Whole numbers and calculations - topic test

12 questions | 19 marks | 30 minutes

Short calculations lead into explanations and practical problems. Show your working.

Equivalent correct methods earn the corresponding marks.

1. What is the value of 6 in 16,204? [1 mark]

The 6 is in the thousands place.

Answer: 6,000.

2. Write 5,090 in expanded form. [1 mark]

There are 5 thousands, 0 hundreds, 9 tens and 0 ones.

Answer: $5{,}000 + 90$.

3. Is 9,317 odd or even? Explain briefly. [1 mark]

An odd ones digit leaves one object unpaired.

Answer: Odd, because it ends in 7.

4. Round 2,746 to the nearest ten. [1 mark]

The ones digit is 6, so use the next ten.

Answer: 2,750.

5. Find $384 + 215$. [1 mark]

$384 + 200 = 584$; add 15 to get 599.

Answer: 599.

6. Find the missing number: $? + 168 = 500$. [1 mark]

$500 - 168 = 332$.

Check: $332 + 168 = 500$.

Answer: 332.

7. Calculate $800 - 356$. Show your steps. [2 marks]

$800 - 300 = 500$.

$500 - 50 - 6 = 444$.

Answer: 444.

8. Use compensation to find $572 + 199$. [2 marks]

$572 + 200 = 772$.

Remove the extra 1: 771.

Answer: 771.

9. Find the missing number: $950 - ? = 468$. Check your answer. [2 marks]

$950 - 468 = 482$.

$950 - 482 = 468$.

Answer: 482.

10. Without finding the full total, explain whether $3{,}425 + 6{,}181$ is odd or even. [2 marks]

Both are odd because their ones digits are 5 and 1.

Two odd leftovers form a pair, so $\text{odd} + \text{odd}$ is even.

Answer: Even.

11. A library has 648 picture books and 277 chapter books. Estimate the total by rounding each count to the nearest hundred, then calculate exactly. [2 marks]

648 rounds to 600; 277 rounds to 300: estimate 900.

$648 + 277 = 925$.

Answer: Estimate 900; exact total 925 books.

12. A school prints 900 tickets. It gives out 286 in the morning and 347 in the afternoon. How many remain? Use an addition check. [3 marks]

$286 + 347 = 633$ tickets given out.

$900 - 633 = 267$.

Check: $267 + 286 + 347 = 900$.

Answer: 267 tickets.