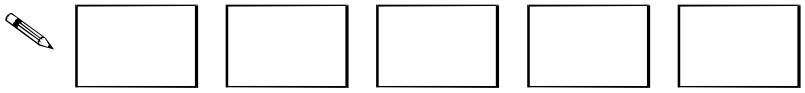
Mathematics

Test A

2006
40 min
40 marks
Calculator not allowed

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

901 1091 910 109 190



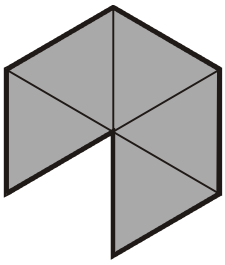
smallest

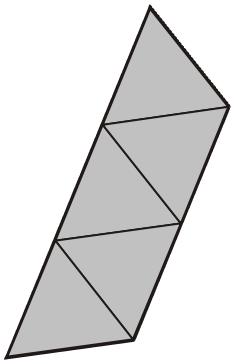
1 mark

2. These two shapes are made from equilateral triangles.

Draw one line of symmetry on each shape.

Use a ruler.



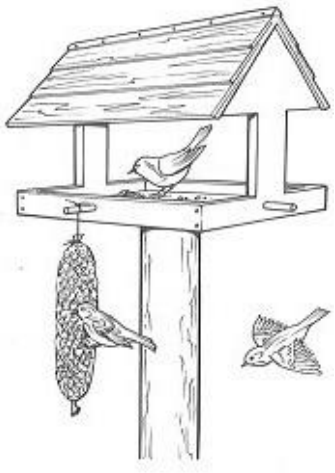


1 mark

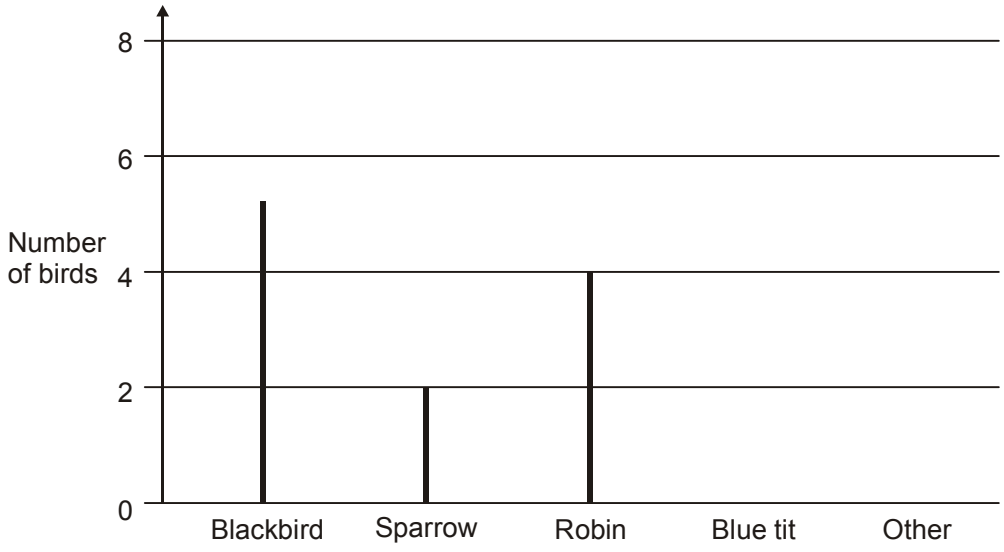
3. Rosie collects data about birds visiting a bird table.

Here are her results.

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



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



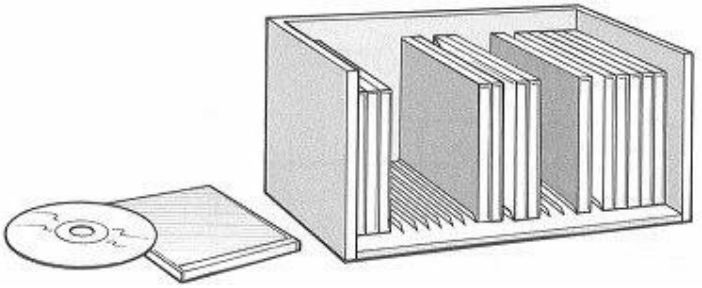
1 mark

Rosie saw **20 birds** altogether.

