

# 2019 national curriculum tests

## Key stage 2

# MATHEMATICS

## Modified large print

## Paper 2: reasoning

**First name**

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**Middle name**

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**Last name**

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**Date of birth**

**Day**

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**Month**

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**Year**

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**School name**

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**DfE number**

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**Note to markers:**

**This paper should be marked using the modified large print amendments to the mark schemes – MLP with the standard mark schemes for KS2 Mathematics: Paper 2.**

STA/19/8217/MLp

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# Instructions

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

## Questions and answers

**You have 40 minutes to complete this test, plus your additional time allowance.**

**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 any space on the page.**

**Some questions say ‘Show your method.’**

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

**If you cannot do a question, 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.**

1. Look at the three multiplications below.

Write the missing numbers in the boxes.

$$4 \times 8 = \square$$

$$3 \times \square = 21$$

$$8 \times \square = 56$$

2. Write the number that is **1 000** less than **9 072**

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**3. Order the numbers below starting with the largest.**

**Draw lines to match each number with its order.**

**1 230 650**

**1<sup>st</sup>**

**largest**

**1 009 909**

**2<sup>nd</sup>**

**1 023 065**

**3<sup>rd</sup>**

**1 009 099**

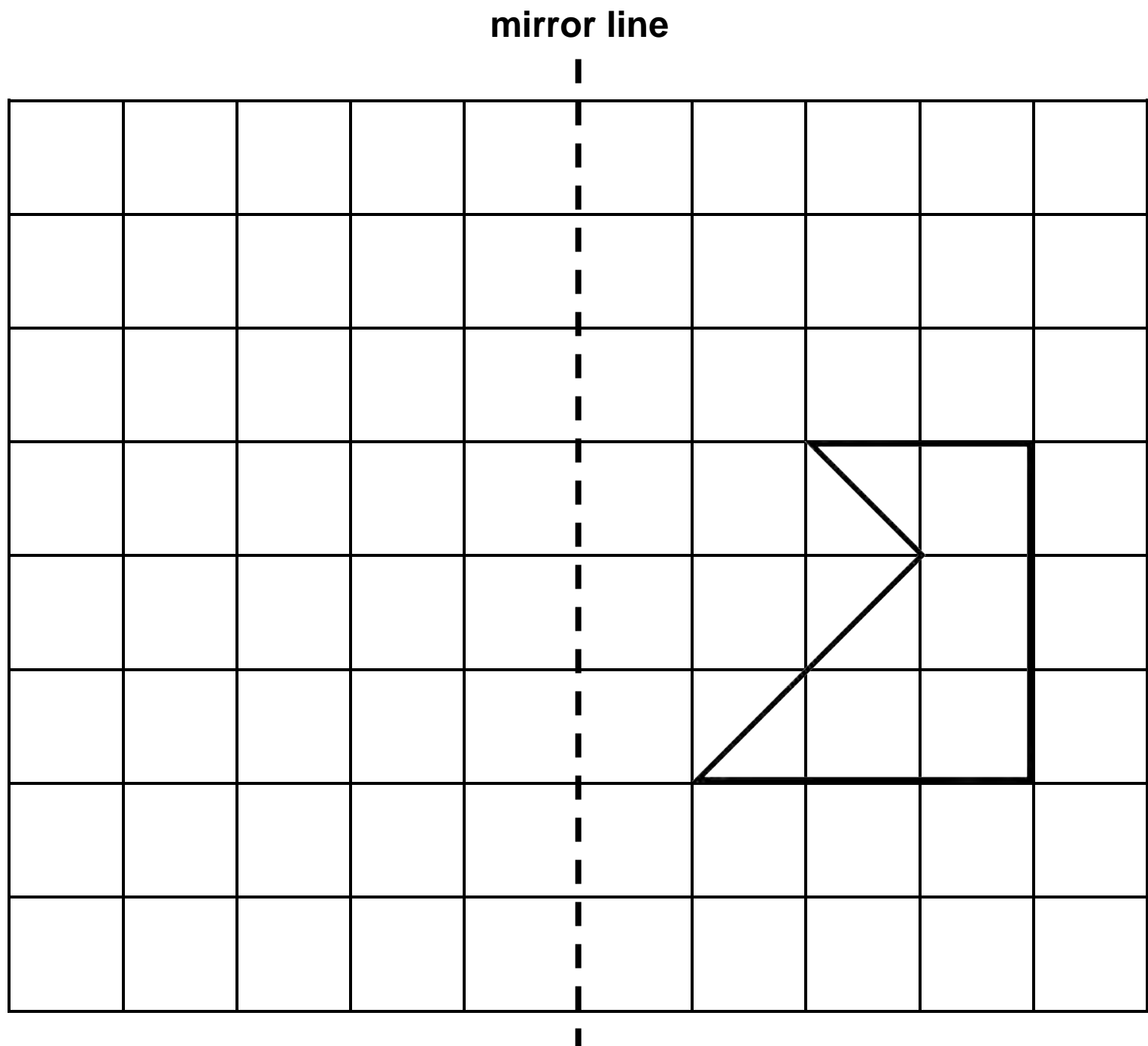
**4<sup>th</sup>**

**smallest**

**4. You have a cut-out shape for this question.**

**Look at the diagram below.**

**A shape is drawn on a square grid.**



**Reflect the shape in the mirror line.**

**Use a ruler.**

5. Look at the sequence below.

The numbers increase by **45** each time.

\_\_\_\_\_ **155**   **200**   **245**   \_\_\_\_\_   \_\_\_\_\_

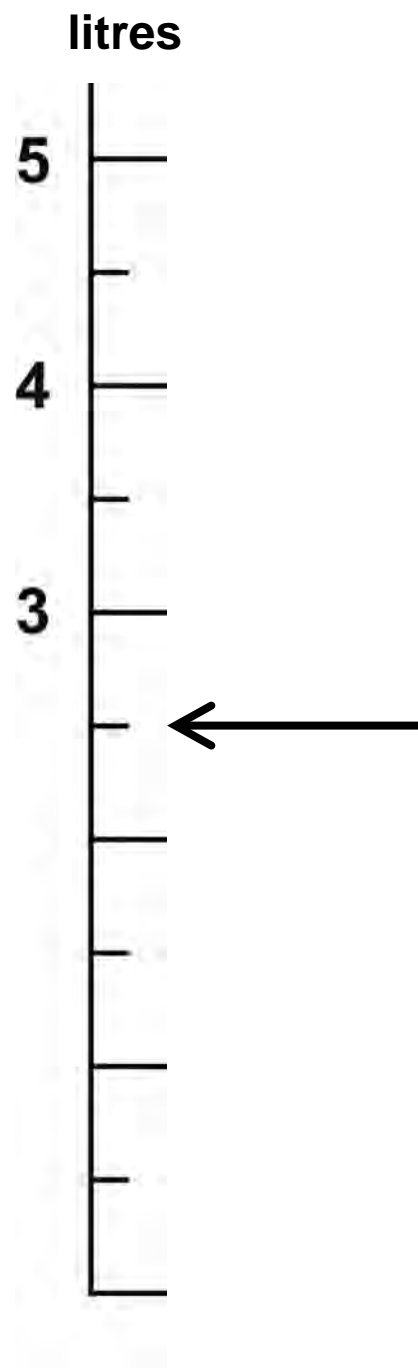
Write the missing numbers in the three spaces.

6. Write the missing number in the box to make the division below correct.

$$0.3 \div \boxed{\phantom{00}} = 0.03$$

**7. Look at the number scale below.**

**It measures litres.**



**Write the number of litres the arrow is pointing to.**

\_\_\_\_\_ litres

8. In the sequence below, the rule to get the next number is multiply by **2** and then add **3**

Some numbers in the sequence are shown below.

