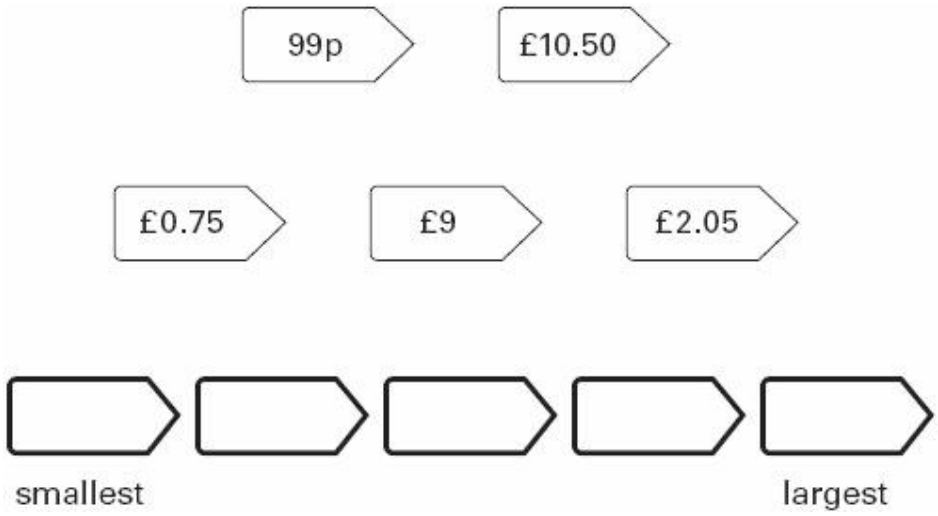
Mathematics

Test B

2005
40 min
40 marks
Calculator allowed

1. Write these prices in order from smallest to largest.



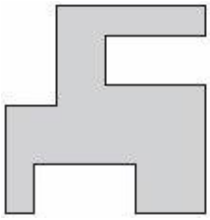
1 mark

2. Circle the numbers that add up to 100

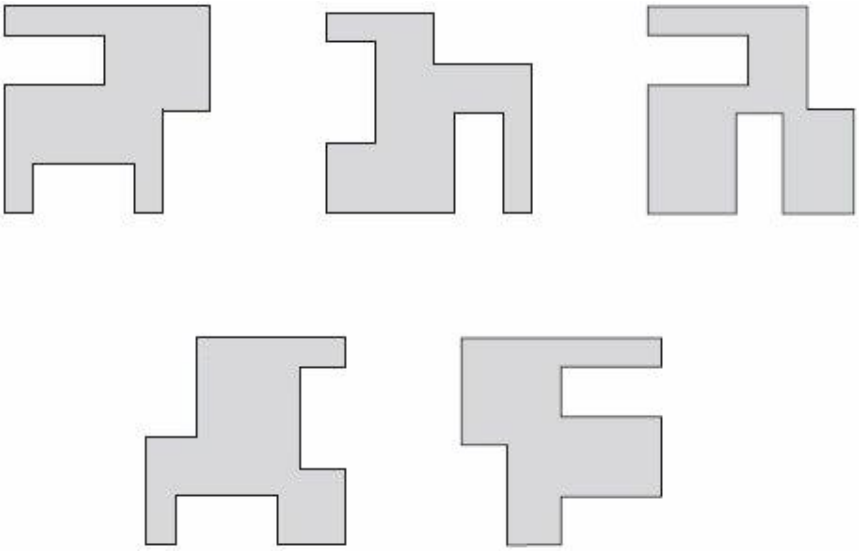
64 32 16 8 4 2 1

1 mark

3. Here is a shape.



Put a tick (✓) on the shape below which is the same as the one above.



1 mark

4. These are the prices of coconuts and bananas.

coconuts
78p each

bananas
£1.20 for 1kg

Josh buys **one coconut** and **half a kilogram** of **bananas**.

