Renan Carlos Loeruenstein

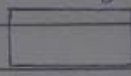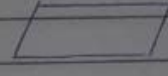## Geometria Plana

- **Quadrado**

$A = a^2$

- **Retângulo**

$A = b \cdot h$
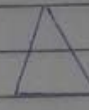
- **Paralelogramo**

$A = b \cdot h$

- **Losango**

$A = \dfrac{D \cdot d}{2}$

- **Trapézio**

$A = \dfrac{(B+b) \cdot h}{2}$

- **Triângulo**

$A = \dfrac{b \cdot h}{2}$

## Geometria Espacial

- **Prisma**

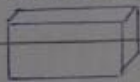$Vol = Ab \cdot H$

$A_T = 2Ab + A_{lateral}$

- **Cilindro**

$Al = 2\pi r h$

$Vol = Ab \cdot h$

$A_t = 2Ab + Al$

- **Paralelepípedo**

$Vol = a \cdot b \cdot c$

$A_T = 2(ab + ac + bc)$

- **Cubo**

$V = a^3$

$A_T = 6a^2$

- **Pirâmide**

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

- **Cone**

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

↳ Sup. lateral → $Al = \pi r g$

- **Esfera**

$V = \frac{4}{3} \cdot \pi R^3$

$A = 4\pi r^2$

## Lista de exercícios 6

① Diagonal → $\sqrt{25+49+81}$ → $d = \sqrt{155}$ cm

$A_L = 2(35 + 45 + 63)$ → $A_L = 286$ cm²

$V = 5$ cm · 7 cm · 9 cm → $V = 315$ cm³

② $(120 \text{ cm})^3 = 1728000$ cm³

$\dfrac{1728000}{21600} = 80$ grãos/dia

③ $\begin{array}{l} a \Rightarrow a^3 \\ 2a \Rightarrow 8a^3 \end{array}$ → a) Volume fica 8 vezes maior

$\begin{array}{l} a \Rightarrow a^3 \\ \frac{1}{3}a \Rightarrow \left(\frac{a}{3}\right)^3 = \left(\frac{a^3}{27}\right) \end{array}$ → b) Volume fica 27 vezes menor

$\begin{array}{l} a \Rightarrow a^3 \\ Ka \Rightarrow (Ka)^3 \end{array}$ → c) Volume fica $K^3$ vezes maior

④ Área lateral = $25\sqrt{3}$ cm²; área total = $25 + 25\sqrt{3}$; $V = 25\sqrt{2}/$

⑤ $A_L = 48\sqrt{6}$ cm² ; $A_t = 24\sqrt{3} + 48\sqrt{6}$    $V = 48\sqrt{7}$

⑤ $x = 10$ cm       $Al = 2\pi x h$
   $Al = 250\pi$ cm$^2$

                          $250\pi = 2\pi \cdot 10 \cdot h$
                                                    $\rightarrow h = \dfrac{250}{2\phi}$
   $h = \dfrac{25}{2}$ cm          $\leftarrow$

⑥ $\dfrac{6b \cdot a \cdot h}{2} = \dfrac{b \cdot h}{2} \rightarrow \dfrac{6}{4} \Rightarrow \dfrac{3}{2}$

⑦ $8 \cdot 7 = 56$ cm$^2 \cdot 5 = 280$ cm$^2$

⑧ a) $x = 52/5$        c) $x = 4$
   b) $x = 4$          d) $x = 45/4$