



Area, Perimeter & Volume - Answers

Answer Key

Section A: Area & Perimeter Reasoning

1. 71m^2 (80m^2 rectangle - 9m^2 pond)
2. 10cm (area 60cm^2 , base 12cm, so height = $60 \div 6 = 10$)
3. £405 ($6 \times 4.5 = 27\text{m}^2$, $\times \text{£}15$)
4. Width $\approx 16.67\text{m}$, length $\approx 33.33\text{m}$ (length + width = 50m, and length is double the width) - these aren't clean whole numbers, but the maths is correct
5. 68cm^2 (80cm^2 rectangle - 12cm^2 removed)

Section B: Volume Reasoning

1. 120 litres ($50 \times 40 \times 60 = 120,000\text{cm}^3$)
2. 27cm^3 (half the dimensions gives $1/8$ of the volume: $216 \div 8$)
3. 48m^3 ($8 \times 4 \times 1.5$)
4. 128cm^3 (two 4cm cubes, each 64cm^3)
5. 200cm ($800 \text{ litres} = 800,000\text{cm}^3$, $\div (80 \times 50) = 200$)