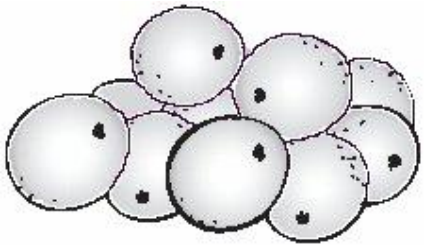
How much does he spend altogether?

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

£

2 marks

Oranges cost **25p** each.

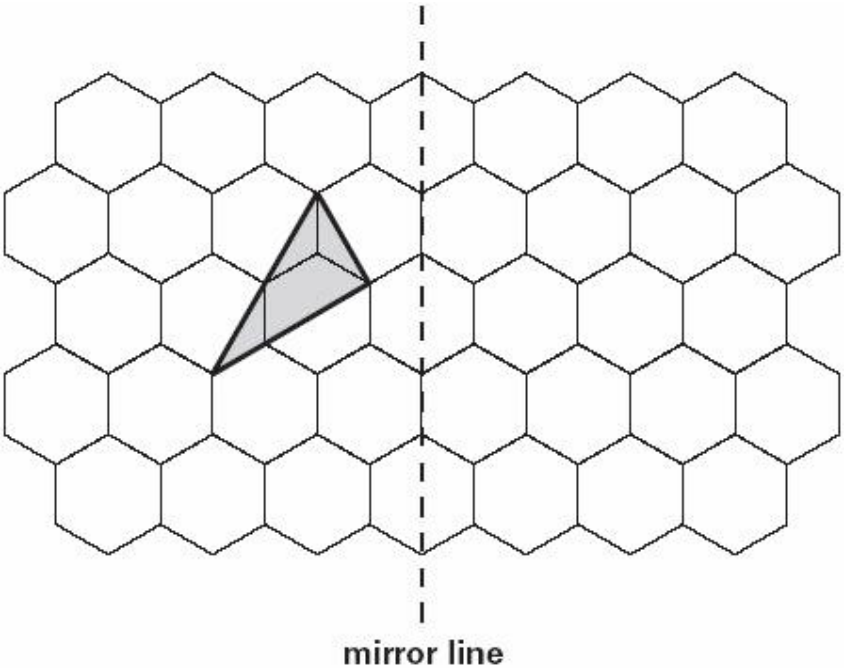


How many oranges can Josh buy for **£1.50**?

1 mark

5. This grid is made of hexagons.

Draw the reflection of the shaded shape on the grid.

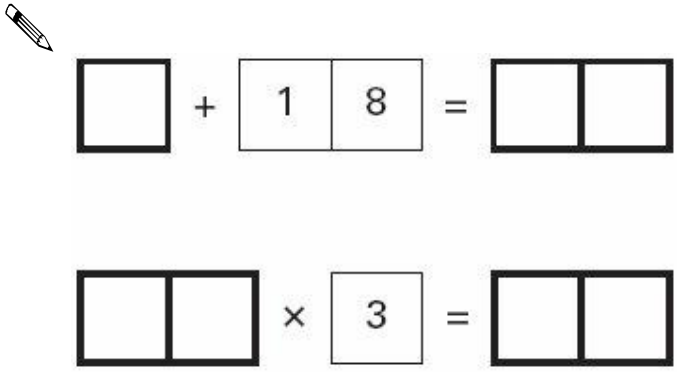


1 mark

6. Each missing digit in these calculations is **2**, **5** or **7**

Write in the missing digits.

You may use each digit more than once.



2 marks

7. This table shows information about four solid shapes.

Complete the table.

