

# MATHEMATICS

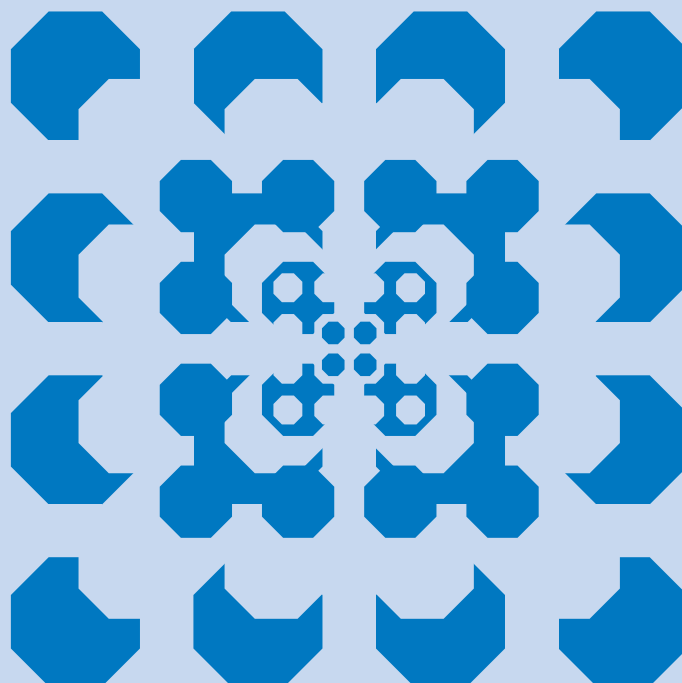
KEY STAGE 2 2006

TEST A

LEVELS  
**3-5**

CALCULATOR NOT ALLOWED

PAGE	MARKS
5	
7	
9	
11	
13	
15	
17	
19	
21	
<b>TOTAL</b>	



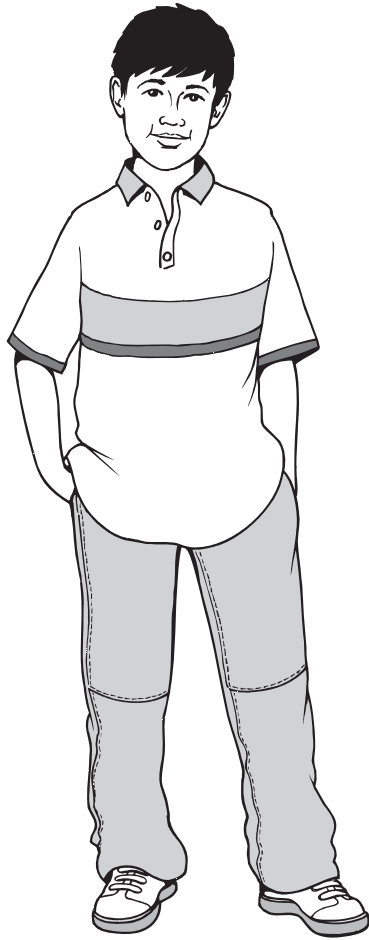
First Name

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**.

