

# Maths Entry Assessment

Name ..... Date ..... Score .....

**Time: about 50 minutes.** Hampstead Tuition Centre - Year 5 Maths Entry Assessment. Answer all questions and show full working - method marks are awarded. Several questions need more than one step, and the last few are challenging. No calculator allowed. Show your working where you can. Marks for each question are shown in brackets, like [2]. Total marks: **49**.

- 1 Write the number 64,309 in words. What is the value of the digit 4 in this number? [2]

WORKING

Answer .....

PLACE VALUE

- 2 The temperature at midnight is  $-6^{\circ}\text{C}$ . By midday it has risen by 11 degrees. What is the temperature at midday? It then falls by 9 degrees by evening - what is the evening temperature? [3]

WORKING

Answer .....

NEGATIVE NUMBERS (MULTI-STEP)

- 3 Work out  $384 \times 26$  using a written method. [3]

WORKING

Answer .....

LONG MULTIPLICATION

- 4 Work out  $4,731 \div 8$ , giving any remainder. [3]

WORKING

Answer .....

SHORT DIVISION

- 5 Write these in order, smallest first: 0.6,  $\frac{3}{5}$ , 0.65,  $\frac{7}{10}$ , 0.06.

[3]

WORKING

Answer \_\_\_\_\_

FRACTIONS AND DECIMALS ORDERING (REASONING)

- 6 Find 35% of 240.

[3]

WORKING

Answer \_\_\_\_\_

PERCENTAGES OF AMOUNTS

- 7 A square has an area of  $81 \text{ cm}^2$ . What is the length of one side? What is its perimeter?

[3]

WORKING

Answer \_\_\_\_\_

SQUARE NUMBERS, AREA AND PERIMETER

- 8 Write  $\frac{7}{4}$  as a mixed number. Then add  $\frac{7}{4} + \frac{5}{8}$ , giving your answer as a mixed number in its simplest form.

[4]

WORKING

Answer \_\_\_\_\_

FRACTIONS (MIXED NUMBERS, ADDITION)

- 9 A recipe for 4 people needs 600 g of flour and 250 ml of milk. How much flour and milk are needed for 10 people? [4]

WORKING

Answer \_\_\_\_\_

SCALING / PROPORTION (MULTI-STEP)

- 10 A shop reduces the price of a coat by  $\frac{1}{5}$ . The coat originally cost £60. What is the new price? What fraction of the original price does the customer still pay? [3]

WORKING

Answer \_\_\_\_\_

FRACTIONS IN CONTEXT (REASONING)

- 11 Here is a sequence given by a rule: start at 3, then multiply by 2 and subtract 1 each time. Write the first five terms. [4]  
Explain why every term is an odd number.

WORKING

Answer \_\_\_\_\_

SEQUENCES AND PROOF-STYLE REASONING (STRETCH)

- 12 Priya says, 'If I multiply two numbers together and the answer is odd, then both numbers must be odd.' Is she correct? Explain. [2]

WORKING

Answer \_\_\_\_\_

REASONING (ODD/EVEN)

- 13 A rectangle has a perimeter of 40 cm. Its length is 4 cm more than its width. Work out the length and the width. [4]

WORKING

Answer \_\_\_\_\_

PERIMETER REASONING / SUM-DIFFERENCE (STRETCH)

- 14 Tom and Ben share some money in the ratio 3 : 5. Ben gets £20 more than Tom. How much money do they share altogether? [4]

WORKING

Answer \_\_\_\_\_

RATIO (STRETCH)

- 15 I think of a number. I multiply it by 3, add 4, and the result is the same as multiplying my number by 5 and subtracting 6. What is my number? Show your reasoning. [4]

WORKING

Answer \_\_\_\_\_

PRE-ALGEBRA / BALANCING (STRETCH, INTO Y6)

End of assessment. Hand your paper back when you are finished. Well done!