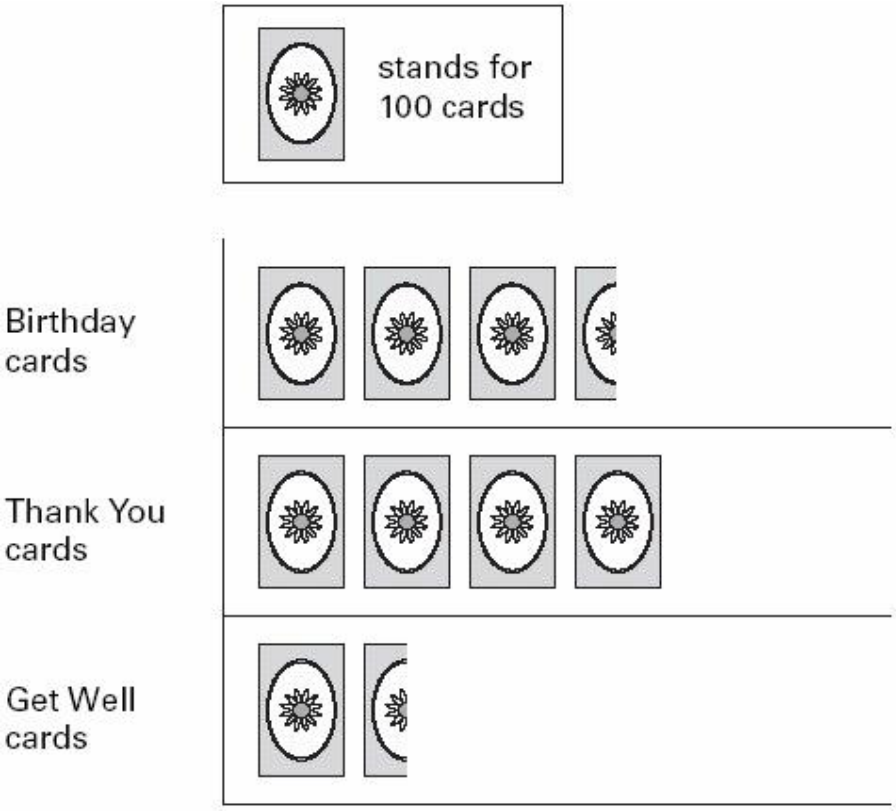
One has been done for you.

	number of **flat** surfaces	number of **curved** surfaces
sphere	0	1
cone		
cuboid		
cylinder		

2 marks

8. A shop sells different kinds of greeting cards.

This pictogram shows how many they sold in a week.



Estimate how many Birthday cards were sold.

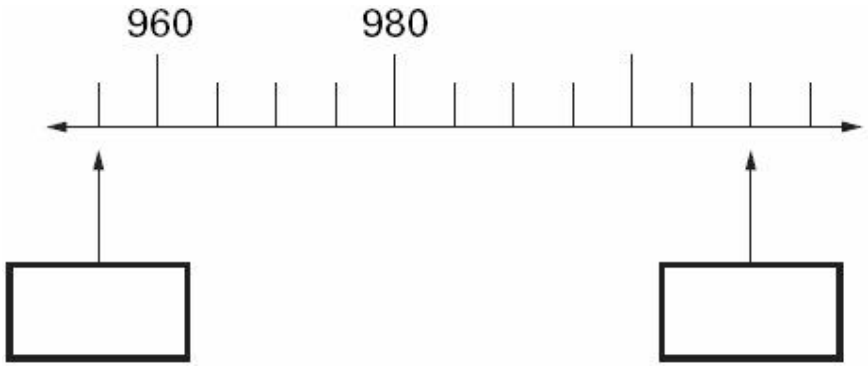
1 mark

Estimate how many more Thank You cards than Get Well cards were sold.

1 mark

9. Here is part of a number line.

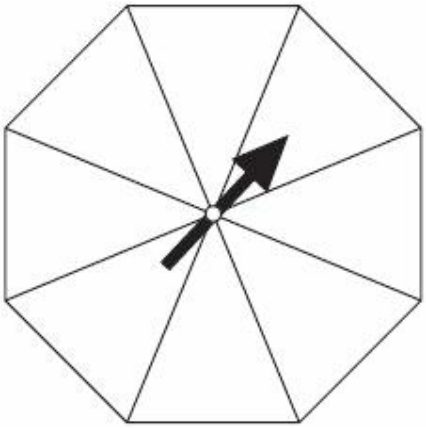
Write the two missing numbers in the boxes.



