

Year 5 Mathematics Assessment: The Roman Numeral System

Learning objective: To read, write, and convert Roman numerals to 1,000 (M) and recognise years written in Roman numerals.

Read each question carefully. Max the monkey is helping you check your work. Ensure your answers are clearly written. You may use the word bank to assist with your historical conversions.

Ellie the elephant has discovered an ancient stone tablet in the library. She needs your help to decode the dates and quantities inscribed on it so she can add them to her historical records.

Word bank: I = 1 · V = 5 · X = 10 · L = 50 · C = 100 · D = 500 · M = 1,000

1. Convert the following Roman numerals into Arabic numerals (standard digits): a) XLVI, b) DCCIX. (2 marks)

2. Write the numbers 84 and 492 using Roman numerals. (2 marks)

3. Max the monkey has 150 gold coins. He spends LXX coins on supplies. How many coins does he have left? Write your final answer as a Roman numeral. (3 marks)

4. Explain why the Roman numeral 'IV' represents the number 4, whereas 'VI' represents the number 6. Use your knowledge of subtractive notation in your explanation. (4 marks)

5. Compare and contrast the Roman numeral system with our modern decimal (base-10) system. Identify one advantage and one disadvantage of using Roman numerals for complex mathematical calculations. (4 marks)

6. Ellie found a date carved into a statue: MMIX. She says this statue was built in 2009. Justify whether Ellie is correct or incorrect using your knowledge of Roman numeral place value. (3 marks)

7. Creative Task: Imagine you are an architect in Ancient Rome. You are designing a new stadium. Write a short paragraph (5 sentences) describing the stadium, ensuring you include at least four different numbers written in Roman numerals (e.g., the number of rows, the cost in £, the year of construction, and the number of pillars). (7 marks)

Draw: Draw a Roman-style sundial where the numbers around the clock face are written correctly in Roman numerals from I to XII.



Extension challenge: What might happen if we tried to represent very large numbers, such as 5,000 or 10,000, using the standard Roman system? Is it efficient for modern mathematics? Total: /25