Multiplication and division - topic test

12 questions | 22 marks | 30 minutes

Recall facts, show strategies and solve equal-group problems. Explain the meaning of remainders.

Equivalent correct methods earn the corresponding marks.

1. Find 8×7. [1 mark]

$8 \times 7 = 56$.

Answer: 56.

2. Find $63 \div 9$. [1 mark]

$9 \times 7 = 63$.

Answer: 7.

3. Find 46×10. [1 mark]

Every digit takes a value ten times as large.

Answer: 460.

4. Find $3{,}500 \div 100$. [1 mark]

$35 \times 100 = 3{,}500$.

Answer: 35.

5. Use $5 \times 9 = 45$ to find 6×9. [2 marks]

Add one more group of 9: $45 + 9 = 54$.

Answer: 54.

6. Write both division facts related to $6 \times 8 = 48$. [2 marks]

Start with the total 48 and use each factor as a divisor.

Answer: $48 \div 6 = 8$ and $48 \div 8 = 6$.

7. Calculate 27×4. Show your working. [2 marks]

$20 \times 4 = 80$ and $7 \times 4 = 28$.

$80 + 28 = 108$.

Answer: 108.

8. Calculate $192 \div 6$. Show useful parts. [2 marks]

$180 \div 6 = 30$ and $12 \div 6 = 2$.

$30 + 2 = 32$.

Answer: 32.

9. Put 98 marbles into full bags of 6. How many full bags can be made, and how many marbles remain? [2 marks]

$6 \times 16 = 96$.

$98 - 96 = 2$; 2 is less than 6.

Answer: 16 full bags and 2 marbles left.

10. Use compensation to calculate 29×6. [2 marks]

$30 \times 6 = 180$.

Subtract one group of 6: $180 - 6 = 174$.

Answer: 174.

11. Which method is correct for 45×8? Explain, then calculate. [3 marks]

Two proposed methods

Method	New calculation
A	90×16
B	90×4

Method A doubles both factors, making the product four times as large.

Method B doubles 45 and halves 8: $90 \times 4 = 360$.

Answer: Method B; the answer is 360.

12. A class needs 144 pencils. Pencils come in packs of 8. The class already has 5 full packs. How many more packs are needed? [3 marks]

$144 \div 8 = 18$ packs in total.

$18 - 5 = 13$ more packs.

Check: $(13 + 5) \times 8 = 144$.

Answer: 13 more packs.