2 marks

10. Here is a spinner which is a regular octagon.

Write 1, 2 or 3 in each section of the spinner so that
1 and 2 are equally likely to come up and
3 is the least likely to come up.



2 marks

11. Josh thinks of a number.

He adds 4

He multiplies his result by 3

Then he takes away 9

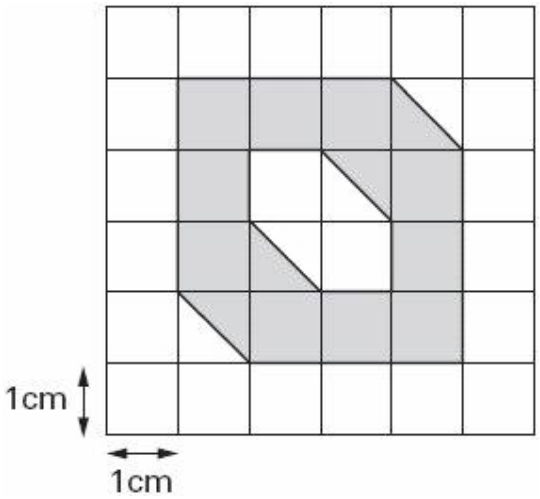
His final answer is 90

What number did Josh start with?

1 mark

12. Here is a 1cm square grid.

Some of the grid is shaded.



What is the **area** that is shaded?

cm²

1 mark

13.

Sapna and Robbie have some biscuits.

Altogether they have **14** biscuits.

Sapna has **2 more** biscuits than Robbie.

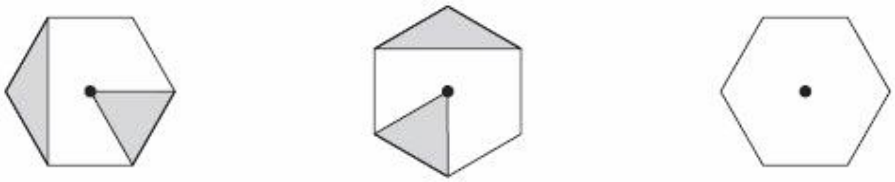
How many biscuits do Sapna and Robbie each have?

Sapna ☐ **Robbie** ☐

1 mark

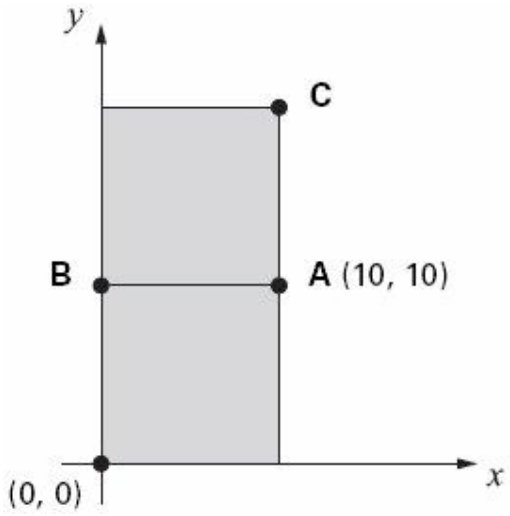
14. This pattern is made by turning a shape clockwise through 90° each time.

Draw the two missing triangles on the last shape.



1 mark

15. The diagram shows two identical squares.



A is the point (10,10)

What are the coordinates of **B** and **C**?

B is (,)

1 mark

C is (,)

1 mark

16. Write all the factors of 30 which are **also** factors of 20

.....

2 marks

17. 17 multiplied by itself gives a **3-digit** answer.

