

## **Transcript of the Braille Version**

2018 national curriculum tests

Key stage 2

Mathematics

Braille

Paper 3: reasoning

**[braille page 1]**

On your paper write:

Your first name

Your last name

Your date of birth

Your school name

**Instructions**

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

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.

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.

The questions are on different types of paper and diagrams are on opposite pages. Make sure you read everything carefully.

\_\_\_\_\_ has been used in some questions to indicate a missing number, symbol or word.

.....

## **Test administration guidance**

Please write the school DfE number on the pupil's braille script.

If you are acting as a scribe for a braillist, write the pupil's answers on a sheet of plain or lined paper and attach the braille diagrams showing the pupil's work.

**[braille page 2]**

1. Look at the sequence below.

\_\_\_\_ 42 49 \_\_\_\_ 63 \_\_\_\_

The numbers in this sequence increase by the same amount each time.  
Write the missing numbers.

.....

2. Adam chooses the colours for a new team shirt.

The shirt has two colours.

There are four colours to choose from: yellow, blue, white and red.

There are six different combinations.

The shirt could be

yellow and blue

yellow and white

yellow and red

blue and white

Write the two missing combinations.

\_\_\_\_ and \_\_\_\_

\_\_\_\_ and \_\_\_\_

.....

**[braille page 3]**

3. Look at the four digits below.

2 3 4 7

Layla uses each digit once to make a four-digit number.

She places

4 in the tens column

2 so that it has a higher value than any of the other digits.

She places the remaining two digits so that 7 has the higher value.

Write the four digits to show Layla's number.

.....

4. In this question \_ stands for a missing digit.

$532\_ + 748 = \_069$

Write the two missing digits to make the addition correct.

.....

5. Look at the five numbers below.

2 3 6 9 12

Write the numbers that are common factors of both 12 and 18

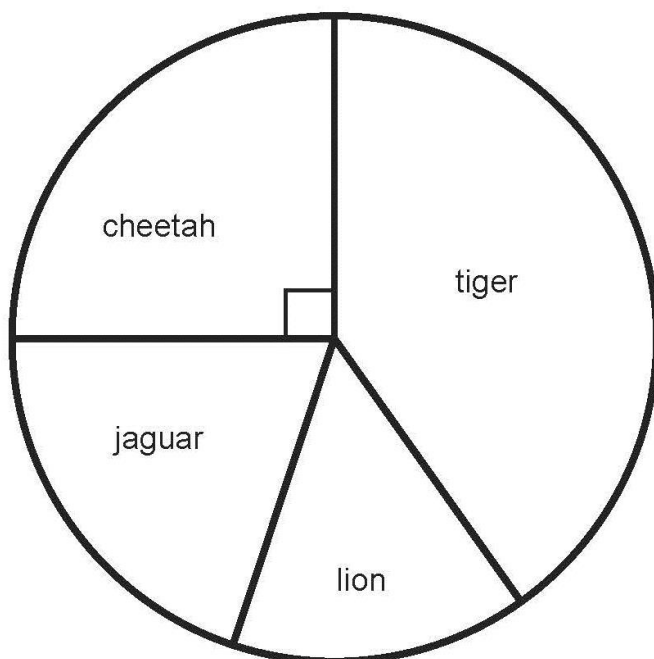
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### Test administration guidance

4. You may explain to the pupil that in this question \_ stands for a missing digit.  
So 45\_9 would be brailled #45\_9  
If the missing digit is at the front of a number, e.g. \_459, this would be brailled as #\_459

**[braille page 4, facing page 5]**

Diagram for question 6



**[braille page 5]**

6. Look at the chart on the opposite page.  
It shows the number of different types of big cat in a zoo.  
There are 20 big cats in the zoo altogether.  
Look at the four statements about the chart, below.  
They are labelled P Q R and S  
P There are more cheetahs than jaguars.  
Q The total number of lions and tigers is 10  
R One-quarter of the big cats are cheetahs.  
S There are more than 5 jaguars.  
Write the letters of the statements that are true.
- .....

7. A farmer is packing eggs.  
Each box holds six eggs.  
The farmer has 980 eggs to pack.
- a) How many boxes can the farmer fill using 980 eggs?  
\_\_\_\_\_ full boxes
- b) How many eggs will be left over?  
\_\_\_\_\_ left over
- .....