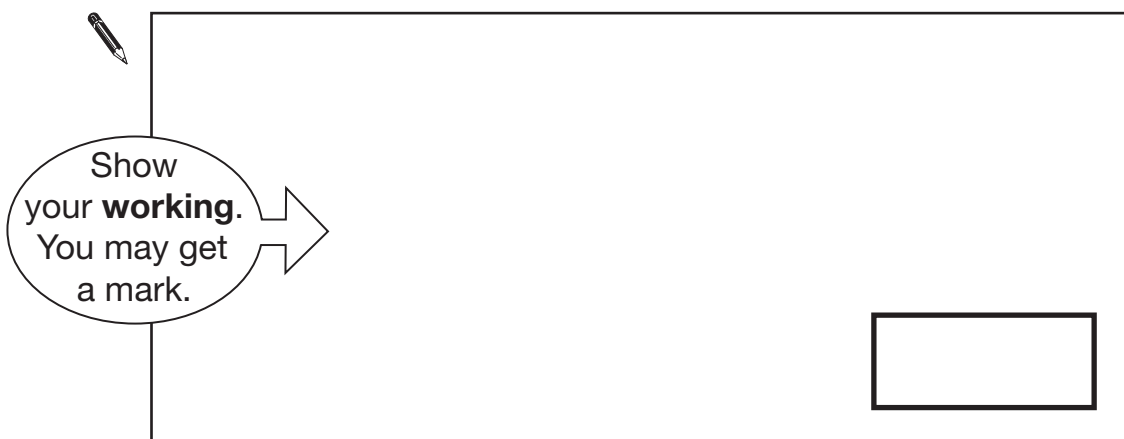
**Follow the instructions for each question carefully.**



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



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smallest

1 mark

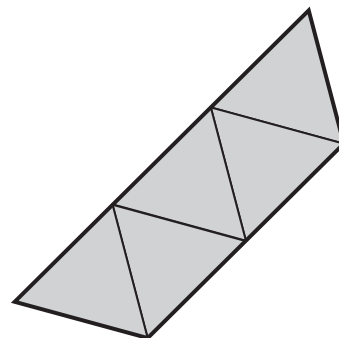
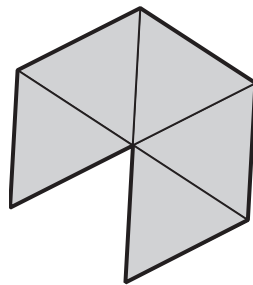
1

2

These two shapes are made from equilateral triangles.

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

Use a ruler.



1 mark

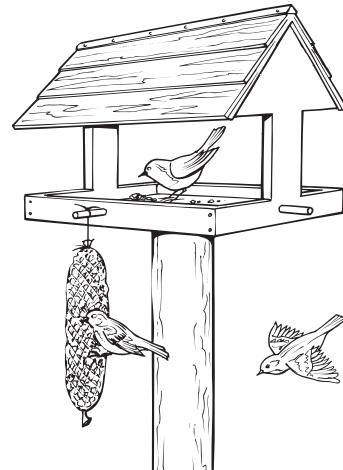
2

3

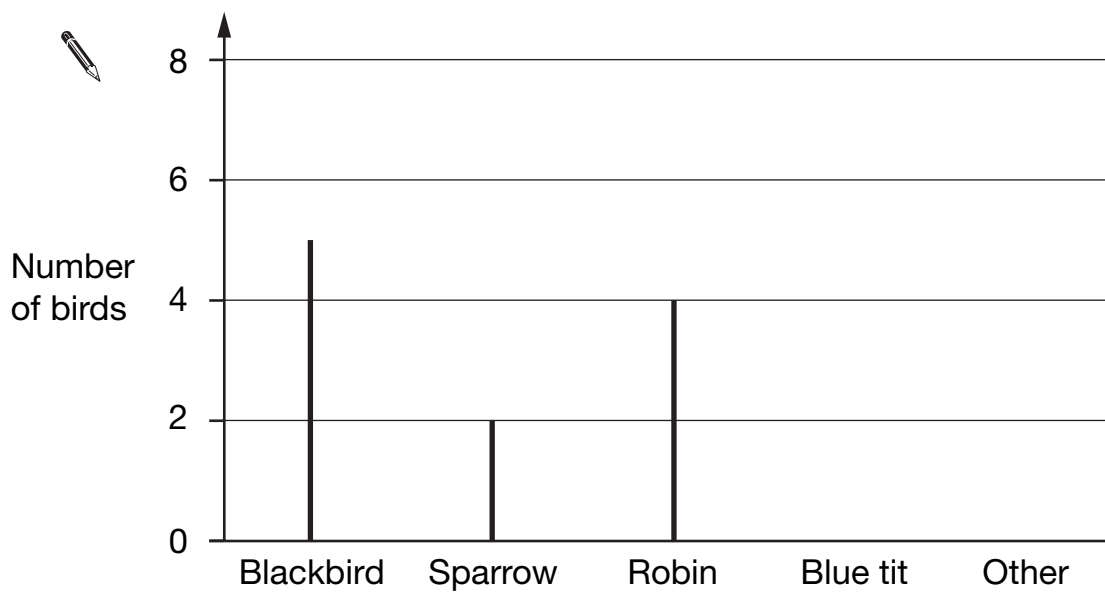
Rosie collects data about birds visiting a bird table.