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

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?

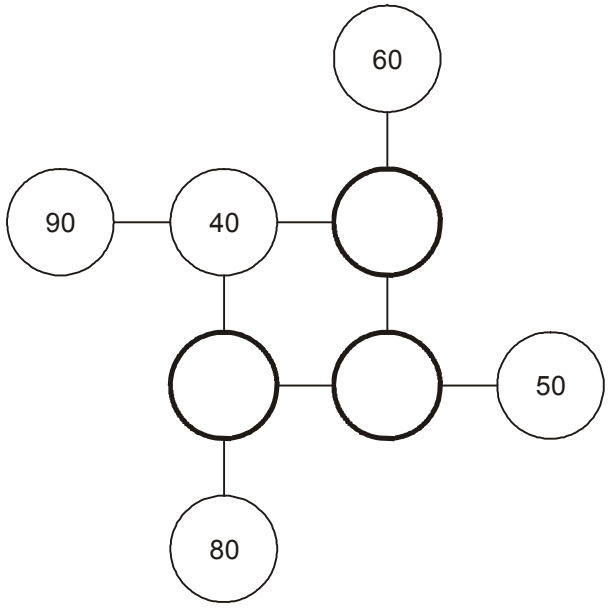
1 mark

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

How many CDs does Lin have altogether?

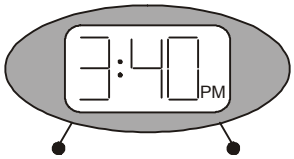
1 mark

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



I mark

6. A clock shows this time.



How long is it from this time until 5pm?

1 mark

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

pm

1 mark

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.

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.

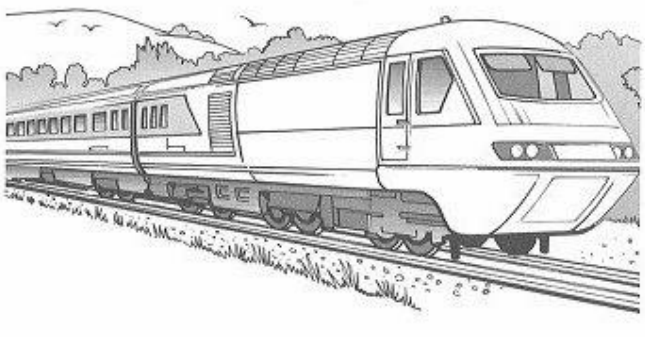
☐ An orange costs 5p more than an apple.

☐ An apple costs 20p

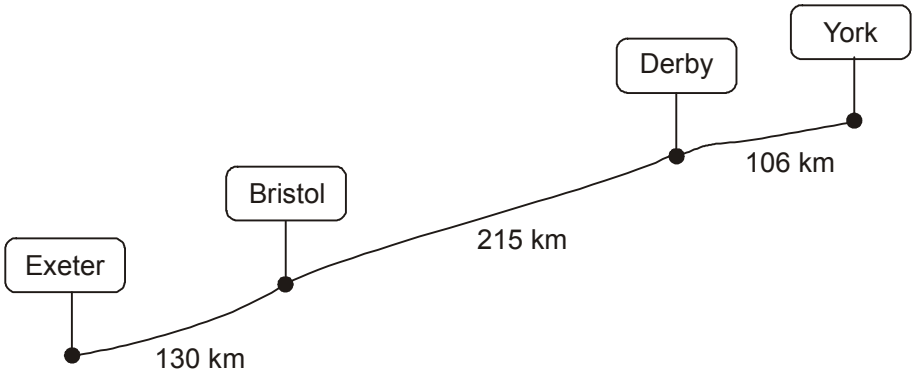
☐ David has £1 7b

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

1 mark

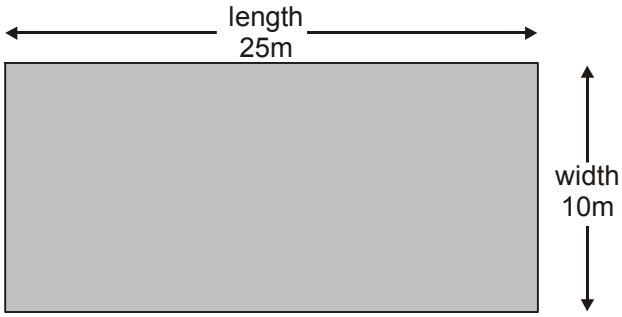
What is the distance from **Derby** to **York** rounded to the nearest 10km?