### **Test administration guidance**

6. Ensure the pupil finds the diagram on the facing page.
7. Encourage the pupil to braille a) before the answer to part a and b) before the answer to part b.

**[braille page 6]**

8. Jack has £400  
He spends 35% of his money on a new bike.  
How much does Jack spend on his new bike?  
£\_\_\_\_\_
- .....

9. The Angel of the North is a large statue in England.  
It is 20 metres tall and 54 metres wide.  
Ally makes a scale model of the Angel of the North.  
Her model is 40 centimetres tall.  
How wide is her model?  
\_\_\_\_\_ cm
- .....

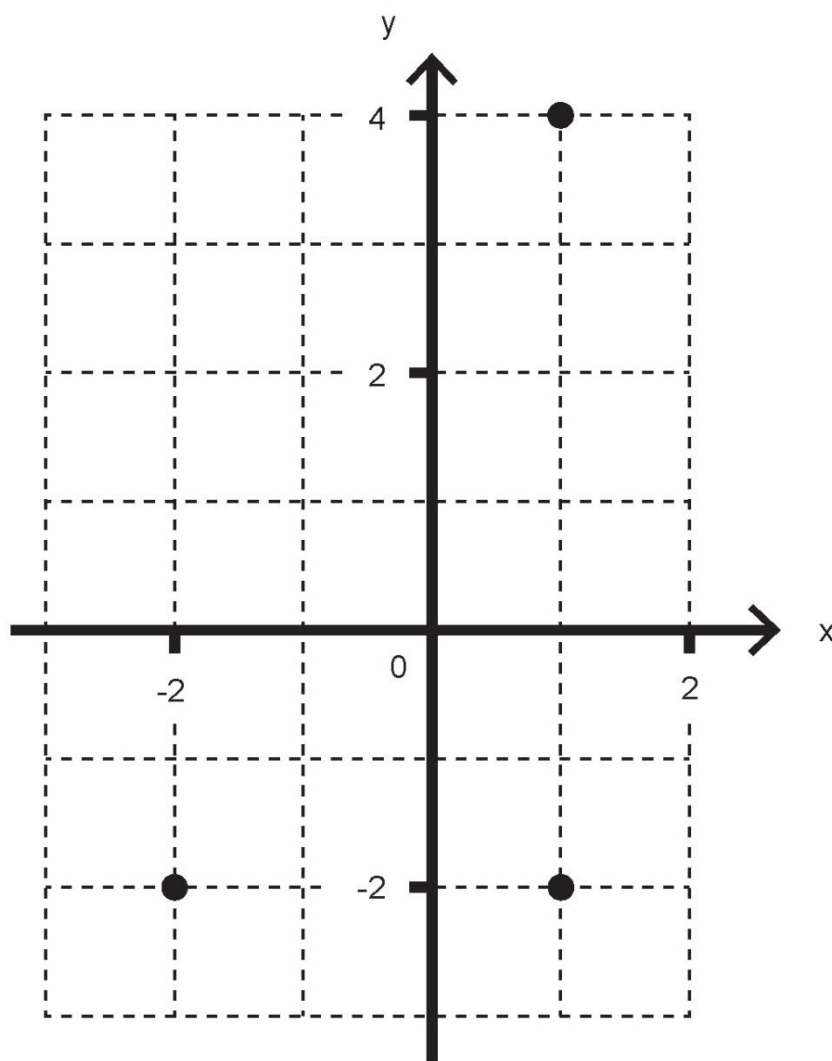


## **Test administration guidance**

There is no specific guidance for questions 8 and 9.

**[braille page 7, facing page 8]**

Diagram for question 10



**[braille page 8]**

10. Look at the diagram on the opposite page.  
Layla draws a rectangle on this coordinate grid.  
Three of the vertices are marked.  
What are the coordinates of the missing vertex?  
You have a separate copy of the diagram.  
(\_\_\_\_, \_\_\_\_)

11. Stefan has 600 millilitres of water in a bottle.  
He pours 130 ml into one jug.  
He pours 155 ml into another jug.  
How many millilitres of water are left in Stefan's bottle?  
Show your method.  
\_\_\_\_ ml

## **Test administration guidance**

10. Teachers may mount the separate diagram on a board so that the pupil can use pins and bands.

Teachers should then transcribe the pupil's work on the spare copy of the diagram.

