

# Year 4 – End of Spring Term

(On track to meet end of year expectations)

## Mathematics

### Paper 2: reasoning

First name	
Middle name	
Last name	

Total marks

## Instructions

You **may not** use a calculator to answer any questions in this test.

### Questions and answers

You have approximately **40 minutes** to complete this test.

Follow the instructions for each question.

Work as quickly and as carefully as you can.

If you need to do any working out, you can use the space around the question.

**Some question have a method box like this:**

Diagram illustrating a method box for showing working out. The box is labeled "Show your method" and is adjacent to a large grid of red lines. A smaller box is shown within the grid, indicating where to write the method.

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

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**.

### Marks

The number under each line at the side of the page tells you the maximum number of marks available for each question.

1

Fill in the numbers to complete the sequences.

27

36

45

54



1 mark

225

200

175

150



1 mark

2

Here is a place value chart.

What number would the circled parts make when combined?

0	1	2	3	4	5	6	7	8	9
0.0	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9
0.00	0.01	0.02	0.03	0.04	0.05	0.06	0.07	0.08	0.09

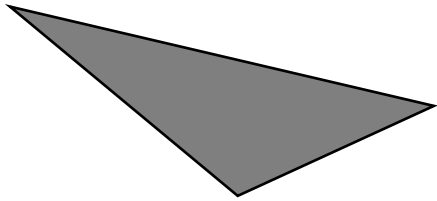
---



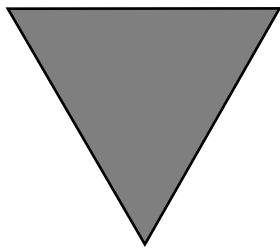
1 mark

3

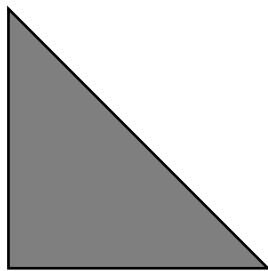
Match the triangle to its name.



equilateral



isosceles



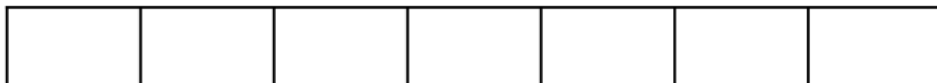
scalene



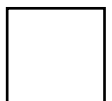
1 mark

4

Use the fraction strips to calculate  $\frac{5}{7} + \frac{6}{7}$




---



1 mark

5

What multiplication calculation is represented by these arrays?

Four empty 2x2 grids are provided for drawing. Each grid is a square divided into four smaller squares by a horizontal and a vertical line.

**x**  **x**

1 mark

6

Sara is saving up to buy a book that costs £12.90

She has £6.80 in her money box and is given £1.40 by her dad.

How much **more** does she have to save to buy the book?