km

1 mark

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

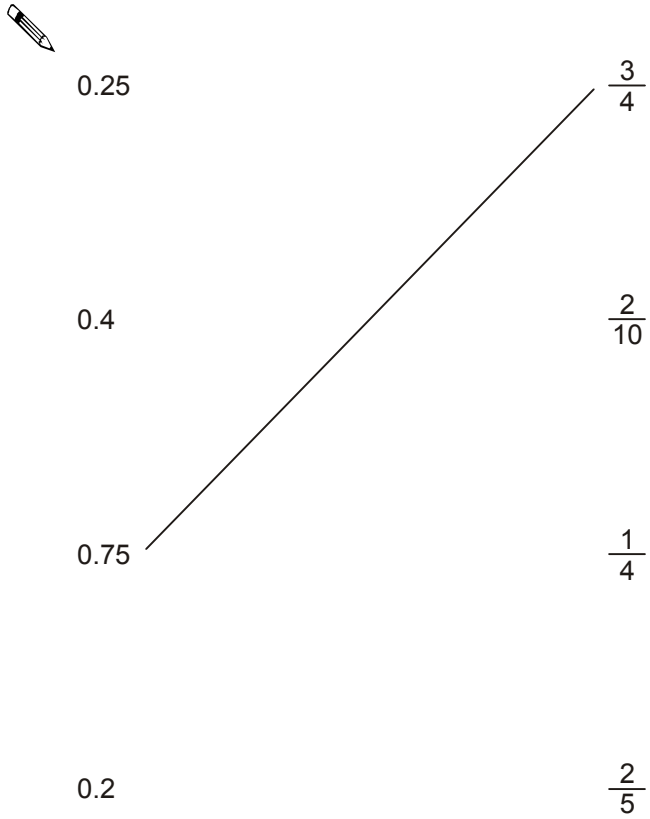
2 marks

10. Calculate **2006 – 289**

1 mark

11. Match each decimal number to its equivalent fraction.

One has been done for you.



1 mark

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?