No tactile aids (i.e. 'blobs', bluetack, wikkisticks) should be sent with the pupil's braille script.

**[braille page 9]**

12. The table below shows the areas of the United Kingdom and Jamaica.

Country	Area (square kilometres)
United Kingdom ....	240 000
Jamaica .....	10 000

.....  
The area of the United Kingdom is larger than the area of Jamaica.  
How many times larger is the United Kingdom?  
\_\_\_\_\_ times larger

.....

13. A box contains 2.6 kg of washing powder.  
Jack uses 65 grams of powder for each wash.  
He uses all the powder.  
How many washes did Jack do?  
Show your method.  
\_\_\_\_\_ washes
- .....

**[braille page 10]**

14. Two of the angles in a triangle are  $70^\circ$  and  $40^\circ$   
Jack says that the triangle is equilateral.  
Explain why Jack is not correct.
- .....

15. A shop prints designs on T-shirts.  
They use the formula below to work out the price for printing a design.

$$\text{price} = 60\text{p} \times \text{number of colours} + \text{£}1.25$$

a) What is the price for printing a design that has 3 colours in it?  
£\_\_\_\_\_

b) Amina has £5 to spend on printing a design.  
What is the greatest number of colours she can have in the design?  
Show your method.  
\_\_\_\_\_ colours

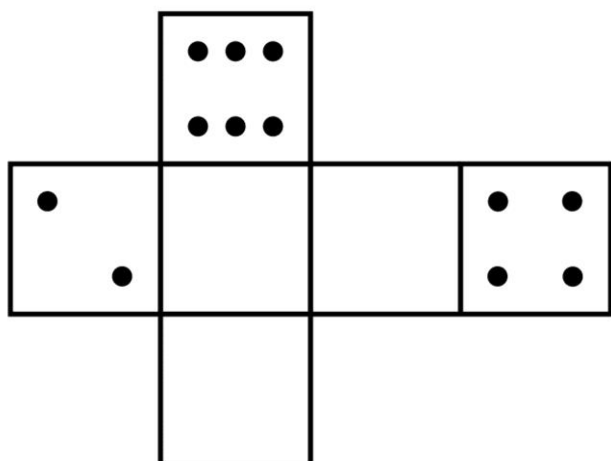
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### **Test administration guidance**

15. Encourage the pupil to braille a) before the answer to part a and b) before the answer to part b.

[braille page 11, facing page 12]

Diagram for question 17



[braille page 12]

16. A book has 276 pages.

Amina has read  $\frac{1}{3}$  of the book.

How many pages are left for Amina to read?

Show your method.

\_\_\_\_\_ pages

.....

17. Look at the net of a dice on the opposite page.

On a dice, the sum of the dots on opposite faces is always 7

Draw dots on the three empty faces of the net so that it could fold up to make a dice.

Use the separate copy of the diagram.

.....

18. A vegetable garden is planted with potatoes, cabbages and carrots.

$\frac{2}{3}$  of the area is planted with potatoes.

$\frac{1}{4}$  of the area is planted with cabbages.

The remaining area is planted with carrots.

What fraction of the garden is planted with carrots?

Show your method.

.....

### **Test administration guidance**

17. Teachers may mount the separate copy of the diagram on a board so that the pupil can use pins or other tactile aids.

Teachers should then transcribe the pupil's work on the spare copy of the diagram.

No tactile aids (i.e. 'blobs', bluetack, wikkisticks) should be sent with the pupil's braille transcript.

**[braille page 13]**

19. Look at the multiplication below.

$$33630 = 354 \times 95$$

Use this multiplication to complete the three calculations below.

a)  $354 \times 9.5 = \underline{\hspace{2cm}}$

b)  $3540 \times 95 = \underline{\hspace{2cm}}$

c)  $3363 \div 95 = \underline{\hspace{2cm}}$

20. In March, Ken collects 2 or 3 or 4 eggs each day from his hens.

In the first 20 days, Ken collects 57 eggs altogether.

There are 31 days in March.

What is the greatest number of eggs Ken can collect in March?

Show your method.

       eggs

**[braille page 14]**

21. Jack finished a sponsored run in  
53 minutes 25 seconds.

a) Ally finished the run

3 minutes 50 seconds after Jack.

