

Solutions

2.1 $(6 \times 4/2) \times 10 = 120 \text{ cm}^3$.

2.2 $r^2 h = 9 \times 5 = 45$.

2.3 $\text{Length} = \text{volume} / \text{area} = 180 / 15$.

3.1 False. A 3 cm by 4 cm rectangular cross-section and 10 cm length give 120 cm^3 . Perimeter times length gives 140 cm^2 , which has the wrong units.

Local review guidance: show the chosen method; give the checked result; explain the condition or failed shortcut. This is authored classroom guidance.