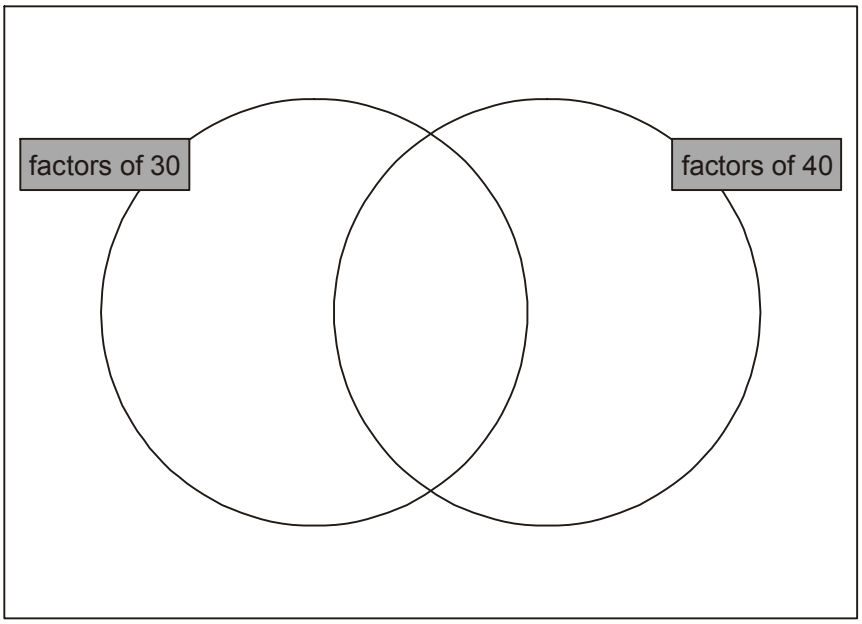
1 mark

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

1 mark

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

5 **6** **7** **8**

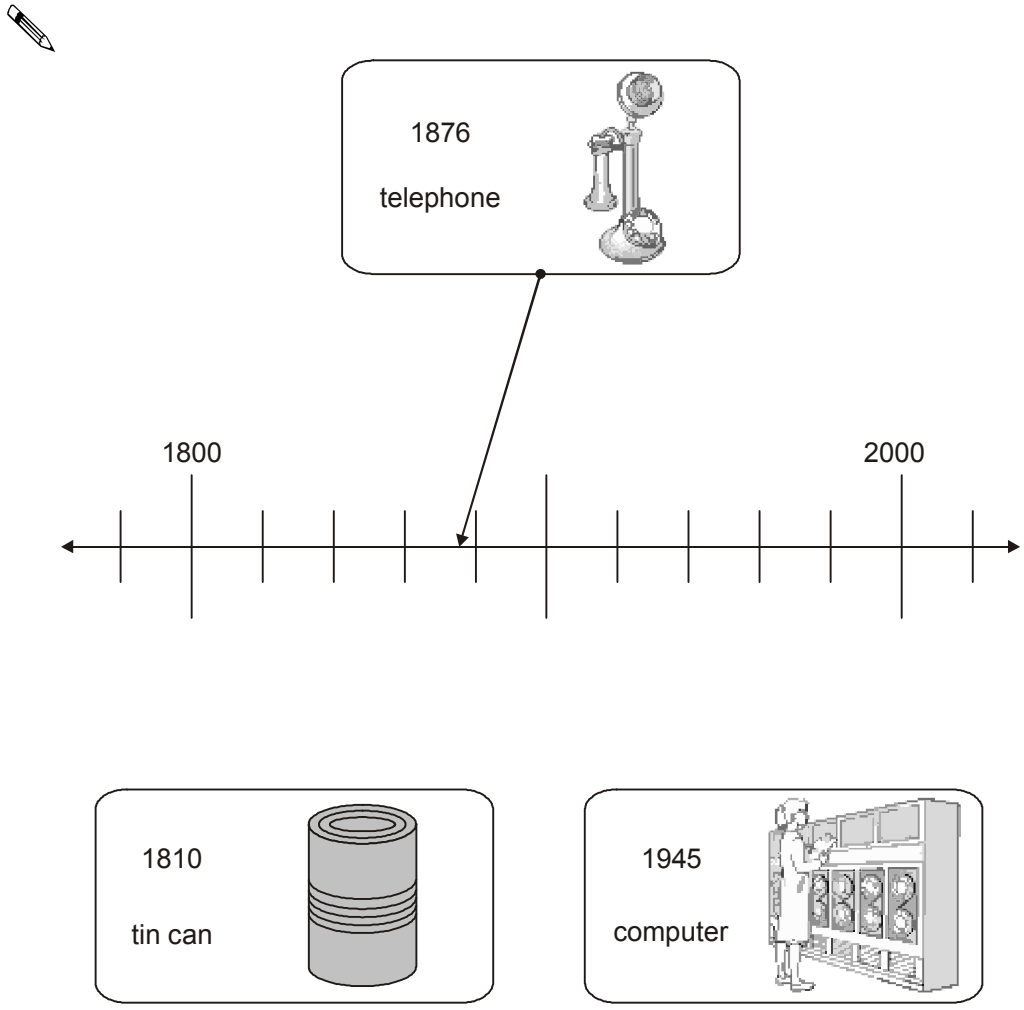


2 marks

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.



2 marks

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.

