Substituting into expressions/formulas

6 questions | 11 marks

Equivalent correct methods earn the corresponding marks.

1. Evaluate $4x + 3$ for $x = 5$. [1 mark]

$4 \times 5 + 3 = 23$.

Answer: 23

2. Evaluate $7a - 2$ for $a = 4$. [1 mark]

$7 \times 4 - 2 = 26$.

Answer: 26

3. Evaluate $b^2 + 2b$ for $b = 6$. [2 marks]

$6^2 + 2 \times 6 = 36 + 12 = 48$.

Answer: 48

4. Evaluate $3(p + 4)$ for $p = 7$. [2 marks]

$3(7 + 4) = 3 \times 11 = 33$.

Answer: 33

5. A museum charges $C = 4n + 6$ dollars for n children. Find the cost for 7 children. [2 marks]

$C = 4 \times 7 + 6 = 34$.

The result is a cost in dollars.

Answer: 34 dollars

6. A rectangle is 9 cm long and 4 cm wide. Use $A = lw$ and $P = 2(l + w)$ to find its area and perimeter. [3 marks]

$A = 9 \times 4 = 36$ cm².

$P = 2(9 + 4) = 26$ cm.

Answer: Area 36 cm²; perimeter 26 cm.