Here are her results.

Blackbird	/
Sparrow	
Robin	
Blue tit	
Other	/



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



3a

1 mark

Rosie saw **20 birds** altogether.

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

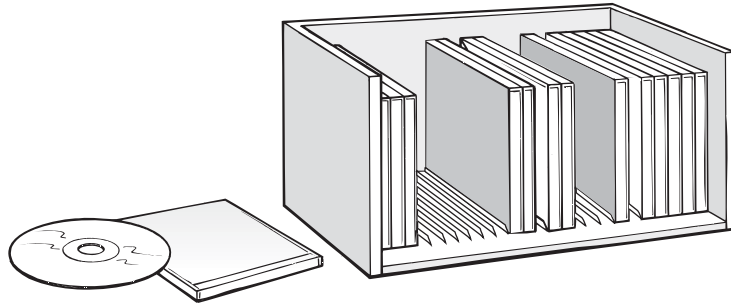


3b

1 mark

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?

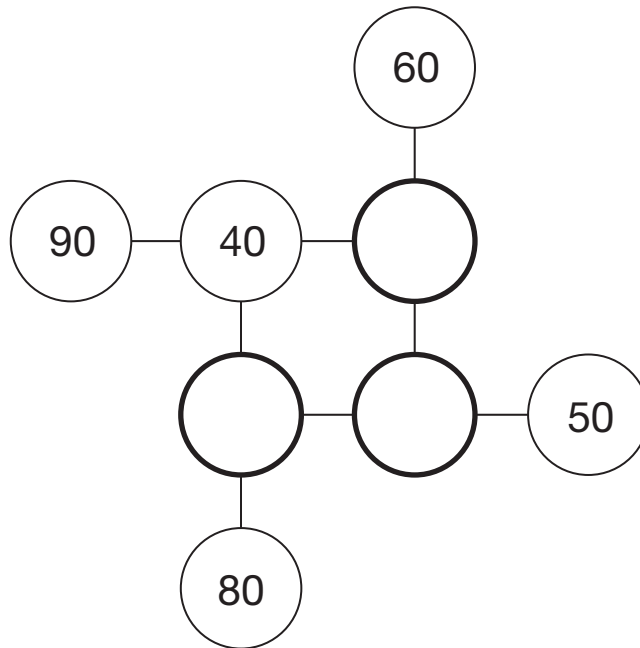


4b

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?



6b

1 mark

7

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.

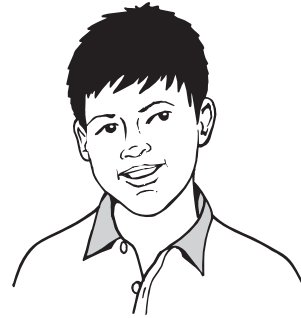
There are twice as many boys as girls in the class.

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.