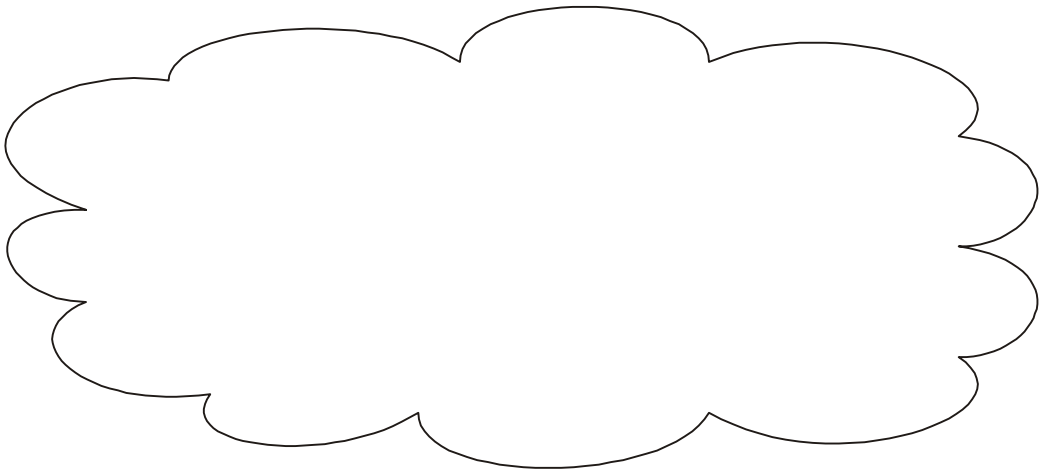
71	72	73	74	75

1 mark

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

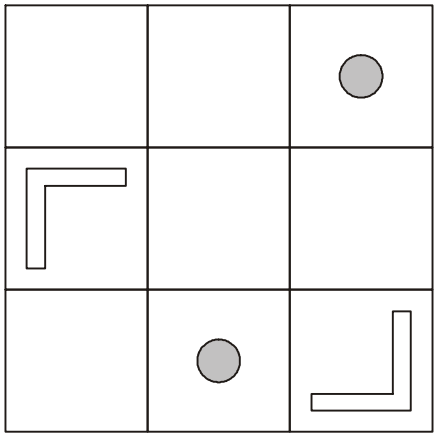
Yes / No

Explain how you know.



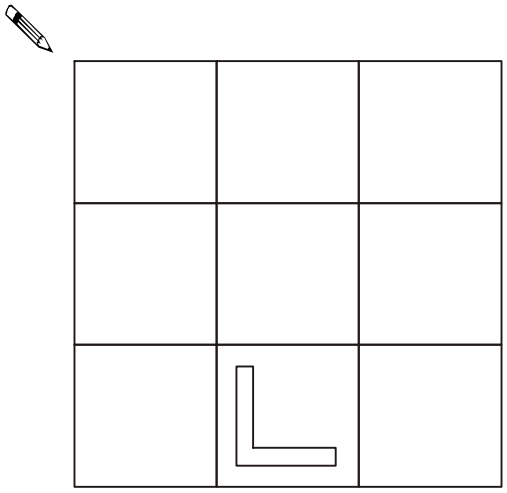
1 mark

16. There are four shapes on this diagram.



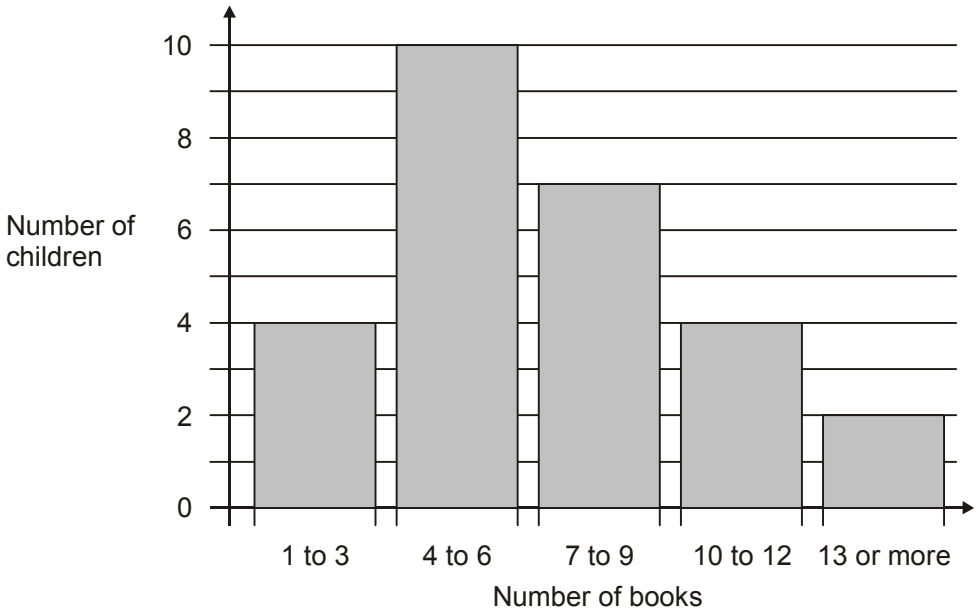
The diagram is turned to the new position below.