\_\_\_\_\_ **25** **53** \_\_\_\_\_

Write the missing numbers in the two spaces.

9. Jack chose a number.

He multiplied the number by **7**

Then he added **85**

His answer was **953**

What number did Jack choose?

Show your method.

\_\_\_\_\_

**10. A theme park sells tickets online.**

**Each ticket costs £24**

**There is a £3 charge for buying tickets.**

**Look at the four calculations below.**

**number of tickets  $\times$  3 + 24**

**number of tickets  $\times$  24 + 3**

**number of tickets + 3  $\times$  24**

**number of tickets + 24  $\times$  3**

**Tick the calculation that shows how to calculate the total cost in pounds.**

**11. Amina is shopping.**

**She says that she would like to buy one-quarter of a kilogram of cheese.**

**Write one-quarter as a decimal.**

\_\_\_\_\_ kg

**The cheese costs £1.35**

**Amina pays with a £2 coin.**

**How much change should Amina get?**

\_\_\_\_\_

12. Look at the three symbols below.

$<$        $>$        $=$

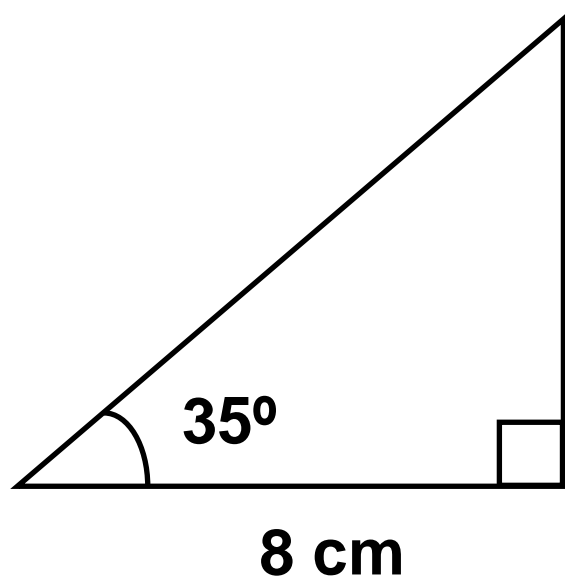
Write one symbol in each box below to make the statements correct.

$$\frac{7}{10} \quad \boxed{\phantom{00}} \quad 0.07$$

$$\frac{23}{1000} \quad \boxed{\phantom{00}} \quad 0.23$$

**13. Look at the sketch of a triangle below.**

**It is not drawn to scale.**



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

**Use the diagram on a separate sheet.**

**Use an angle measurer (protractor) and a ruler.**

**One line has been drawn for you.**

14. Round **39 476** to the nearest **10 000**

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Round **39 476** to the nearest **1 000**

---

Round **39 476** to the nearest **100**

---

15. Amina asked **60** children to choose their favourite flavour of jelly.

Her results are shown in the table below.

Flavour	Number of children
Raspberry	<b>12</b>
Lemon	<b>8</b>
Orange	<b>15</b>
Blackcurrant	<b>25</b>
Total	<b>60</b>

What percentage of the **60** children chose orange?

\_\_\_\_\_ %

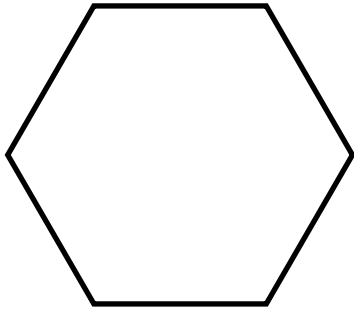
16.  $6 + 2 \times 2 - \boxed{\phantom{00}} = 6$

Write the missing number in the box.

