Efficient whole-number calculations and order of operations

6 questions | 13 marks

Equivalent correct methods earn the corresponding marks.

1. Evaluate $72 \div (3 \times 4)$. [2 marks]

Calculate the bracket: $3 \times 4 = 12$.

Then $72 \div 12 = 6$.

Answer: 6

2. Evaluate $30 - 12 \div 3 + 2$. [2 marks]

Division first gives $12 \div 3 = 4$.

Then work left to right: $30 - 4 + 2 = 26 + 2 = 28$.

Answer: 28

3. Evaluate $15 + 4^2 - 9$. [2 marks]

The power is $4^2 = 16$.

Then $15 + 16 - 9 = 31 - 9 = 22$.

Answer: 22

4. Evaluate $5(8+6)$. [2 marks]

The bracket is $8+6=14$.

Multiply: $5 \times 14 = 70$.

Answer: 70

5. Evaluate $96 \div 8 \div 3$. [2 marks]

Both operations have equal priority.

Work left to right: $96 \div 8 = 12$, then $12 \div 3 = 4$.

Answer: 4

6. Six cinema tickets cost 9 dollars each. A single booking fee of 4 dollars is added. Find the total cost. [3 marks]

Ticket cost is $6 \times 9 = 54$ dollars.

Add the one booking fee: $54 + 4 = 58$ dollars.

Answer: 58 dollars