Draw the three missing shapes.

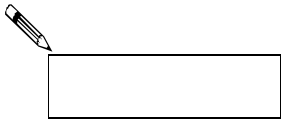


2 marks

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



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



1 mark

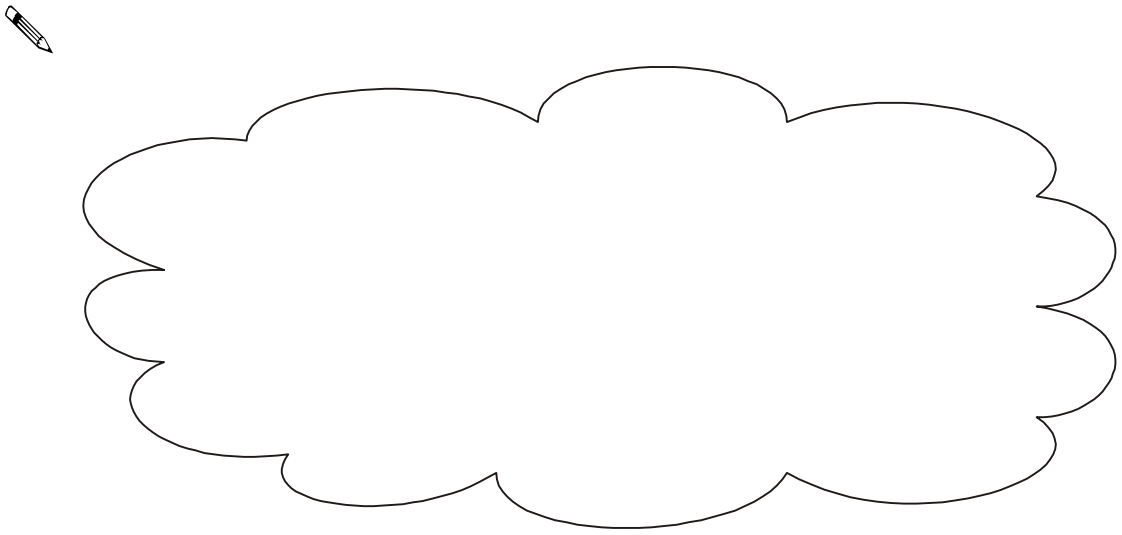
7 children read 4 books.

1 child read 5 books.

Lin says,

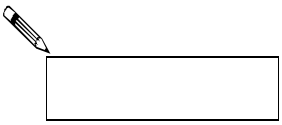
'That means 2 children read 6 books'.

Explain how she can work this out from the chart.



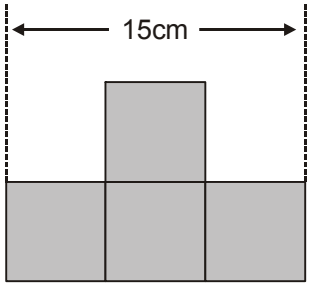
1 mark

18. Calculate 52.85 + 143.6



1 mark

19. This shape is made from 4 shaded squares.



Not actual size

Calculate the perimeter of the shape.