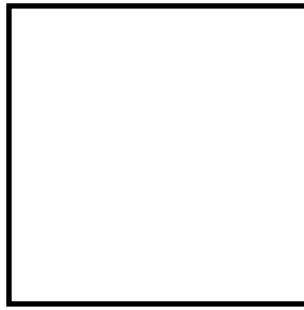
**17. Look at the two shapes below.**

**They are not actual size.**

**regular hexagon**



**square**



**The two shapes have the same perimeter.**

**The length of each side of the hexagon is 8 centimetres.**

**Calculate the area of the square.**

**Show your method.**

\_\_\_\_\_ **cm<sup>2</sup>**

**18. Look at the three numbers below.**

**95      89      87**

**Write the prime number.**

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**Explain how you know the other numbers are **not** prime.**

19. A machine pours **250** millilitres of juice every **4** seconds.

How many litres of juice does the machine pour every minute?

Show your method.

\_\_\_\_\_ litres

**20. Look at the five fractions below.**

$$\frac{1}{20}$$

$$\frac{20}{40}$$

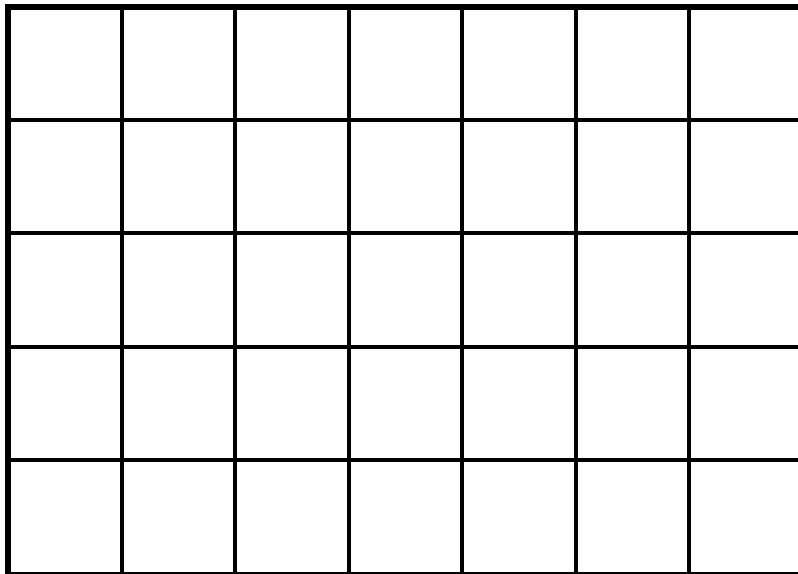
$$\frac{1}{5}$$

$$\frac{3}{15}$$

$$\frac{2}{100}$$

**Tick the fractions that are equal to 20%**

- 21. Adam has this rectangular piece of card. It is marked with grid lines.**



**Adam makes one straight cut along the grid lines.**

**The cut divides the rectangle into 2 shapes:**

**1 square and**

**1 rectangle.**

**Using the grid lines, draw one line that shows where Adam could have made his cut.**

**You may use the diagram on a separate sheet.**

**Use a ruler.**

22. The table below shows the maximum temperature for five days.

Day	Temperature °C
Monday	8.1
Tuesday	9.3
Wednesday	11.9
Thursday	11.8
Friday	12.4

For what fraction of the five days was the maximum temperature below 10°C?

\_\_\_\_\_

What was the mean maximum temperature, to one decimal place?

Show your method.

\_\_\_\_\_ °C

**23. Amina makes a cuboid using centimetre cubes.**

**Her cuboid has**

**length 6 cm**

**width 3 cm**

**height 4 cm**

**Stefan makes a cuboid that is**

**5 cm longer**

**5 cm wider**

**5 cm taller than Amina's cuboid**

**What is the difference between the number of cubes in Amina's and Stefan's cuboids?**

**Show your method.**

**\_\_\_\_\_ cubes**

**END OF TEST**



2019 key stage 2 mathematics

Paper 2: reasoning

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