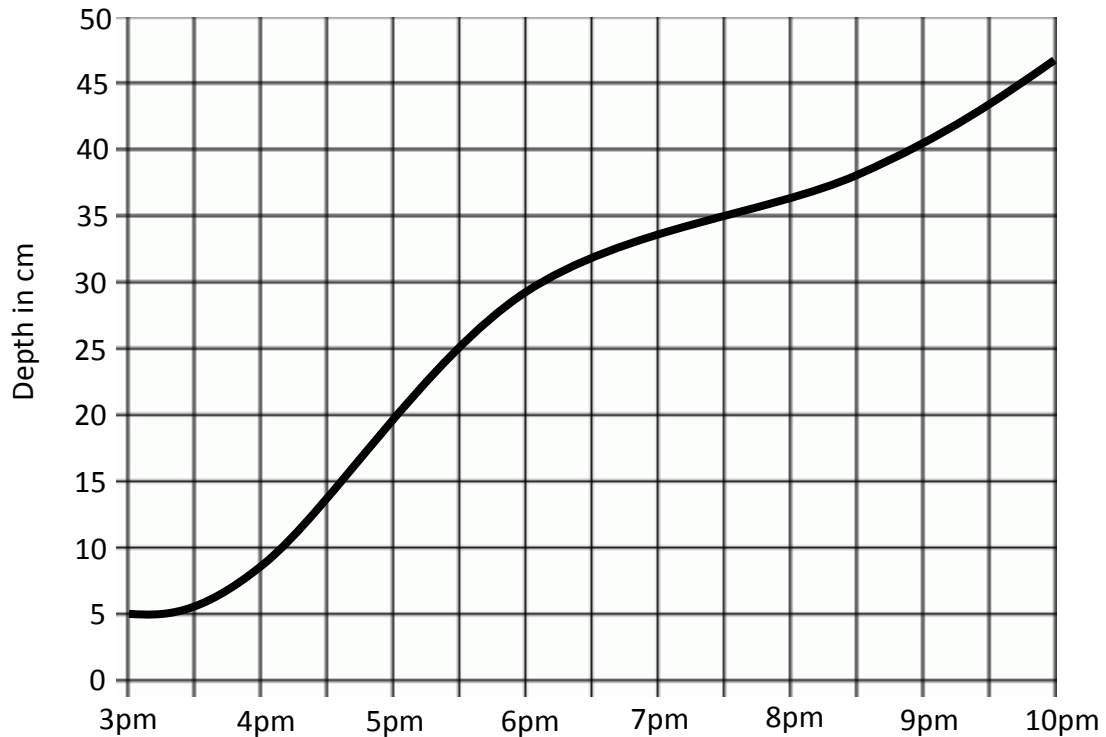
Show  
your  
method

[illegible]

2 marks

7

This graph shows the depth of snow at a school in Iceland during a snowstorm.



How deep was the snow at **6pm**?

  
cm

1 mark

How much snow fell **between 4pm and 8pm**?

  
cm

1 mark

8

Fill in the missing number to make the calculation correct.

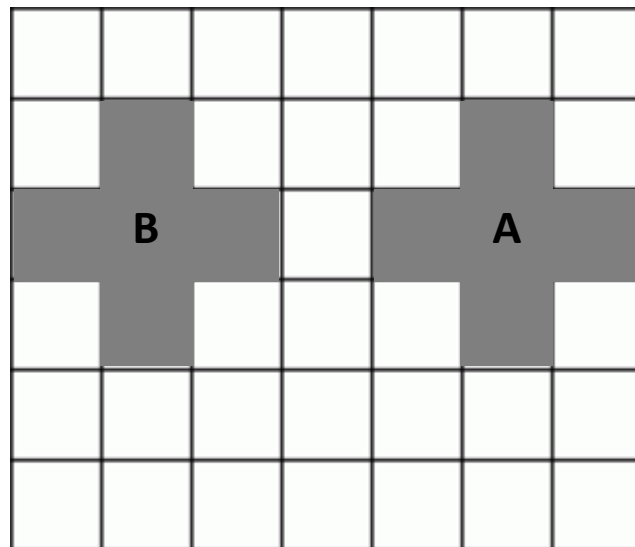
$$4 \times 6 = 8 + \square + 8$$

1 mark

9

The shape on the grid has moved from position A to position B.

Describe the movement the shape has made.




---



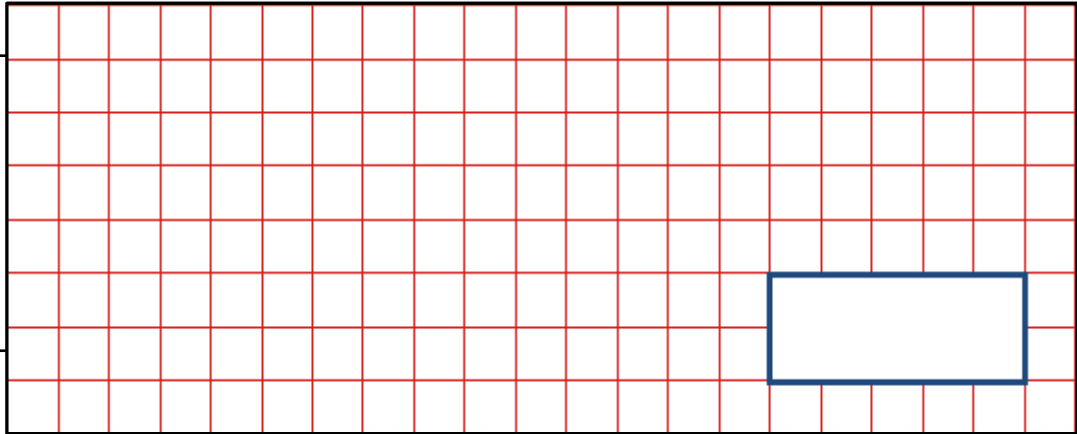
1 mark

10

Ben is reading a book.  
The book has 84 pages.  
Ben has one quarter of the book left to read.

