

Progress check

Year 4

Mathematics

Paper 2: reasoning and problem solving

| | | | | | | |
|---------------|-----|--|-------|--|------|--|
| First name | | | | | | |
| Middle name | | | | | | |
| Last name | | | | | | |
| Date of birth | Day | | Month | | Year | |
| Teacher | | | | | | |

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These assessments have been designed by the White Rose Maths Hub.
For more information, please visit www.whiterosemathshub.co.uk

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Instructions

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

Questions and answers

You have **35 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 working out, you can use the space around the question.

Some questions have a method box like this:

Show your 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 for each question.

1

Write the next two numbers in each sequence.

| | | | | |
|---|----|----|--|--|
| 6 | 12 | 18 | | |
|---|----|----|--|--|

| | | | | |
|----|----|----|--|--|
| 21 | 28 | 35 | | |
|----|----|----|--|--|

| | | | | |
|----|----|----|--|--|
| 90 | 81 | 72 | | |
|----|----|----|--|--|

3 marks

2

Mihal is counting aloud from 0 to 250 in 25s.

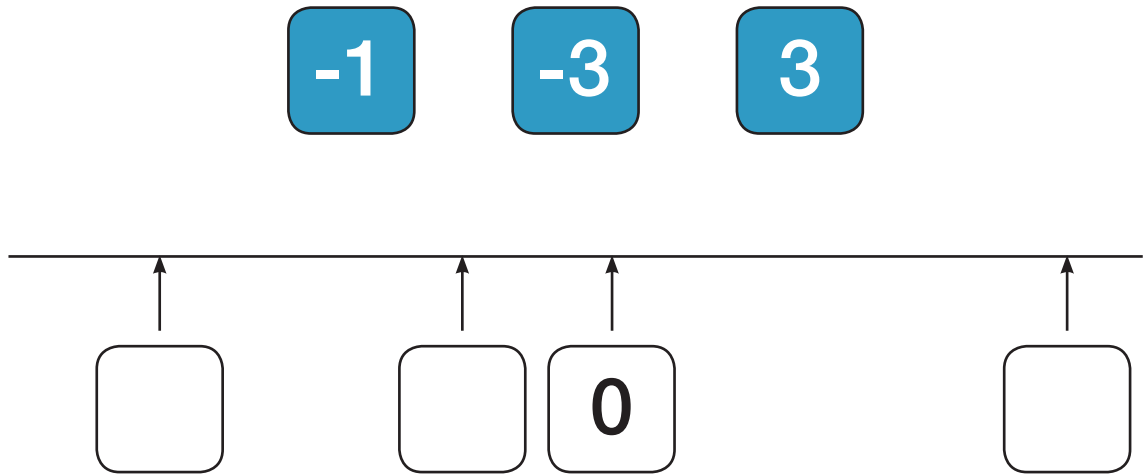
Does he say the number 150?

Show your reasoning.

1 mark

3

Use the numbers to complete the number line.



1 mark

4

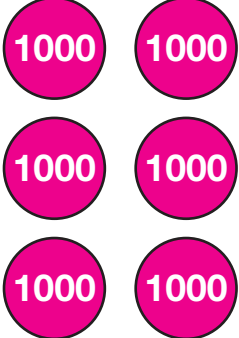
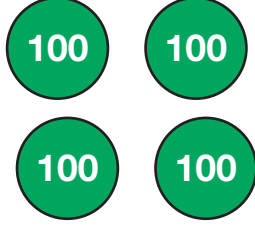
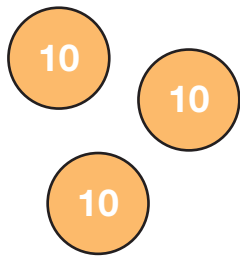
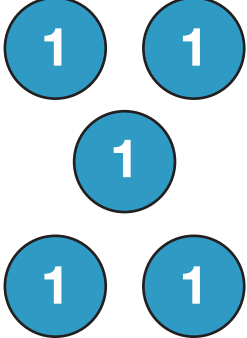
Complete the missing value.

$$3683 = 3000 + 600 + \boxed{} + 3$$

1 mark

5

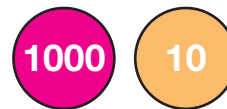
Jenny makes a 4 digit number on a place value grid.

| 1000s | 100s | 10s | 1s |
|---|---|--|---|
|  |  |  |  |

What is Jenny's number rounded to the nearest 1000?

1 mark

Jenny takes away these two counters



What number will she have now?

1 mark

6

Fill in the boxes so the numbers are in **descending** order.

3 17, 33 5, 339 , 764

2 marks

7

Complete the table.

| Starting number | Rounded to the nearest 10 | Rounded to the nearest 100 |
|-----------------|---------------------------|----------------------------|
| 326 | | |
| | 2550 | 2500 |

2 marks

8

Here is a number written in Roman numerals.

XXVIIWhat is **double** this number?

Write your answer in figures.

1 mark

10

Helen is calculating $3465 + 2951$

She decides to estimate her answer first.

Tick (✓) the best estimate.

$$3000 + 2000 = 5000 \quad \square$$

$$4000 + 3000 = 7000 \quad \square$$

$$3500 + 2000 = 5500 \quad \square$$

$$3500 + 3000 = 6500 \quad \square$$

Explain your answer.

