

## 11+ MATHEMATICS SAMPLE PAPER

**45 minutes**

Equipment Required: Pencil and pen

Special Instructions: **All working must be clearly shown** and must be set out in the space provided. Attempt as many questions as you can, in any order.  
Calculators may **not** be used.  
Marks for each question are shown.

Name:
Result:
Comment:

1. Write the number thirty thousand eight hundred and five in figures.

Answer .....

[1]

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2. Write the number 602 174 in words.

Answer .....

[1]

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3. Write down all the factors of 24.

Answer .....

[3]

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4. Fill in the gaps:

(a)  $2.2 \text{ km} = \dots \text{ meters}$  [1]

(b)  $575 \text{ ml} = \dots \text{ litres}$  [1]

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5. Calculate the answer to

(a)  $-8 + +6 = \dots$  [1]

(b)  $-7 - -3 = \dots$  [1]

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6. Work out each of the following and write your answer in the space provided:

(a)  $72 \div 9 + 3 = \dots$  [1]

(b)  $25 - 3 \times 7 = \dots$  [1]

(c)  $36 \div (12 - 3) = \dots$  [1]

## 7. Work out:

Answer ..... [2] Answer ..... [2]

Answer ..... [3] Answer ..... [3]

8. Nicole downloaded 6 MP3 albums. Each album cost £8.98 and contained 13 tracks.

(a) How many tracks did she buy?

Answer ..... [1]

(b) How much did she pay in total?

Answer ..... [1]

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9. 37 girls are going to a Netball Tournament with 6 adults. Each mini bus holds 17 people. How many minibuses are needed?

Answer ..... [3]

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10. Alice's train leaves at 16:05. She must allow 1 hour and 12 minutes to get to the station. When is the latest she can leave home and still catch the train?

Answer ..... [2]

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11. (a) Write down the next two terms in this

5, 12, 19, 26, ..... , .....

[2]

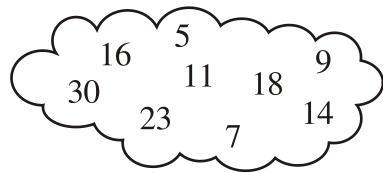
(b) Fill in the missing numbers in this sequence

5, ..... , 21, 29, ..... , 45, 53

[2]

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12. Look at the numbers in the cloud:



Write down **all** the numbers in the cloud that are:

(a) multiples of 3 ..... [1]

(b) prime numbers ..... [1]

(c) factors of 45 ..... [1]

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13. There are 18 chocolates in a box.  $\frac{2}{3}$  are milk chocolate, the rest are plain. How many chocolates are plain?

Answer ..... [2]

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14. 9 girls were asked how many pets they had. These are their results.

7, 5, 1, 5, 4, 3, 5, 7, 8

Find the mode, median, mean and range.

The mode is ..... [1]

The median is ..... [2]

The mean is ..... [2]

The range is ..... [1]

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15. Work out the following:

(a) 40% of £200

Answer ..... [2]

(b) 35% of 500g

Answer ..... [2]

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16. Harriet thought of a number. She added 4 and then multiplied by 3. She added 6 to her answer and then divided by 4 to get 9. What number did Harriet first think of?

Answer ..... [3]

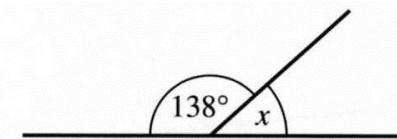
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17. Jess went out hunting for ladybirds. She collected some with 7 spots and some with 10 spots. If she collected 9 ladybirds with a total of 72 spots between them, how many had 7 spots and how many had 10 spots?

Answer 7 spots: ..... 10 spots: ..... [3]

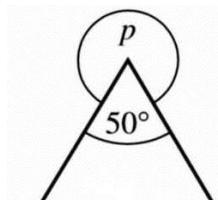
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18. (a) Work out the angle marked  $x$ .



$x = \dots^\circ$  [1]

(b) Work out the angle marked  $p$ .



$p = \dots^\circ$  [1]

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### 19 Solve these equations:

(a)  $x + 4 = 7$   $x = \dots$  [1]

(b)  $3y = 15$   $y = \dots$  [1]

$$(c) \quad \frac{p}{4} = 5 \quad p = \dots [1]$$

(d)  $7 - n = 9$   $n = \dots$  [1]

**END OF EXAMINATION**

Total