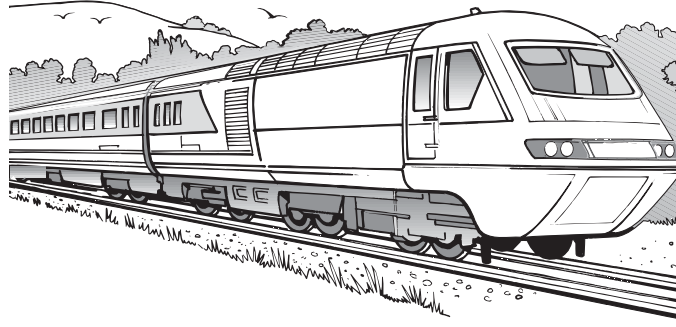
An apple costs 20p

David has £1

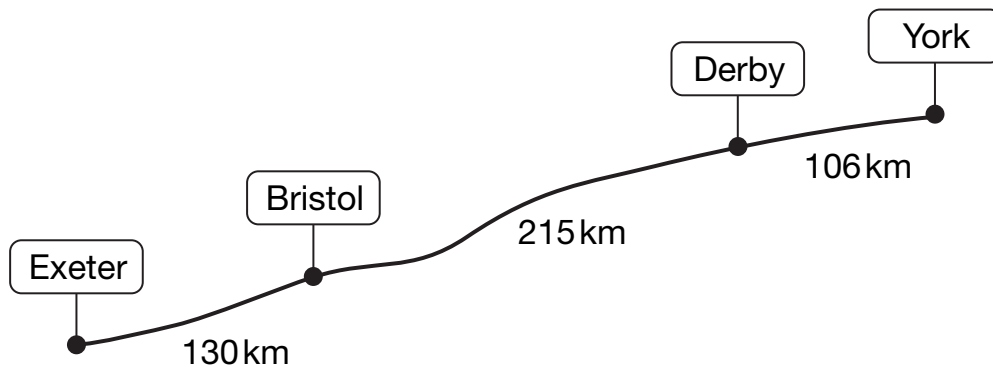
7b

1 mark





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



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


 km

8a

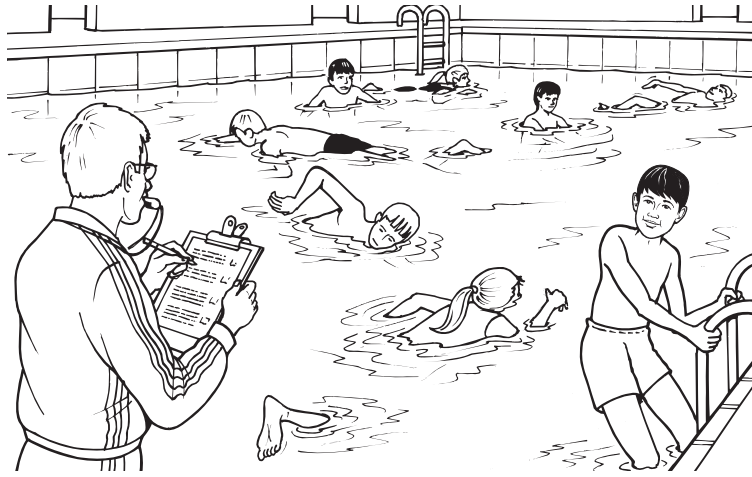
1 mark

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

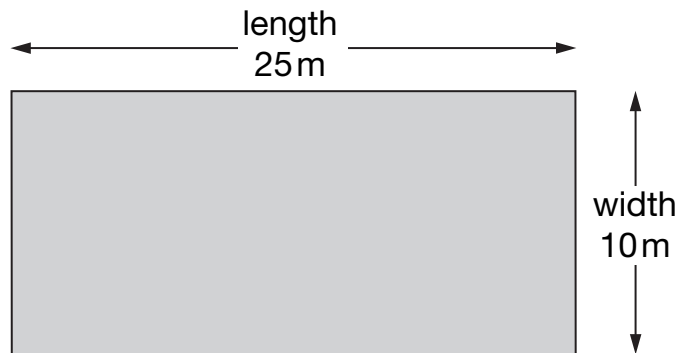

 km

8b

1 mark



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.



