

Nome: Kemilly Teixeira Cruz C.TII-317

Tarefa Básica - Prismas

01. Volume total

$$V_T = 51 \cdot 26 \cdot 12,5 = 16575 \text{ cm}^3$$

$$V_i = V_T - 2 \cdot V_{L51} - 2 \cdot V_{L26}$$

$$V_i = 16575 - 2 \cdot 318,75 - 2 \cdot 162,5$$

$$V_i = 16575 - 637,5 - 325$$

Volume das laterais

$$V_i = 15612,5 \text{ cm}^3$$

$$V_{L51} = 51 \cdot 12,5 \cdot 0,5 = 318,75$$

$$V_i = 0,015 \text{ m}^3 \text{ letra A}$$

$$V_{L26} = 26 \cdot 12,5 \cdot 0,5 = 162,5$$

02. $A_T = 6a^2$

$$D = a\sqrt{3}$$

$$72 = 6a^2$$

$$D = 2\sqrt{3} \cdot \sqrt{3}$$

$$a^2 = 12$$

$$D = 2\sqrt{3^2}$$

$$a = \sqrt{12}$$

$$D = 6 \text{ letra B}$$

$$a = 2\sqrt{3}$$

03. $V = a^3$

$$V = 5^3$$

$$V = 125 \text{ cm}^3 = 0,125 \text{ L letra A}$$

04. $V = a^3$

$$V = 1 \cdot 1 \cdot h$$

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

$$0,001 = 1 \cdot h$$

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

$$1 \text{ L} = 0,001 \text{ m}^3$$

$$05. V = a^3$$

$$V = (4\sqrt{3})^3$$

$$V = 64 \cdot 3\sqrt{3}$$

$$V = 192\sqrt{3}$$

$$V = A_{\text{base}} \cdot h$$

$$192\sqrt{3} = \frac{(4\sqrt{3})^2 \sqrt{3}}{4} \cdot h$$

$$192\sqrt{3} = \frac{16 \cdot 3 \cdot \sqrt{3}}{4} \cdot h$$

4

$$192\sqrt{3} = 12\sqrt{3} \cdot h$$

$$h = \frac{192\sqrt{3}}{12\sqrt{3}}$$

$$h = 16$$

$$A_T = 2 \cdot 12\sqrt{3} + 3 \cdot 4\sqrt{3} \cdot 16$$

$$A_T = 24\sqrt{3} + 192\sqrt{3}$$

$$A_T = 216\sqrt{3} \text{ let's go!}$$