

1-



$$\begin{aligned} a &= x \\ b &= 2x \\ h &= 8 \\ V &= 48 \end{aligned}$$

$$\begin{aligned} V &= \frac{1}{3} \cdot A_b \cdot h \\ 48 &= \frac{1}{3} \cdot A_b \cdot 8 \\ 48/8 &= \frac{1}{3} \cdot A_b \\ 6 &= \frac{1}{3} \cdot A_b \\ A_b &= 18 // \end{aligned}$$

$$\begin{aligned} A_b &= 18 \\ a \cdot b &= 18 \\ x \cdot 2x &= 18 \\ 2x^2 &= 18 \\ x^2 &= 18/2 \end{aligned}$$

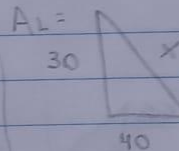
$$x = \sqrt{9} \Rightarrow 3 //$$

LETRA (C)

2-

$$\begin{aligned} A_T &= A_b + A_L \\ h &= 30 \\ \text{LADO} &= 80 \end{aligned}$$

$$\begin{aligned} A_b &= 80 \cdot 80 \\ A_b &= 6400 \end{aligned}$$



$$\begin{aligned} x^2 &= 40^2 + 30^2 \\ 1600 + 900 \end{aligned}$$

$$\sqrt{2500} = 50 //$$

$$A_T = A_b + A_L$$

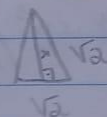
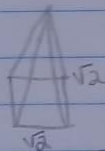
$$A_T = 6400 + 8000 = 14400 //$$

LETRA (E)

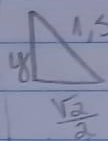
$$A_L = \frac{b \cdot h}{2} = \frac{80 \cdot 50}{2}$$

$$\begin{aligned} A_L &= 2000 \cdot 4 \text{ lados} \\ A_L &= 8000 \end{aligned}$$

3-



$$\sqrt{2}^2 = x^2 + \left(\frac{\sqrt{2}}{2}\right)^2 \Rightarrow x = 1,5$$



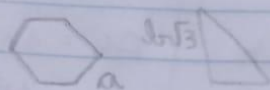
$$1,5^2 = y^2 + \left(\frac{\sqrt{2}}{2}\right)^2 \Rightarrow 2,25 = y^2 + 0,5$$

$$y = \sqrt{1,75} \Rightarrow y \approx 1,3$$

LETRA (C)

FORONI

4-



$$V = \frac{1}{3} \cdot Ab \cdot h$$

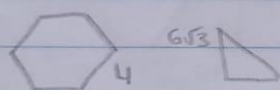
$$Ab = \frac{3\sqrt{3} \cdot a^2}{2} \quad \left\{ \begin{array}{l} h = 3\sqrt{3} \end{array} \right.$$

$$V = \frac{1}{3} \cdot \frac{3\sqrt{3} \cdot a^2}{2} \cdot 3\sqrt{3}$$

$$V = \frac{1}{3} \cdot \frac{9a^2}{2} \cdot 3 = \frac{9a^2}{6} \cdot 3 \Rightarrow \frac{3a^2}{2} \cdot 3 //$$

LETRA(A)

5-



$$V = \frac{1}{3} \cdot Ab \cdot h$$

$$V = \frac{1}{3} \cdot \frac{3\sqrt{3} \cdot 4^2}{2} \cdot 6\sqrt{3}$$

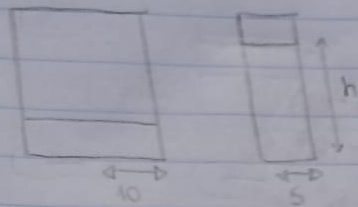
$$V = \frac{1}{3} \cdot 24\sqrt{3} \cdot 6\sqrt{3}$$

$$V = \frac{1}{3} \cdot 144 \cdot 3$$

$$V = \frac{1}{3} \cdot 432$$

$$V = 144 \text{ cm}^3 //$$

1-



1º

$$V = \pi \cdot R^2 \cdot h$$

$$V = 3,14 \cdot 10^2 \cdot 40 \Rightarrow 12560$$

$$\frac{1}{5} \text{ de } 12560 = 2512$$

2º

$$V = \pi \cdot R^2 \cdot h$$

$$2512 = 3,14 \cdot 5^2 \cdot h$$

$$h = \frac{2512}{78,5} \Rightarrow 32 //$$

LETRA(A)