0.25

$\frac{3}{4}$

0.4

$\frac{2}{10}$

0.75

$\frac{1}{4}$

0.2

$\frac{2}{5}$

11

1 mark

11

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

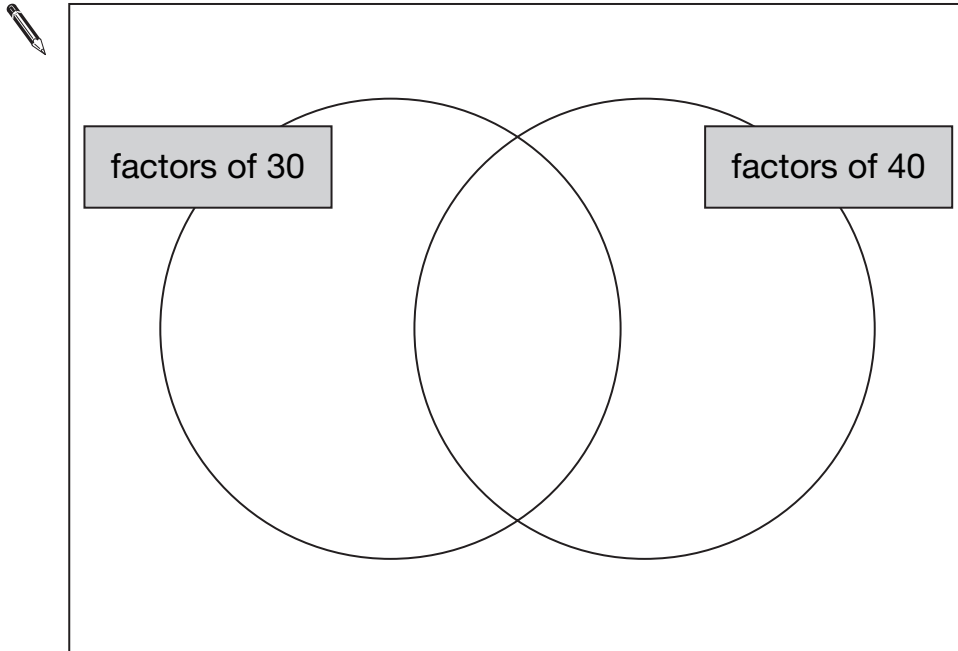
Write these numbers in the correct places on the diagram.

5

6

7

8



13i

\_\_\_\_\_

13ii

\_\_\_\_\_

2 marks

13

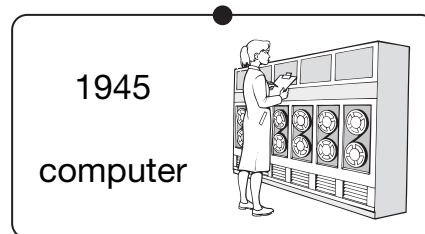
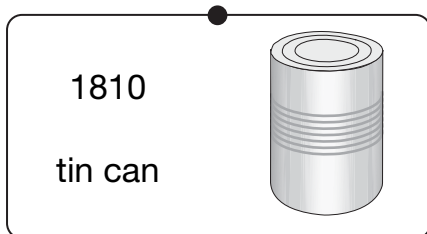
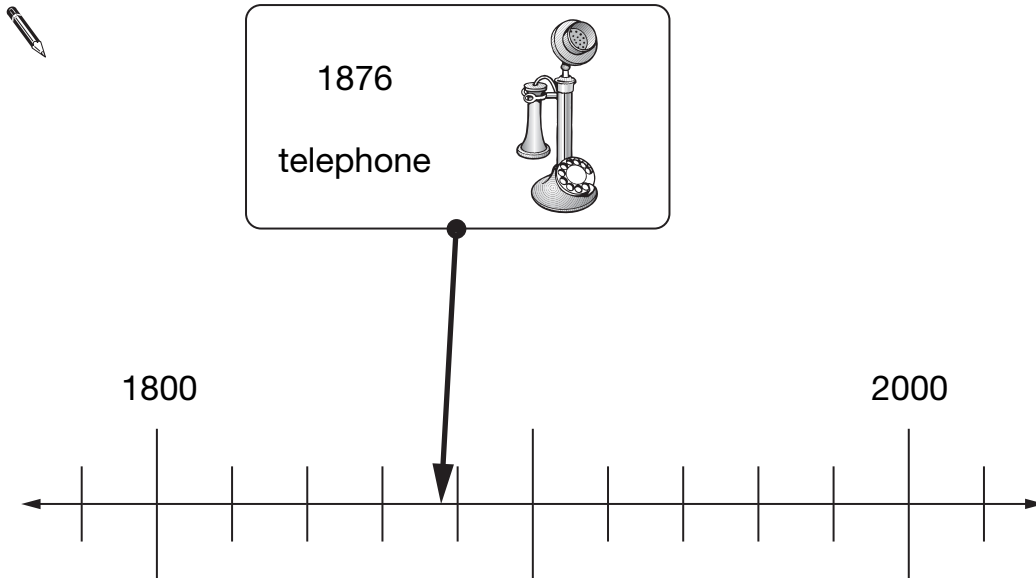
Total out of 4 \_\_\_\_\_

