
Fri	✓	✓			✓

On how many days are **more than two** children free to go out?

12a

1 mark

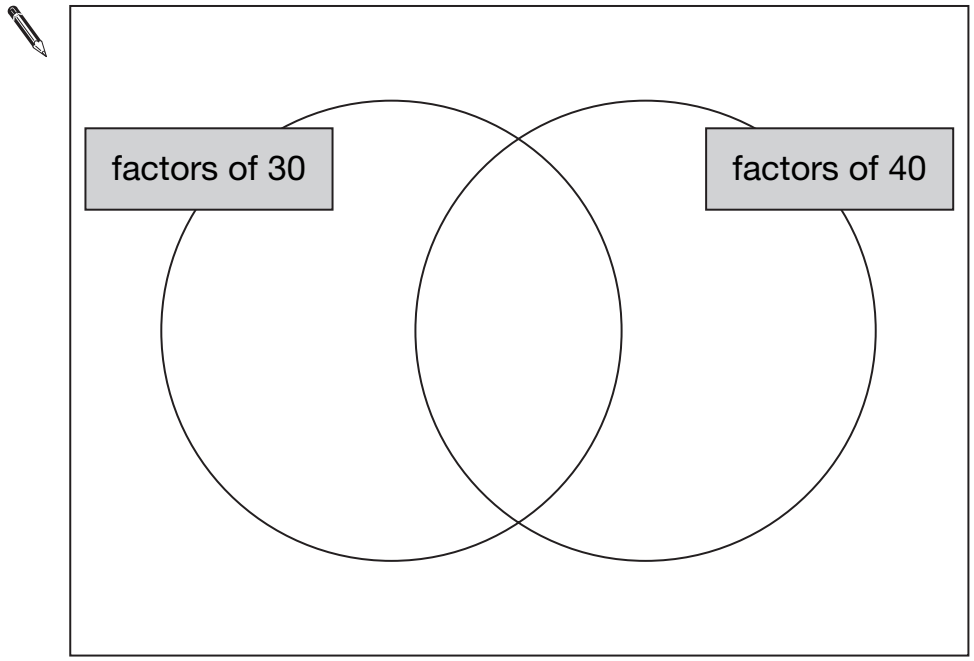
On which days are Lin and Rosie both free to go out together?

12b

1 mark

13 Write these numbers in the correct places on the diagram.

5 6 7 8



13i _____

13ii _____

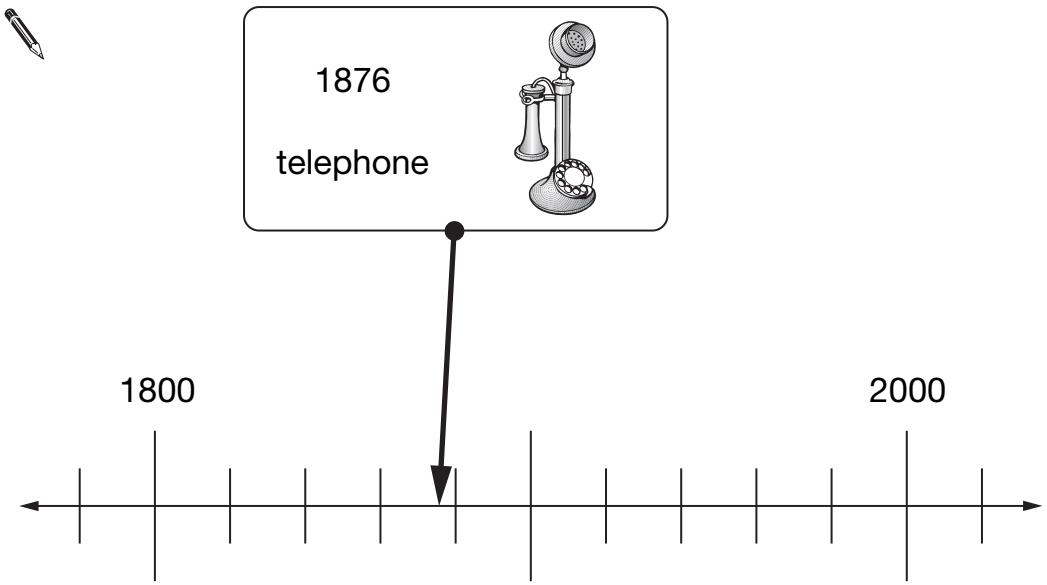
2 marks

Total out of 4 _____

14 Here is part of a time line.

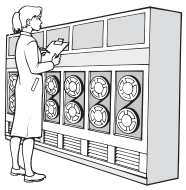
Draw a line from each invention to the correct point on the time line.

