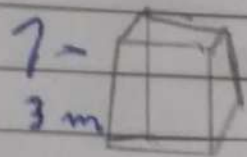


Tarefa Básica - Prismas



$$S_{\text{total}} = 80 = 2x^2 + 4(3 \cdot x) \rightarrow 2x^2 + 12x$$

$$2x^2 + 12x - 80 = 0 \quad | :2$$

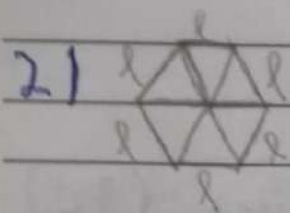
$$x^2 + 6x - 40 = 0$$

$$-10 + 4 = -6$$

$$-10 : 4 = 40$$

$$x = 4 \text{ m}$$

$$x = -10$$

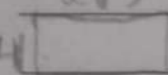


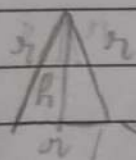
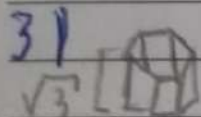
$$\rightarrow S = 24\sqrt{3} \text{ cm}^2 \quad \Delta \rightarrow \frac{24\sqrt{3}}{6} = 4\sqrt{3} \text{ cm}^2$$

$$S_{\Delta \text{ equilat}} = \frac{l^2 \sqrt{3}}{4} = 4\sqrt{3} \rightarrow l^2 = 16$$

$$l = \sqrt{16} = 4 \text{ cm}$$

$$2\sqrt{3}$$

4)  $AL = 6 (4 \cdot 2\sqrt{3}) = 48\sqrt{3} \text{ cm}^2$



$$l = n = d$$

$$n^2 = h^2 + (n/2)^2$$

$$h^2 = 4 - 1 = 3$$

$$h = \sqrt{3} \text{ cm}$$

$$S_{\text{base}} = 6 \cdot S_{\Delta}$$

$$= 6\sqrt{3} \text{ cm}^2$$

$$\rightarrow S_{\Delta} = 2 \cdot \sqrt{3} / 2 = \sqrt{3} \text{ cm}^2$$

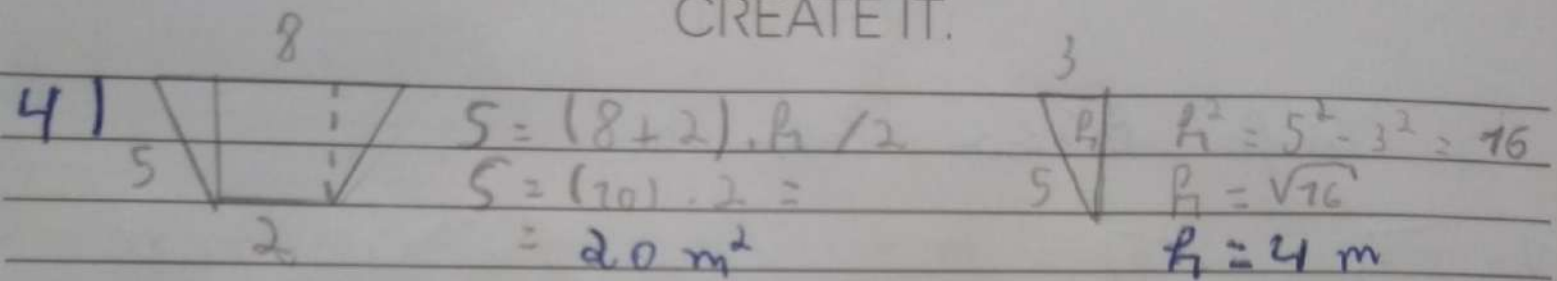
$$S_{\text{total}} = 2(6\sqrt{3}) + 6(2 \cdot \sqrt{3}) =$$

$$= 12\sqrt{3} + 12\sqrt{3}$$

$$= 24\sqrt{3} \text{ cm}^2$$

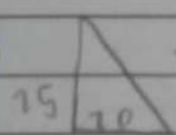
alternativa (B)

CREATE IT.

