**Westminster School Challenge**

**Mental Test**

**5 minutes**

There are five questions in this test.
Each question will be read twice. You will then be given an appropriate time to record your answer.
No other repetitions or explanations will be given

THESE QUESTIONS ARE TO BE DONE MENTALLY.
YOU MAY NOT DO ANY ROUGH WORKING.
WRITE YOUR ANSWERS IN THE BOXES PROVIDED.
DO NOT WRITE ANYTHING ELSE ON THE ANSWER PAPER.

**1** The date at the top of the answer sheet is misprinted.
In how many years' time will it be correct?

**2** What is the average speed of a boy who runs twenty-two kilometres in four hours?

**3** What is nine multiplied by seventeen?

**4** What percentage of seventy is twenty-one?

**5** What is the sum of three quarters and three eighths?

**Westminster School Challenge**

**Calculation Test**

**10 minutes**

ANSWER EACH QUESTION IN THE SPACE PROVIDED.
SHOW ALL YOUR WORKING.

**1** Calculate 2017 + 1072 + 7021.

Answer **1**

**2** What is $14{\cdot}5 \times 0{\cdot}12$?

Answer **2**

**3** A triangle with base 24 cm has the same area as a rectangle with base 15 cm and height 14 cm. What is the height of the triangle?

Answer **3**

**4** What is the square root of 150, correct to the nearest whole number?

Answer **4**

**TURN OVER**

**5** Two numbers add up to 2017 and multiply to give 1017070.
What are the two numbers?

Answer **5**

**6** What is £3·75, increased by 36%.

Answer **6**

A **narcissistic** number is a three-digit number (between 100 and 999) which is **equal** to the **sum of the cubes of its digits**.

**7** What is the sum of the cubes of the digits of 703?

Answer **7**

**8** Write down two **consecutive** narcissistic numbers.

Answer **8**

# Westminster School Challenge 2071

**Mental Test**

Each question will be read TWICE. You will then be given an appropriate time to record your answer.
No other repetitions or explanations will be given

THESE QUESTIONS ARE TO BE DONE MENTALLY.
YOU MAY NOT DO ANY ROUGH WORKING.
Write your answers in the boxes provided.
Write your name and candidate number at the top of the page.
DO NOT WRITE ANYTHING ELSE ON THIS ANSWER PAPER.

| | |
|---|---|
| **1** | |
| **2** | |
| **3** | |
| **4** | |
| **5** | |