One has been done for you.



1810
tin can

1945
computer



14a
1 mark

14b
1 mark

15 Here is a number chart.
Every third number in the chart has a circle on it.

1	2	(3)	4	5
(6)	7	8	(9)	10
11	(12)	13	14	(15)
16	17	(18)	19	20
(21)	22			

The chart continues in the same way.
Here is another row in the chart.

Draw the missing circles.

71	72	73	74	75

15a

1 mark

Will the number **1003** have a circle on it?
Circle **Yes** or **No**.

Yes / No

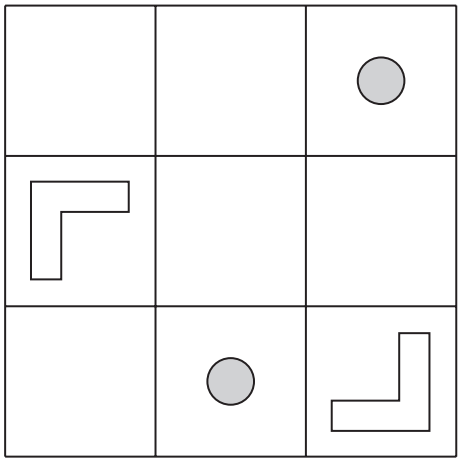
Explain how you know.

15b

1 mark

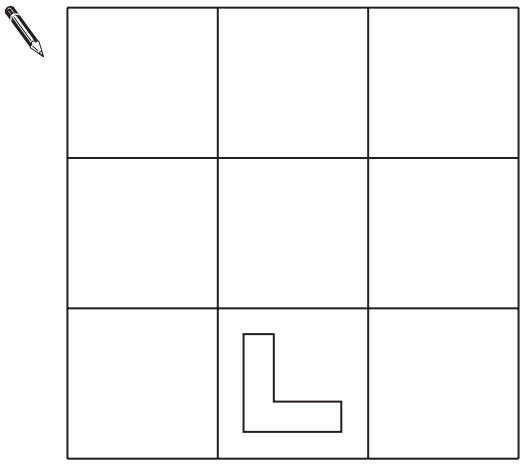
Total out of 4

16 There are four shapes on this diagram.



The diagram is turned to the new position below.

Draw the three missing shapes.

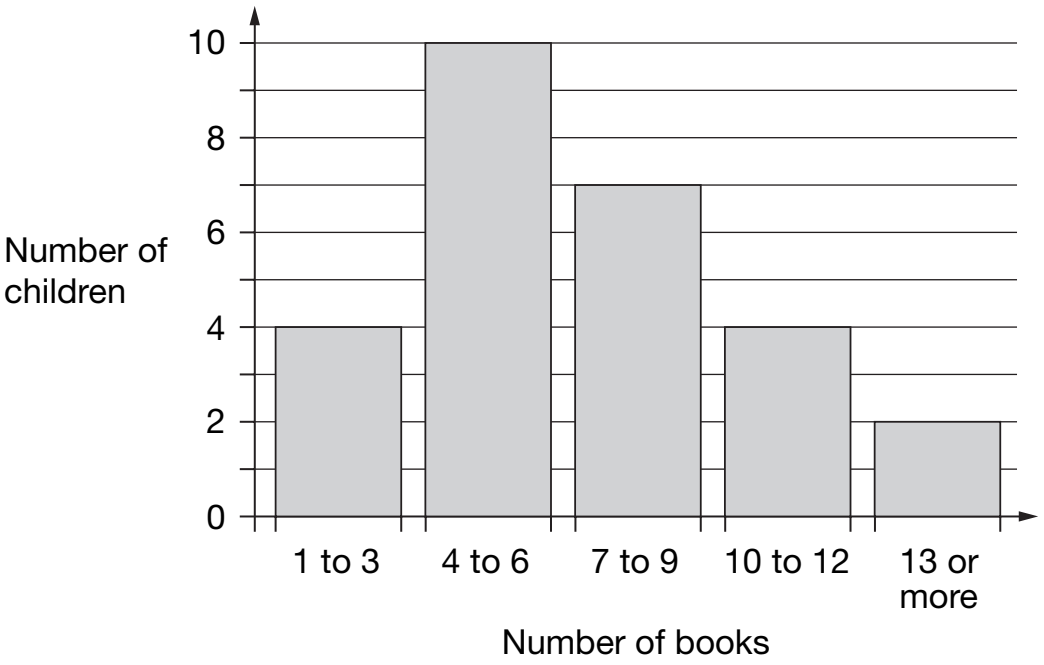


16i

16ii

2 marks

17 This chart shows the number of books some children read last month.



How many children altogether read **more than 9 books**?