How many pages of the book has Ben read?

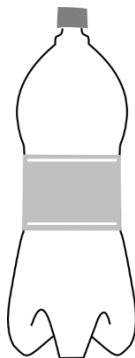
Show  
your  
method



2 marks

11

Put a ring around the capacity of this bottle of fizzy drink.

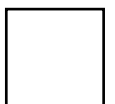


2 litres

20 litres

2ml

20ml

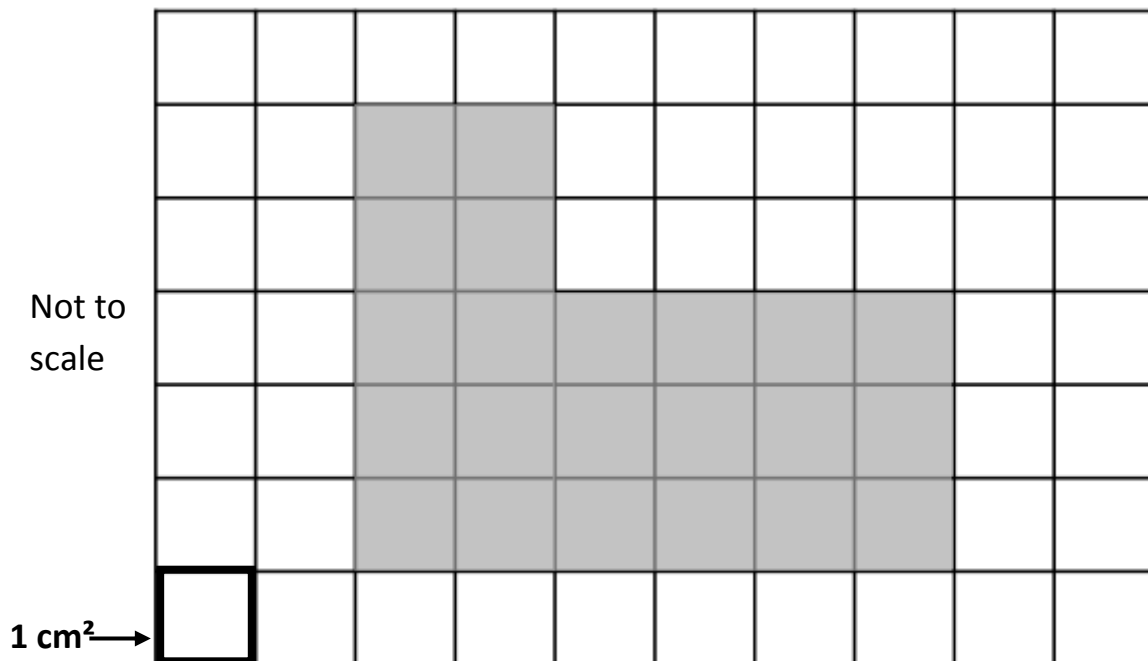


1 mark



12

Find the **area** of the shaded shape.



cm<sup>2</sup>



1 mark

13

How many **tenths** are there **altogether** in **1.8**?

