Grouping with brackets

6 questions | 10 marks

Equivalent correct methods earn the corresponding marks.

1. Write four times the sum of a and 6. [1 mark]

The sum is $a + 6$. Multiply all of it by 4.

Answer: $4(a + 6)$

2. Evaluate $3(n + 2)$ for $n = 5$. [2 marks]

$3(5 + 2) = 3 \times 7 = 21$.

Answer: 21

3. Evaluate $3n + 2$ for $n = 5$. [1 mark]

$3 \times 5 + 2 = 17$.

Answer: 17

4. Each pack has x red counters and 3 blue counters. Write the total in six equal packs. [2 marks]

One pack contains $x + 3$.

Six packs contain six copies of that sum.

Answer: $6(x + 3)$

5. For $x = 4$, compare $20 - (x + 5)$ and $20 - x + 5$. [2 marks]

$20 - (4 + 5) = 11$.

$20 - 4 + 5 = 21$.

Answer: 11 and 21, respectively.

6. A student writes $2p + 7$ for two boxes, each with p pencils and 7 pens. Explain the error and correct it. [2 marks]

Each box contains $p + 7$ items.

$2p + 7$ counts the pens only once.

Answer: The pens must be counted in both boxes. Correct expression: $2(p + 7)$.