1	7	×	1	7	=	2	8	9

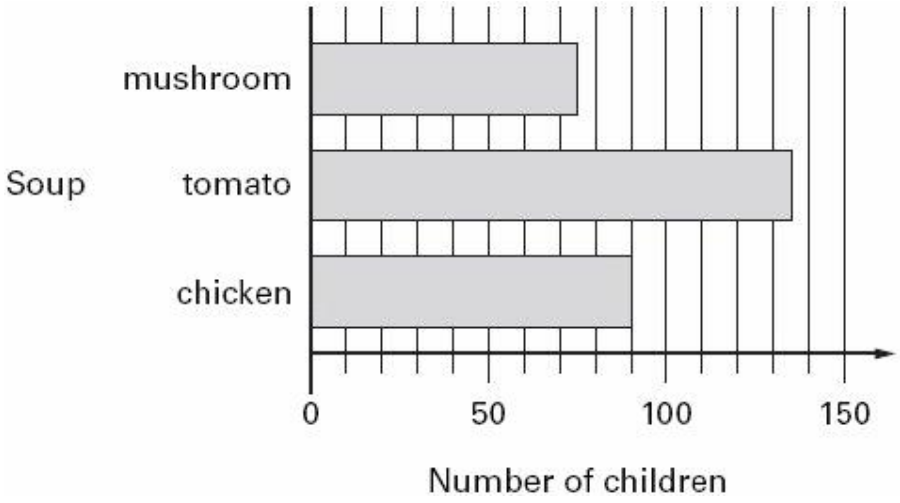
What is the **smallest** 2-digit number that can be multiplied by itself to give a **4-digit** answer?

		×			=				

1 mark

18. All the children at Park School chose their favourite soup.

The graph shows the results.



How many **more** children chose **chicken** soup than **mushroom** soup?

1 mark

Robbie says,

‘More than half of the children chose tomato soup’.

Is he correct?
Circle Yes or No.

Yes / No

Explain how you can tell from the graph.

.....

.....

.....

1 mark

19.

Sapna makes a fruit salad using bananas, oranges and apples.

For every one banana, she uses 2 oranges and 3 apples.

Sapna uses 24 fruits.

How many **oranges** does she use?

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

oranges

2 marks

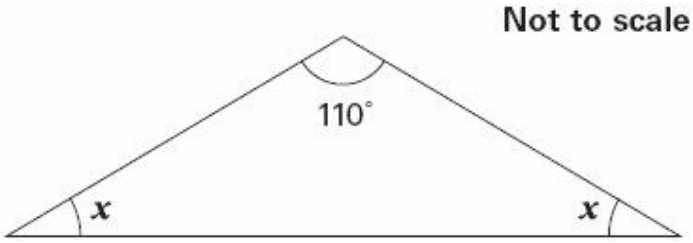
20. 7.4 8.1 9.4 10

Which two of these numbers, when multiplied together, have the answer closest to 70?

and

1 mark

21. Here is an isosceles triangle.



Calculate the size of angle x.

Do **not** use a protractor (angle measurer).

$x =$ ____ °

1 mark

22. On Monday all the children at Grange School each play one sport.

They choose either hockey or rounders.

There are **103** children altogether in the school.

27 girls choose hockey.

Write all this information in the table.
Then complete the table.