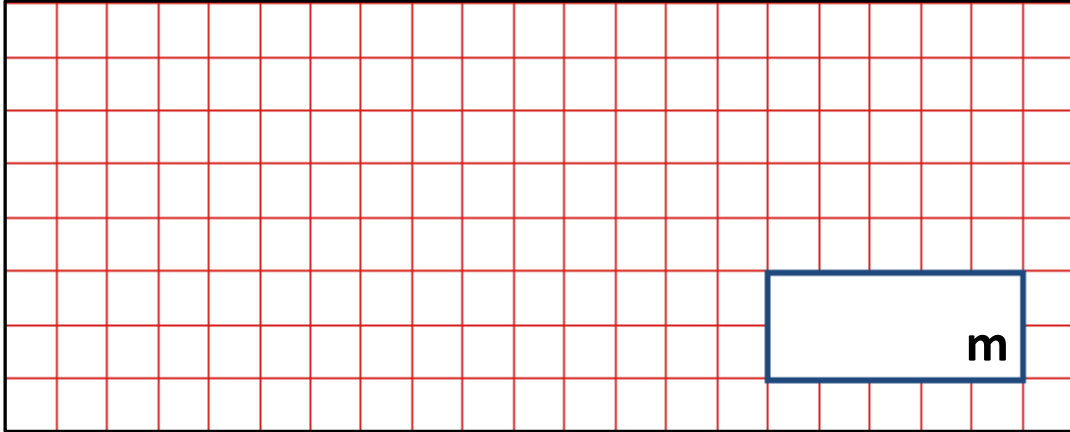


1 mark

14

Sara is doing a sponsored walk around the playground.  
One lap of the playground is 234 metres.

How far has Sara walked if she has completed **six laps** of the playground?



1 mark

Ben has walked 1,378m.

He wants to walk 2,000m in total.

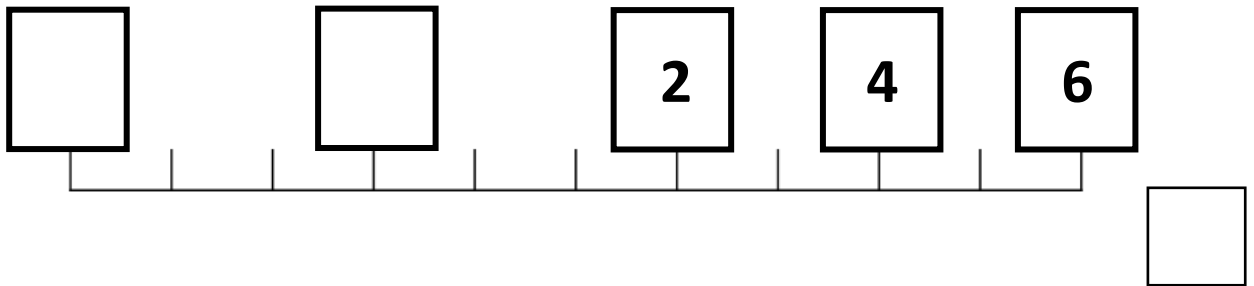
How much **further** does he need to walk?



1 mark

15

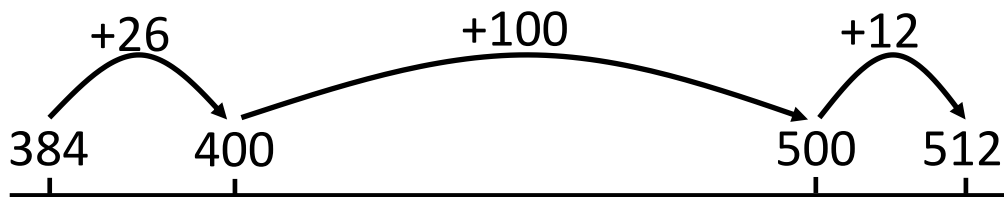
Label the missing numbers on the number line.



1 mark

16

Ali has calculated that the difference between 384 and 512 is 138. He worked it out by counting up on a number line.

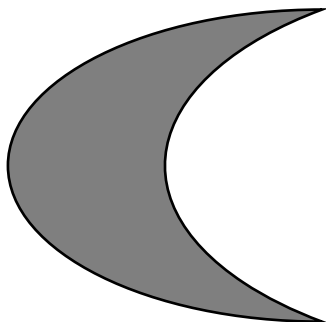
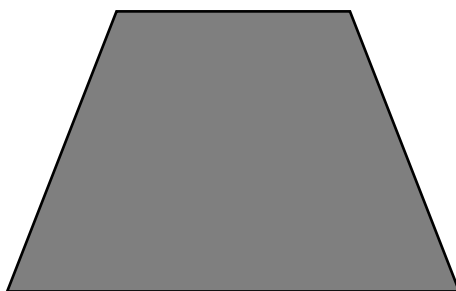
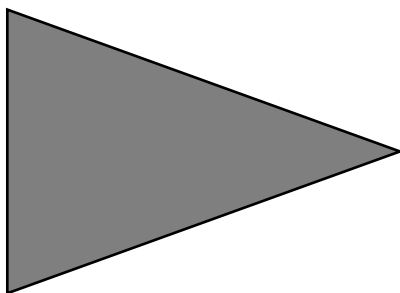


What mistake has Ali made?