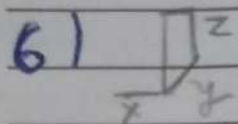


$$V = 20 \cdot 5 = 100 \text{ m}^3 \quad \text{alternativa (D)}$$

5)


$$\rightarrow S_{\text{base}} = \frac{15 \cdot 10}{2} = 75 \text{ cm}^2$$
$$V = \text{base} \cdot h = 75 \cdot 10 = 750 \text{ cm}^3$$

alternativa (C)



$$\text{Area Total} = 4x^2 = 2xy + 2xz + 2yz$$

$$4x^2 = 2(xy + xz + yz)$$

$$2x^2 = xy + xz + yz$$

$$2x^2 = xy + x \cdot 2y + y \cdot 2y$$

$$2x^2 = 3xy + 2y^2$$



$$2x^2 = 3xy + 2y^2$$

$$a = 2$$

$$b = 3x$$

$$c = 2x^2$$

$$\Delta = (3x)^2 - 4 \cdot 2 \cdot 2x^2 = 9x^2 - 16x^2 = -7x^2$$

$$y = \frac{-3x \pm \sqrt{25x^2}}{2 \cdot 2} = \frac{-3x \pm 5x}{4} = \frac{2x}{4} = \frac{x}{2}$$

$$\frac{-3x - 5x}{4} = \frac{-8x}{4} = -2x$$

→ Não convém

$$Z = 2 \cdot \frac{x}{2}$$

$$= x$$

$$V = x \cdot y \cdot z \rightarrow x \cdot \frac{x}{2} \cdot x = \frac{x^3}{2}$$

Alternativa (c)

Tarefa Básica - Paralelepípedos e Cubos

7-

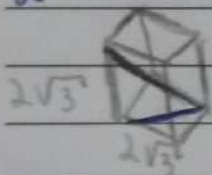
$$V = (57 - 2,0,5) \cdot (26 - 2,0,5) \cdot (72,5 - 0,5)$$

$$V = 50 \cdot 25 \cdot 72 \rightarrow 600 \cdot 25 = 15.000 \text{ cm}^3$$

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

alternativa (A)

2-



$$\text{Área total} = 6l^2 = 72$$

$$l = \sqrt{12}$$

$$72 \mid 27$$

$$l^2 = 72/6 = 12$$

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

$$6 \mid 2$$

$$3 \mid 3$$

$$1 \mid 1$$

$$D = l\sqrt{3} = 2\sqrt{3} \cdot \sqrt{3} = 2 \cdot 3 = 6 \text{ m}$$

alternativa (B)

$$3- V = 5^3 = 125 \rightarrow 25 \cdot 50 = 1250$$

arrumado

alternativa (A)

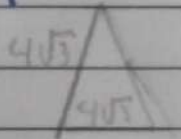
$$4- V = l^3 = 1 \text{ m}^3 = 1000 \text{ L} \rightarrow \frac{1 \text{ L}}{1000 \text{ L}} = 0,001 \text{ m}$$

$$5) a, b, c = V \rightarrow x = \frac{4a \cdot b \cdot c \cdot V}{a \cdot b \cdot c} = 4V$$

$$2a, 2b, c = V$$

alternativa (C)

6)



$$S_1 = \frac{(4\sqrt{3})^2 \sqrt{3}}{4} = 4 \cdot 3\sqrt{3} = 12\sqrt{3}$$

$$V_{\text{cube}} = (4\sqrt{3})^3 = 48 \cdot 4\sqrt{3} = 192\sqrt{3}$$

$$V_A = 192\sqrt{3} = 12\sqrt{3} \cdot h \rightarrow h = \frac{192\sqrt{3}}{12\sqrt{3}} = 16 \text{ cm}$$

$$\begin{aligned} \text{Area Total} &= 2(12\sqrt{3}) + 3(16 \cdot 4\sqrt{3}) \\ &= 24\sqrt{3} + 192\sqrt{3} \\ &= 216\sqrt{3} \text{ cm}^2 \end{aligned}$$

alternativa (D)