17a

1 mark

7 children read 4 books.
1 child read 5 books.

Lin says,

'That means 2 children read 6 books'.

Explain how she can work this out from the chart.

17b

1 mark

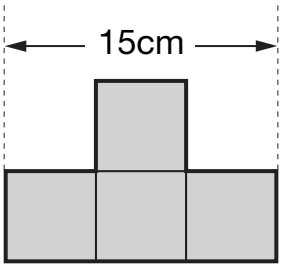
Total out of 4

18 Calculate **52.85 + 143.6**

18

1 mark

19 This shape is made from 4 shaded squares.



Not actual size

Calculate the perimeter of the shape.

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

cm

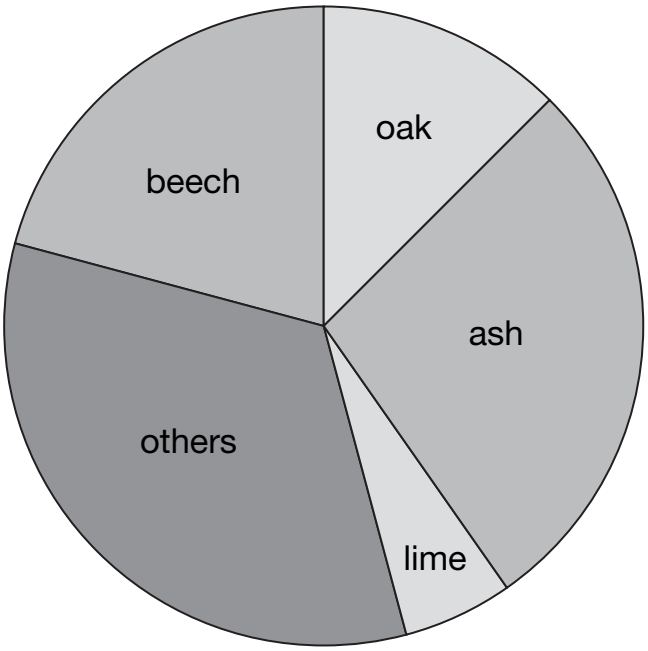
19i

19ii

2 marks

20 Class 6 did a survey of the number of trees in a country park.

This pie chart shows their results.



Estimate the **fraction** of trees in the survey that are **oak** trees.

20a

1 mark

The children counted 60 **ash** trees.

Use the pie chart to estimate the **number** of **beech** trees they counted.

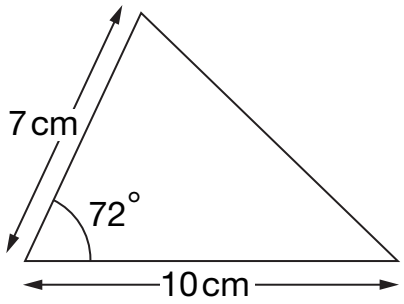
20b

1 mark

Total out of 5

21 Here is a sketch of a triangle.

It is not drawn to scale.



Draw the full-size triangle **accurately** below.

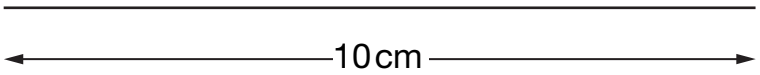
Use a protractor (angle measurer) and a ruler.

One line has been drawn for you.

21i

21ii

2 marks



22 Calculate **848 ÷ 16**

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

22i _____

22ii _____

2 marks

23 k stands for a whole number.

k **+ 7** is greater than 100

k **– 7** is less than 90

Find **all** the numbers that k could be.

23i _____

23ii _____

2 marks

Total out of 6 _____

End of test

QCA, 83 Piccadilly, London W1J 8QA

Order refs:
QCA/06/1904 (pupil pack)
QCA/06/1900 (mark schemes pack)

270001