1 mark

17

Tick all the shapes that have **at least one** line of symmetry.



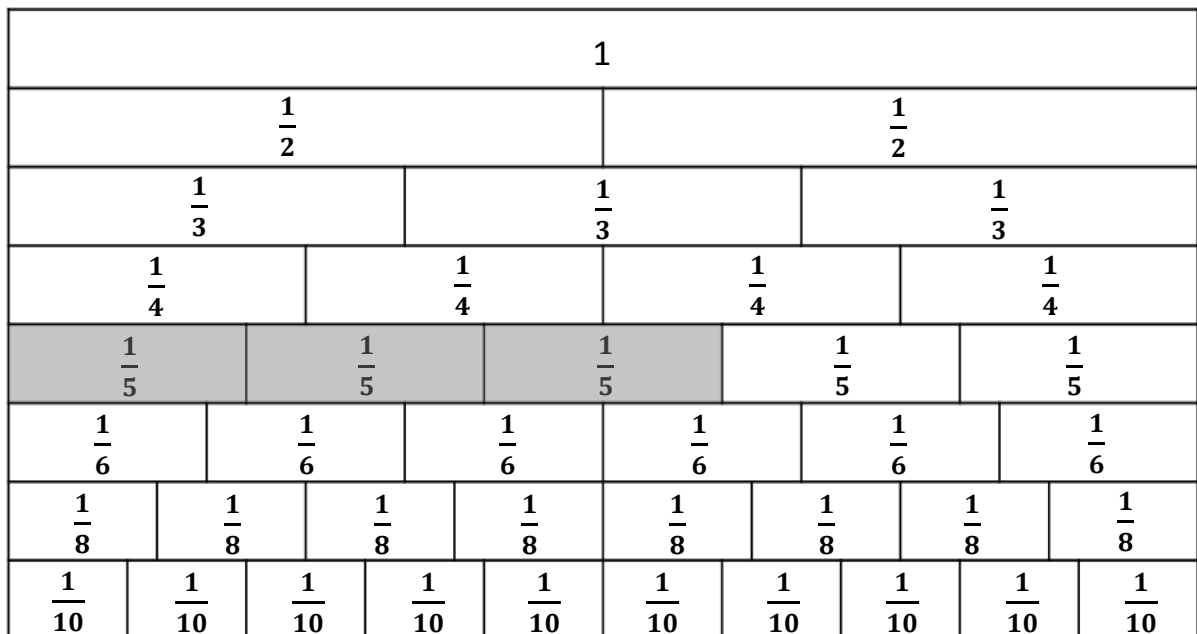
2 marks

18

Lin knows that  $6 \times 7 = 42$ Explain how she could use this to work out  $60 \times 7$ 

1 mark

19

Use the fraction wall to identify a fraction that is equivalent to  $\frac{3}{5}$ 

1 mark

**20**

Sort these numbers into the correct place on the diagram.

One has been done for you.

~~6~~

27

40

36

	multiple of 9	not a multiple of 9
multiple of 3		6
not a multiple of 3		

☐

1 mark

Write a number **between 50 and 60** that is **both a multiple of 3 and 9**

---

☐

1 mark

21

Fill in the missing numbers to complete these statements.

1 cm =  mm

1  = 24 hours

1 mark

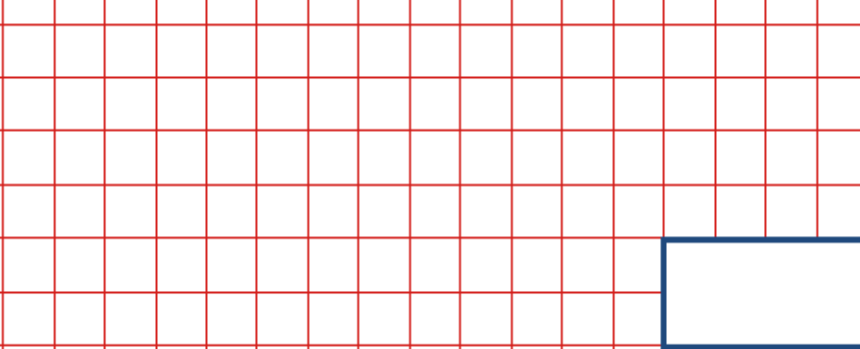
22

This table shows the highest mountains in the four countries of the United Kingdom.