	hockey	rounders	Total
boys	22		
girls			53
Total			

2 marks

23. Write in the missing numbers.

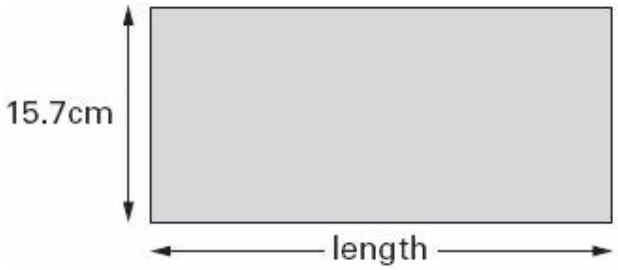
30% of 60 is ☐

1 mark

30% of ☐ is 60

1 mark

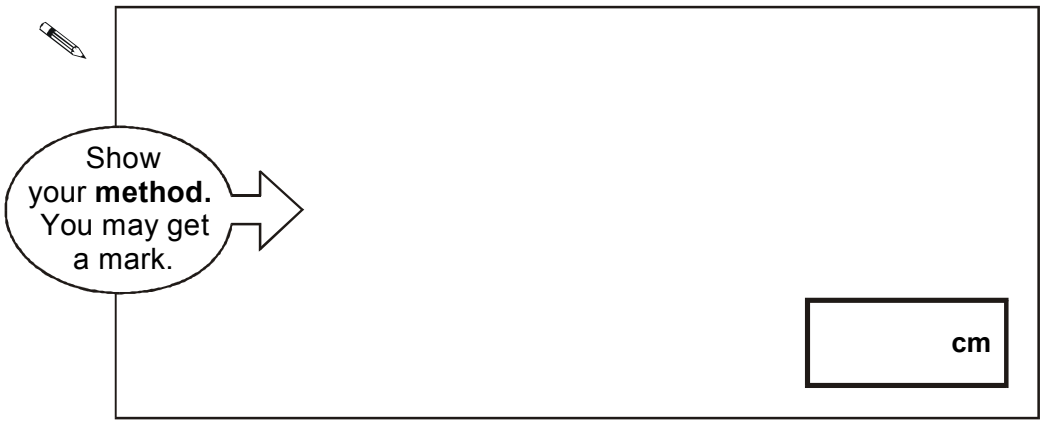
24. Here is a rectangle with a width of 15.7 centimetres.



Not actual size

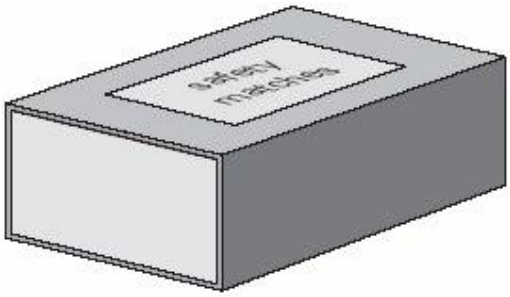
The **perimeter** of this rectangle is 85 centimetres.

Calculate the length of the rectangle.



2 marks

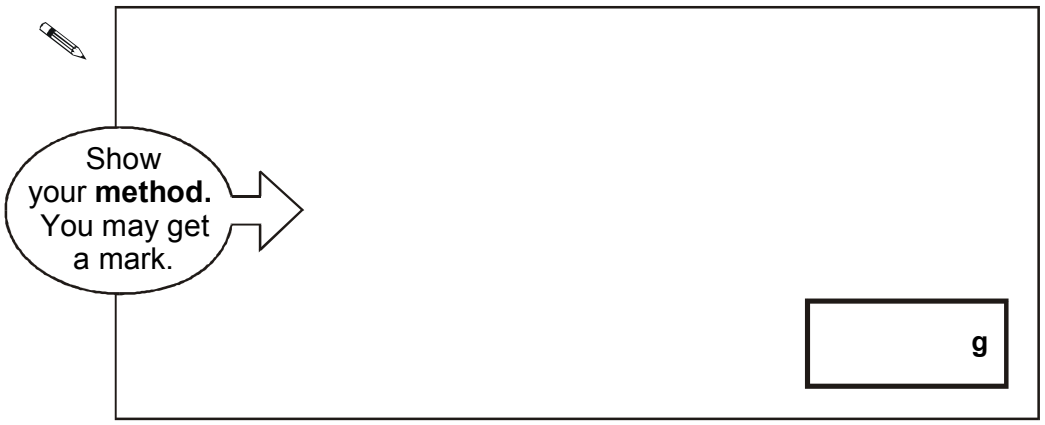
25.



A box contains 220 matches and weighs 45 grams.

The empty box weighs 12 grams.

Calculate the weight of **one** match.



2 marks