2-

$$\frac{V_1}{V_2} = \frac{1}{27} \Rightarrow \frac{\pi(R_1)^2 \cdot h_1}{\pi(R_2)^2 \cdot h_2} = \frac{1}{27} \Rightarrow \frac{(R_1)^2 \cdot 2R_1}{(R_2)^2 \cdot 16R_2} = \frac{1}{27}$$

$$\left(\frac{R_1}{R_2}\right)^3 = \frac{8}{27} \Rightarrow \frac{R_1}{R_2} = \frac{2}{3} //$$

LETRA(E)

3- $A_{LC1} = A_{TC1}$

$$2 \cdot \pi(1,5 \cdot R) \cdot h = 2 \pi R(R+h)$$

$$3h = 2 \cdot R + 2 \cdot h \Rightarrow h = 2 \cdot R$$

$$V_1 = 16\pi$$

$$16\pi = \pi R^2 h \Rightarrow 16\pi = h^3/4 = 16 //$$

$$h^3/4$$

$$h = 4 \text{ cm} //$$

LETRA(D)

FORONI

4-

$$V = \pi \cdot R^2 \cdot h$$

$$\pi \cdot (R+12)^2 \cdot 4 = \pi \cdot R^2 \cdot (4+12)$$

$$\pi \cdot (R^2 + 24R + 144) \cdot 4 = \pi \cdot R^2 \cdot 16$$

$$\pi \cdot (4R^2 + 96R + 576) = \pi \cdot R^2 \cdot 16$$

SIMPLIFICANDO POR π :

$$4R^2 + 96R + 576 = 16R^2$$

$$12R^2 - 96R - 576 = 0 \quad :12$$

$$R^2 - 8R - 48$$

$$R_1 = 12 // \text{ LETRA (A)}$$

$$R_{II} = -4$$

$$\Delta = 64 - 4 \cdot 1 \cdot -48$$

$$\Delta = 256$$

5-

$$V = \pi R^2 h$$

$$V = \pi 20^2 \cdot h$$

$$400\pi \cdot h$$

$$400\pi \cdot 0,08$$

$$32\pi$$

$\rightarrow 0,08 \text{ cm}$

$$V = 32 \cdot 3,14$$

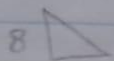
$$V \approx 100,5 //$$

LETRA (B)

6-



$P=6$
 $LADO=1$



$$V = \frac{1}{3} \cdot \frac{3\sqrt{3} \cdot 1^2}{2} \cdot 8$$

$$V = \frac{1}{3} \cdot 1,5\sqrt{3} \cdot 8$$

$$V = \frac{1}{3} \cdot 12\sqrt{3}$$

$$V = 4\sqrt{3} // \text{ LETRA (A)}$$

7-

PIRAMIDE

PRISMA

$$A_b = (2 \cdot a)^2 = 4a^2$$

$$V_I = \frac{4a^2 h_I}{3}$$

$$A_b = a^2$$

$$V_{II} = a^2 \cdot h_{II}$$

$$\frac{h_I}{h_{II}} \Rightarrow \frac{4a^2 h_I}{3} = a^2 h_{II} \Rightarrow \frac{h_I}{h_{II}} = \frac{3 \cdot a^2}{4a^2} \Rightarrow \frac{h_I}{h_{II}} = \frac{3}{4} //$$

LETRA (A)

8-

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

$$6\sqrt{3} = a^2 \sqrt{3}$$

$$a = \sqrt{6} //$$

$$h = \frac{\sqrt{6} \cdot \sqrt{6}}{3} = \frac{6}{3} = 2 \text{ cm} //$$

LETRA (A)

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

$$h = \frac{a\sqrt{6}}{3}$$

} fórmulas