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.



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

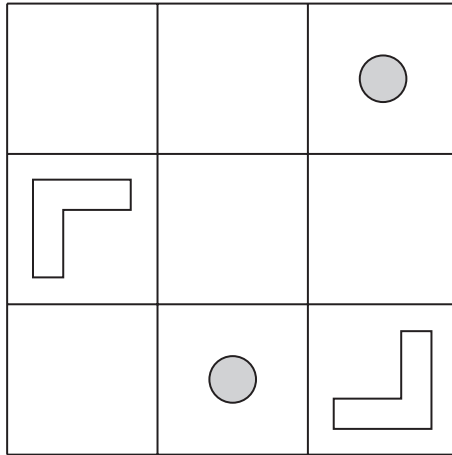
1 mark

15

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

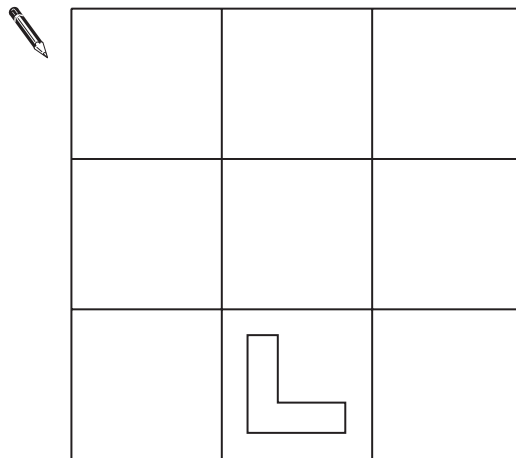
16

There are four shapes on this diagram.



The diagram is turned to the new position below.

Draw the three missing shapes.