1 mark

11

Fill in the missing numbers.

$$\begin{array}{r} 5 \square 7 2 \\ - 2 6 1 \square \\ \hline \square 3 \square 8 \end{array}$$

2 marks

13

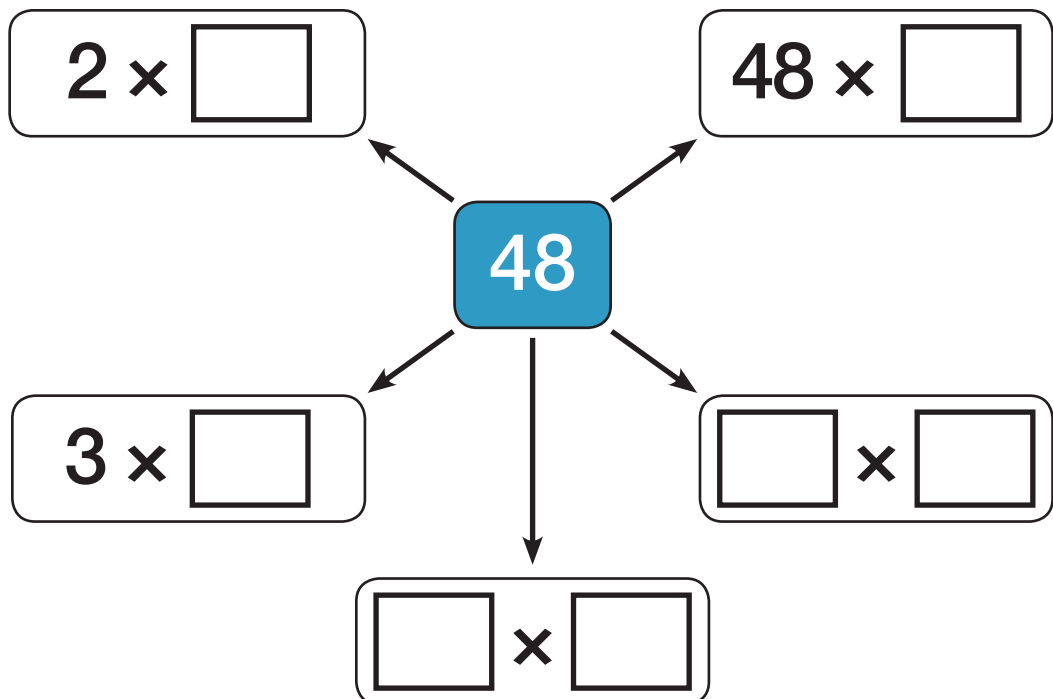
Fill in the missing number.

$$5 \times 8 \times 9 \times \boxed{} = 0$$

Explain your answer.

1 mark

14


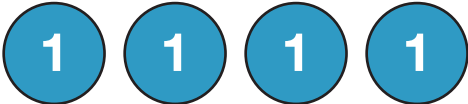


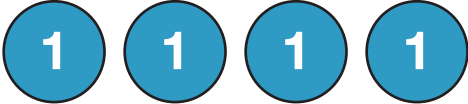

Use **different** whole numbers to complete the diagram.

2 marks

15

Waseem is using place value counters to solve 24×4

Fill in the missing counters on the grid.

| Tens | Ones |
|---|--|
|  |  |
|  | |
|  |  |
| |  |

1 mark

Calculate the answer to his multiplication.

1 mark

16Complete the statements using $<$, $>$ or $=$

$$72 \times 3 \quad \square \quad 72 \times 4$$

$$72 \div 3 \quad \square \quad 72 \div 4$$

1 mark

17

Kelsey buys some fairy cakes for a party.

She buys 38 packs.

There are 6 fairy cakes in each pack.

189 fairy cakes are eaten.

How many fairy cakes does Kelsey have left?

Show
your
method

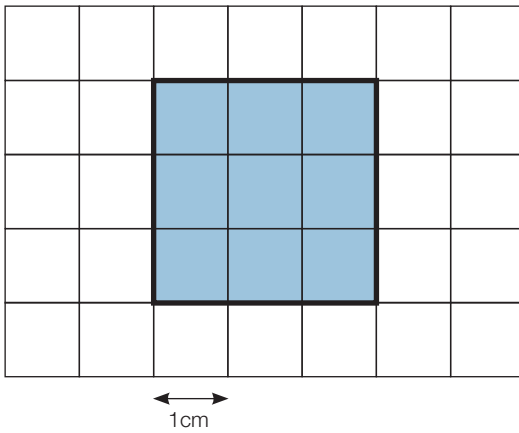
A large grid for showing the method to solve the problem. A small empty rectangular box is provided at the bottom right of the grid for the final answer.

2 marks

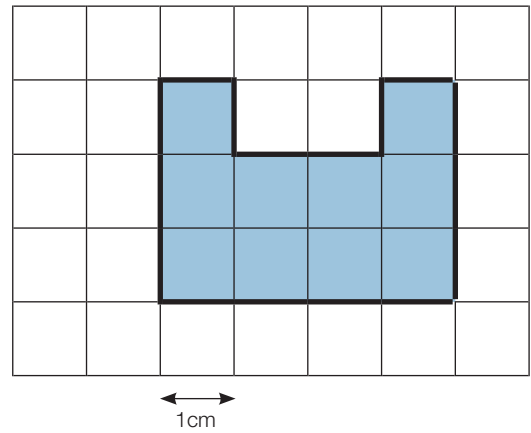
18

Two shapes are drawn on 1cm × 1cm square grids.

Shape A



Shape B



What is the **area** of shape A?

cm²

1 mark

Which shape has the largest area?

Explain your answer.

1 mark

END OF TEST

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