Multiplication and division topic test

12 questions | 24 marks | 30 minutes

Efficient whole-number calculations, missing numbers, inverse facts and interpreting remainders in practical problems.

Equivalent correct methods earn the corresponding marks.

1. Calculate 46 × 3. [1 mark]

40 × 3 = 120 and 6 × 3 = 18; add them.

Answer: 138.

2. Calculate 248 ÷ 4. [1 mark]

240 ÷ 4 = 60 and 8 ÷ 4 = 2.

Answer: 62.

3. Find the square: □ × 7 = 91. [1 mark]

91 ÷ 7 = 13.

Answer: 13.

4. Calculate 38 × 14. Show partial products. [2 marks]

38 × 10 = 380; 38 × 4 = 152.

380 + 152 = 532.

Answer: 532.

5. Calculate 432 ÷ 6. Show your method. [2 marks]

420 ÷ 6 = 70 and 12 ÷ 6 = 2.

Answer: 72.

6. Write both division facts linked to 12 × 15 = 180. [2 marks]

Use the product as each dividend.

Answer: 180 ÷ 12 = 15 and 180 ÷ 15 = 12.

7. Find the square: □ ÷ 8 = 19. Check your answer. [2 marks]

19 × 8 = 152; 152 ÷ 8 = 19.

Answer: 152.

8. Find the square: 168 ÷ □ = 14. Check your answer. [2 marks]

14 × 12 = 168; 168 ÷ 12 = 14.

Answer: 12.

9. Seventy-four students need minibuses holding twelve students each. How many minibuses are needed? [3 marks]

12 × 6 = 72, leaving two students.

One more minibus is needed to seat everyone.

Answer: 7 minibuses.

10. A farmer has 65 eggs. Each full carton holds six eggs. How many full cartons can be filled, and how many eggs remain? [2 marks]

6 × 10 = 60; 65 − 60 = 5.

Five eggs are not enough for another full carton.

Answer: 10 full cartons, with 5 eggs left.

11. Amir calculates 27 × 16 as 27 + 162 = 189. Explain the error and correct it. [3 marks]

Sixteen is ten plus six.

27 × 10 + 27 × 6 = 270 + 162 = 432.

Answer: The tens contribution should be 270. The answer is 432.

12. A school buys 18 boxes of pencils, with 24 pencils in each box. It shares all pencils equally among nine classes. How many pencils does each class receive? Show a useful way to group the calculation. [3 marks]

18 × 24 = 432 pencils altogether.

432 ÷ 9 = 48. Alternatively, eighteen boxes split into nine groups gives two boxes per class: 2 × 24 = 48.

Answer: 48 pencils per class.