Country	Mountain	Height in metres
England	Scafell Pike	978
Northern Ireland	Slieve Donard	850
Scotland	Ben Nevis	1344
Wales	Snowdon	1085

How much **shorter** is the highest mountain in **England** than the highest mountain in **Scotland**?

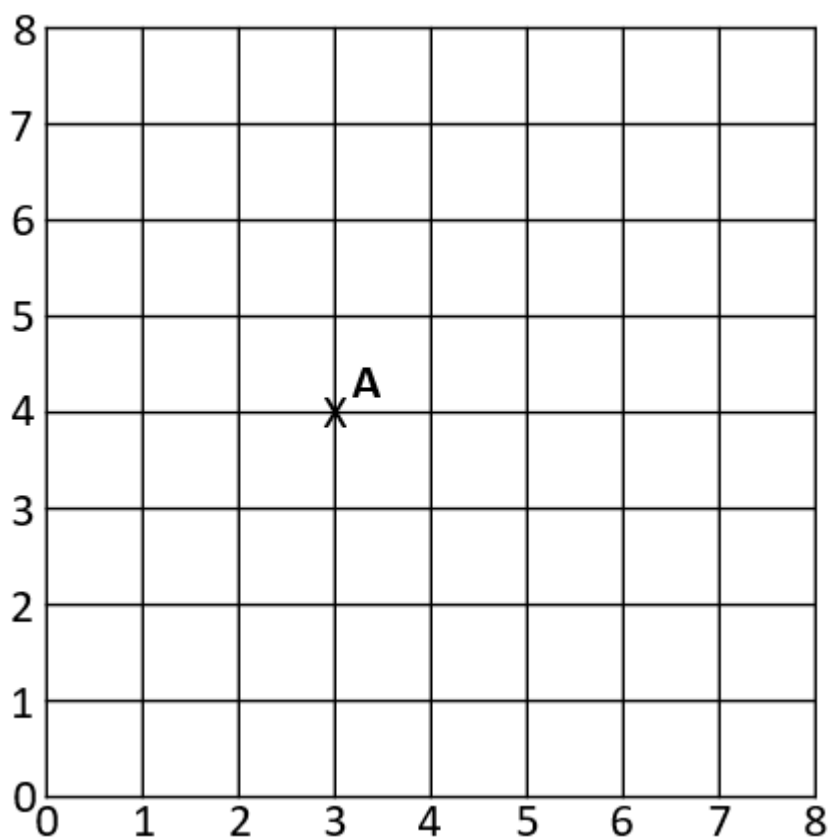
Show  
your  
method

A 20x10 grid of squares. A blue rectangle is drawn in the bottom right corner, spanning 5 squares horizontally and 2 squares vertically. The letter 'm' is written in the bottom right corner of the blue rectangle.

2 marks

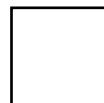
23

Here is a coordinate grid.



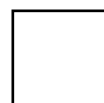
Write the coordinates of point A.

---



1 mark

On the grid, plot point B at (7, 2).



1 mark



**24**Sara is asked to calculate  $19 \times 5$ 

Tick the calculations that she could use to solve this.

$20 \times 5 - 1$

☐

$20 \times 5 - 5$

☐

$19 \times 10 - 5$

☐

$19 \times 10 \div 2$

☐

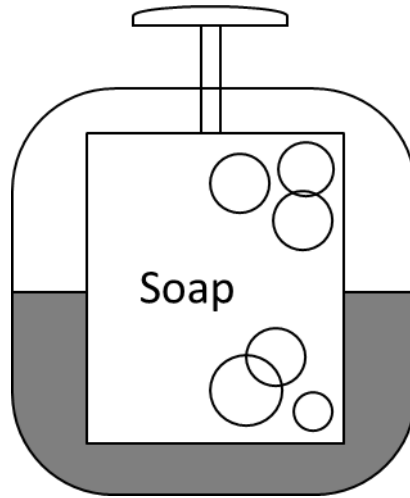
$10 \times 5 + 9 \times 5$

☐☐

2 marks

25

Estimate the amount of soap left in this bottle if the bottle had 250ml when it was full.



ml

1 mark

**END OF TEST**