How long did Ally take?

       min        sec

b) Layla finished the run

8 minutes 45 seconds before Jack.

How long did Layla take?

       min        sec

.....  
End of test



### **Test administration guidance**

19. Encourage the pupil to braille a) before the answer to part a, b) before the answer to part b and c) before the answer to part c.
21. Encourage the pupil to braille a) before the answer to part a) and b) before the answer to part b.

Diagram for question 10

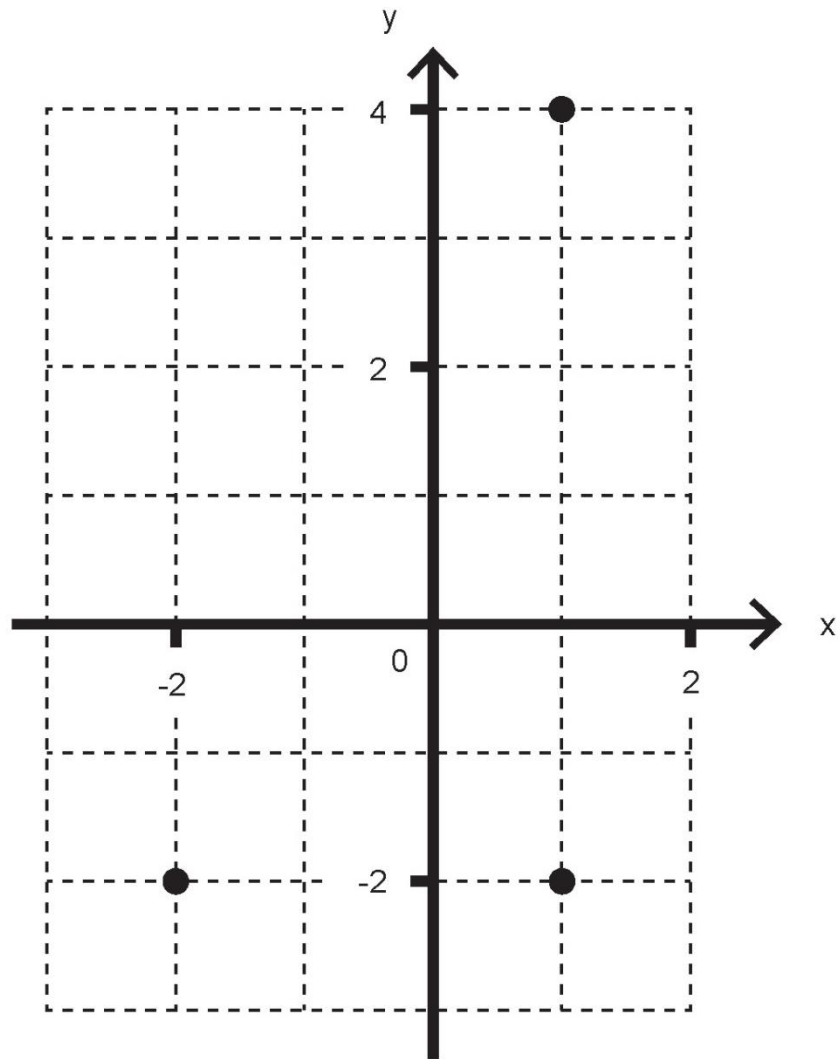
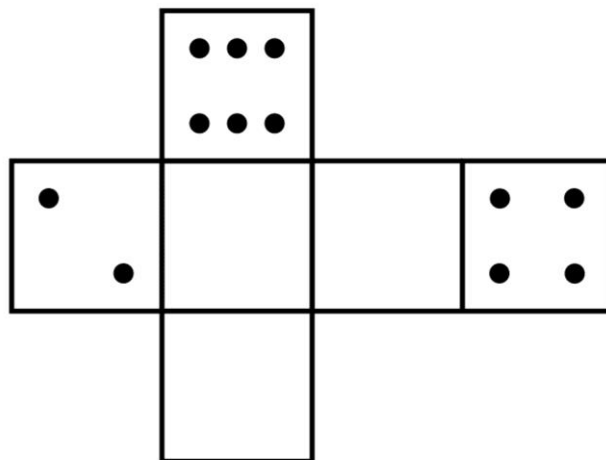


Diagram for question 17



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**Braille transcript**

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