

Exercício Geométrico - Elétrico

. Paralelepípedo e Cubo

$$\begin{aligned} \textcircled{1} \quad \text{comprimento} &= 51 - 2 \cdot 0,5 = 50 \text{ cm} = 0,5 \text{ m} \\ \text{largura} &= 26 - 2 \cdot 0,5 = 25 \text{ cm} = 0,25 \text{ m} \\ \text{altura} &= 12,5 - 0,5 = 12 \text{ cm} = 0,12 \text{ m} \end{aligned}$$

$$V = 0,5 \cdot 0,25 \cdot 0,12$$

$$V = 0,015 \text{ m}^3$$

A

$$\textcircled{2} \quad \text{Área cubo} = 6 \cdot l^2$$

$$\text{Área total} = 42 \text{ m}^2$$

$$42 = 6 \cdot l^2$$

$$l^2 = \frac{42}{6}$$

B

$$d = l \cdot \sqrt{3}$$

$$l^2 = 12$$

$$d = 2\sqrt{3} \cdot \sqrt{3} \rightarrow d = 2 \cdot 3 \rightarrow d = 6 \text{ m} \quad | \quad l = \sqrt{12} \rightarrow l = 2\sqrt{3}$$

$$\textcircled{3} \quad d = 60 \text{ cm} = 0,6 \text{ m}$$

\textcircled{A}

$$V = 0,6^3 \rightarrow V = 0,125 \cdot 1000 \rightarrow V = 125 \text{ l}$$

$$\textcircled{4} \quad \text{cylinder} - 1 \text{ m}^3$$

$$\rightarrow 1^3 = 1 \text{ m}^3$$

$$V_c = d^3$$

$$V_c = 1 \text{ m}^3$$

$$\textcircled{0,001 \text{ m}}$$

$$V = 10001 - 1 \text{ l} \Rightarrow V = 999 \text{ l}$$

$$1 \text{ m} \quad 1000 \text{ l}$$

$$1-x \quad 999 \text{ l}$$

$$1000 \cdot (1-x) = 999 \cdot 1$$

$$1000 - 1000x = 999$$

$$1000x = 1000 - 999$$

$$1000x = 1$$

$$x = 0,001 \text{ m}$$

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$A_B = A$ base do paralelepípedo

$h = \text{altura}$

$$V = A_B \cdot h$$

$$V_1 = a \cdot b \cdot h$$

$$V_2 = 2a \cdot 2b \cdot h$$

$$V_1 = abh$$

$$V_2 = 4abh$$

$$V_2 = 4 \cdot V_1$$

C