16i

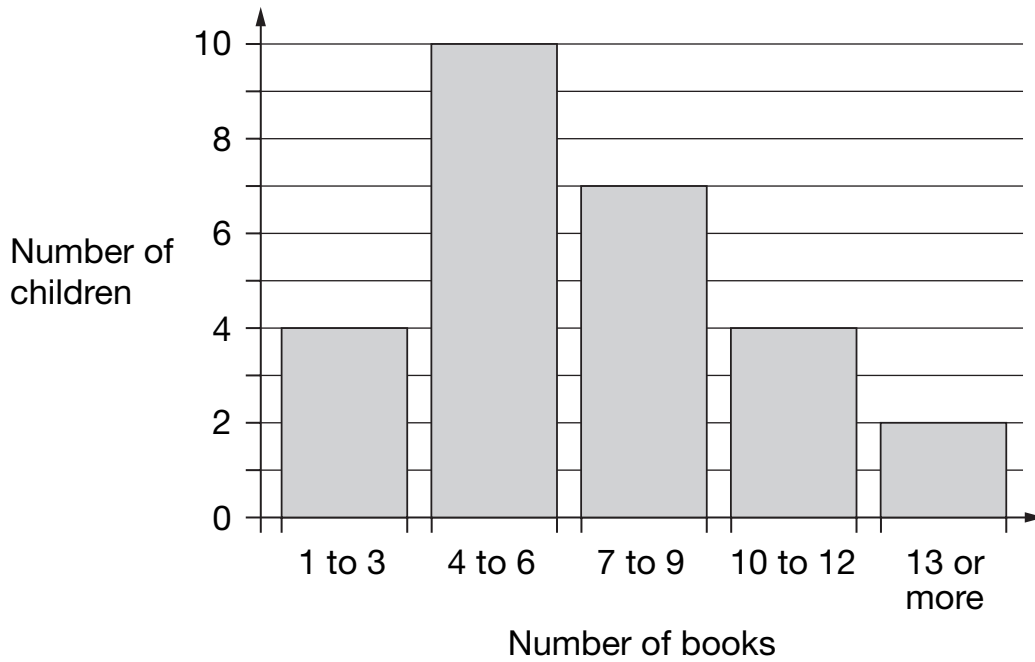
16ii

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

18

Calculate  $52.85 + 143.6$

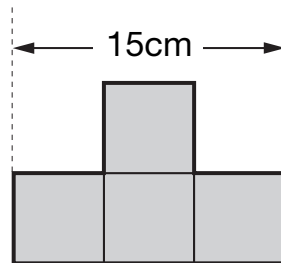


18

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.

19i

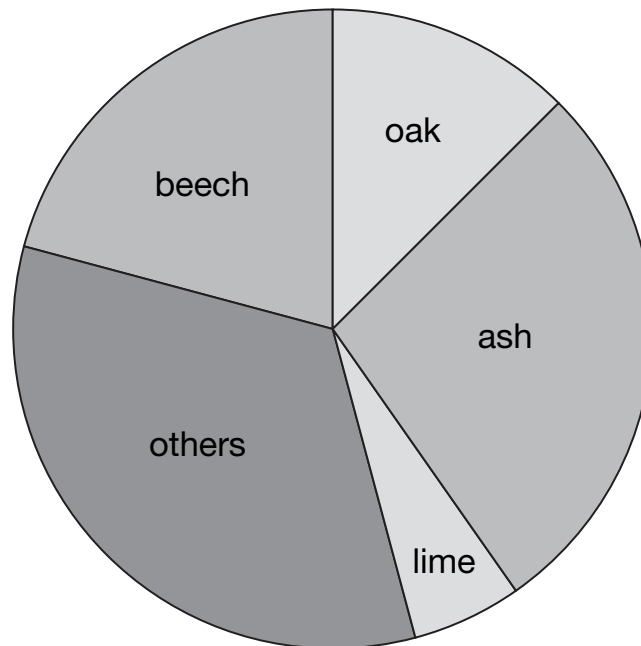
19ii

2 marks

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.

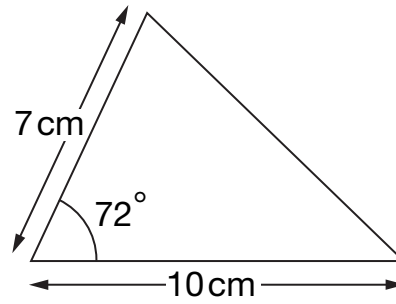
20b

1 mark

21

Here is a sketch of a triangle.

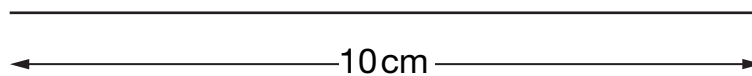
It is not drawn to scale.



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  $848 \div 16$



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

21

Total out of 6 \_\_\_\_\_

End of test



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