# Tarefa Básica
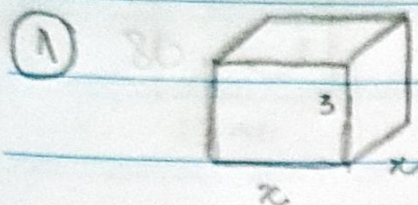
① $80 = 2x^2 + 3x \cdot 4$

$2x^2 + 12x - 80 = 0$
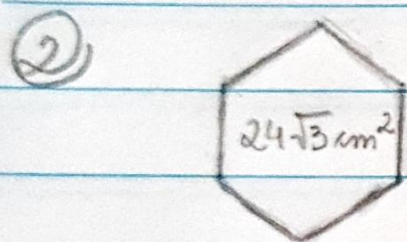
$\Delta = 144 - 4 \cdot 2 \cdot -80$

$\Delta = 784$

$x = \dfrac{-12 \pm 28}{4}$

$x' = \dfrac{-40}{4} = -10$

$x'' = \dfrac{16}{4} = 4 \text{ m}$

② $\ell = 2\sqrt{3}\ cm$

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

$A_{LATERAL} = 6 \cdot (2\sqrt{3} \cdot 4)$

$A_{LATERAL} = 6 \cdot 8\sqrt{3}$

$A_{LATERAL} = 48\sqrt{3}\ cm^2$

$24\sqrt{3} = 6 \cdot \dfrac{\ell^2 \sqrt{3}}{4}$

$96\sqrt{3} = 6\ell^2\sqrt{3}$

$\ell^2 = \dfrac{96\sqrt{3}}{6\sqrt{3}}$

$\ell^2 = 16$

$\ell = 4\ cm$

③
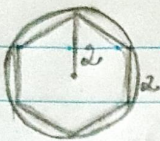
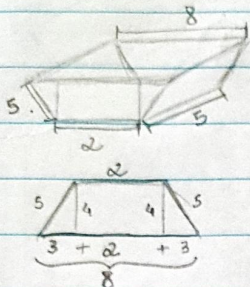$\ell = \sqrt{3}$    $A_T = 2 \cdot \left(\dfrac{6 \cdot 2^2 \sqrt{3}}{4}\right) + 6 \cdot (2 \cdot \sqrt{3})$

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

Alternativa Ⓑ    $A_T = 24\sqrt{3}$

④

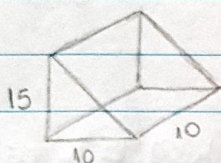$V = \left(\dfrac{(8+2) \cdot 4}{2}\right) \cdot 5$

$V = \dfrac{40}{2} \cdot 5$

Alternativa Ⓓ

$V = 20 \cdot 5$

$V = 100$

⑤

$V = \left(\dfrac{15 \cdot 10}{2}\right) \cdot 10$

Alternativa Ⓒ

$V = 75 \cdot 10$

$V = 750 \ cm^3$

⑥  $A_T = 4x^2$        $4x^2 = 2xy + 2yz + 2xz$

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

$2x^2 = xy + y2y + x2y$

$\Delta = 9x^2 - 4 \cdot 2 \cdot -2x^2$    $2x^2 = 3xy + 2y^2$

$\Delta = 9x^2 + 16x^2$        $2y^2 + 3xy - 2x^2 = 0$

$\Delta = 25x^2$

$V = x \cdot y \cdot z$

$y = \dfrac{-3x \pm 5x}{4}$ $\begin{cases} y' = \dfrac{-8x}{4} = -\cancel{2}x \\ \\ y'' = \dfrac{2x}{4} = \boxed{\dfrac{x}{2}} \end{cases}$    $V = x \cdot \dfrac{x}{2} \cdot 2 \cdot \dfrac{x}{2}$

$V = \dfrac{x^3}{2}$

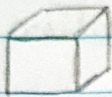Alternativa Ⓒ

# Tarefa Básica

**①**



0,5 cm  12,5 cm  12  25  50  26 cm  51 cm

$V_{INTERNO} = 50 \cdot 25 \cdot 12$

$V_{INTERNO} = 0,5 \cdot 0,25 \cdot 0,12$

$V_{INTERNO} = 0,015 \, m^3$

### Alternativa Ⓐ

**②**



$A_T = 72 \, m^2$

$72 = 6a^2$

$12 = a^2$

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

| 12 | 2 |
| 6 | 2 |
| 3 | 3 |
| 1 | |

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

### Alternativa Ⓑ

**③**



50 cm

$V = 50^3$

$V = 125000 \, cm^3$

$1 m^3 - 1000 L \qquad x = 125 L$

$0,125 \qquad x$

Ⓐ

**④**
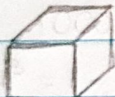


1m

$V = 1^3$

$V = 1 \, m^3$

$1 m^3 = 1000 L$

$x = 1 L$

$1000x = 1$

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

**⑤**

$V = $ volume de 1

$\underline{4V} = $ volume dos 4



$y$  $\ell$  $x$
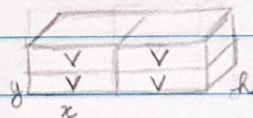
**⑥**
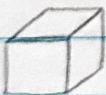


$\rightarrow V = 4\sqrt{3} \cdot 4\sqrt{3} \cdot 4\sqrt{3}$

$V = 16 \cdot 3 \cdot 4\sqrt{3}$

$V = 192\sqrt{3} \, cm^3$

$4\sqrt{3} \, cm$

$A_\triangle = \dfrac{(4\sqrt{3})^2 \sqrt{3}}{4}$

$A_\triangle = \dfrac{48\sqrt{3}}{4} = 12\sqrt{3} \, cm^2$

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

$$l = \frac{192\sqrt{3}}{12\sqrt{3}} = 16 \text{ cm}$$

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

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

$$A_T = 216\sqrt{3} \text{ cm}^2$$

Alternativa Ⓓ