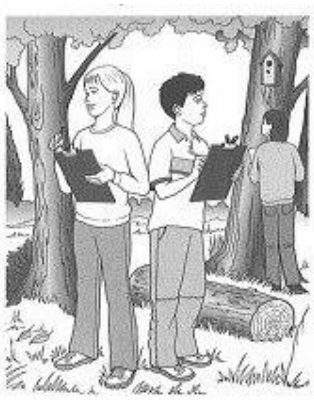
Show your **working.** You may get a mark.

cm

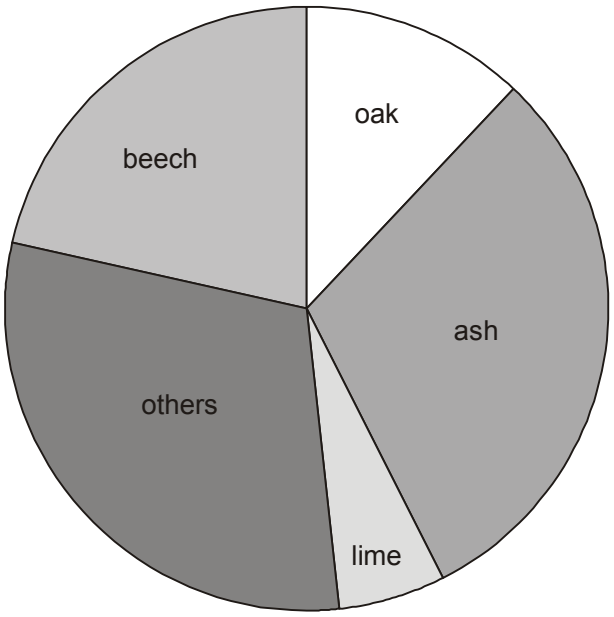
2 marks

20. Class 6 did a survey of the number of

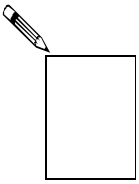
trees in a country park.



This pie chart shows their results.



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



1 mark

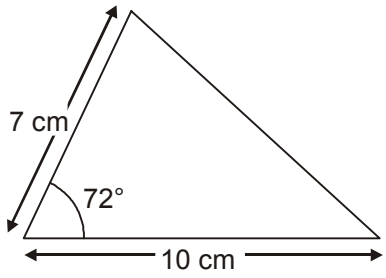
The children counted 60 **ash** trees.

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

1 mark

21. Here is a sketch of a triangle.

It is not drawn to scale.



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

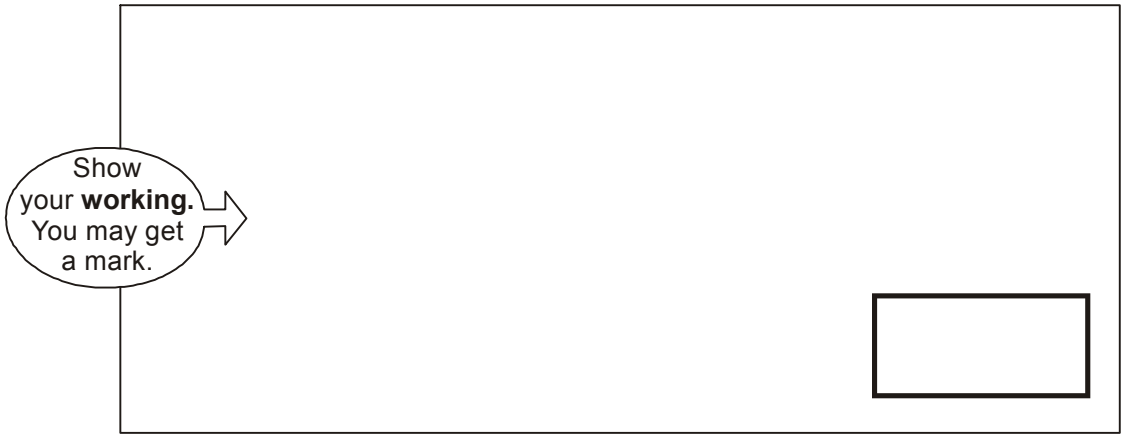
Use a protractor (angle measurer) and a ruler.

One line has been drawn for you.

10 cm

2 marks

22. Calculate 848 ÷ 16



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.

_____

2 marks