

**3^a
SÉRIE**

CANAL SEDUC-PI3



PROFESSOR (A):



DISCIPLINA:



CONTEÚDO:



TEMA GERADOR:



DATA:

**ALEXANDRO
KESLLER**

**MATEMÁTICA
OFICINA**

ÁLGEBRA

**SAÚDE NA
ESCOLA**

14.06.2019

ROTEIRO DE AULA

GEOMETRIA ESPACIAL I

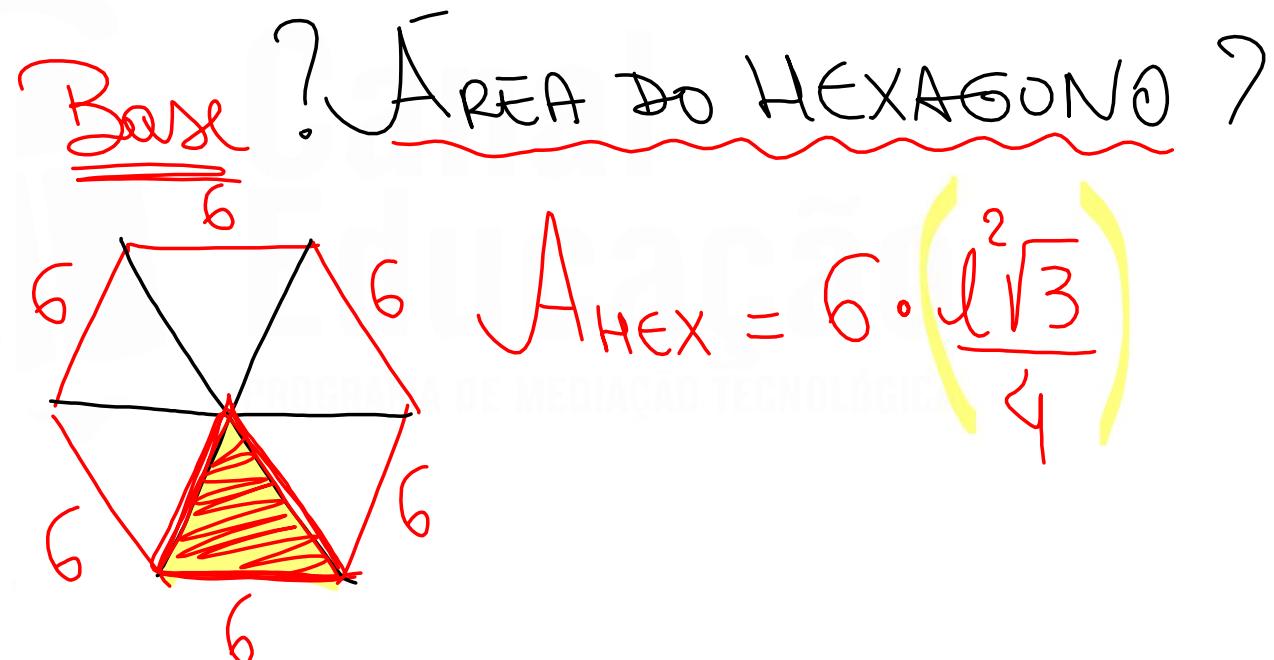
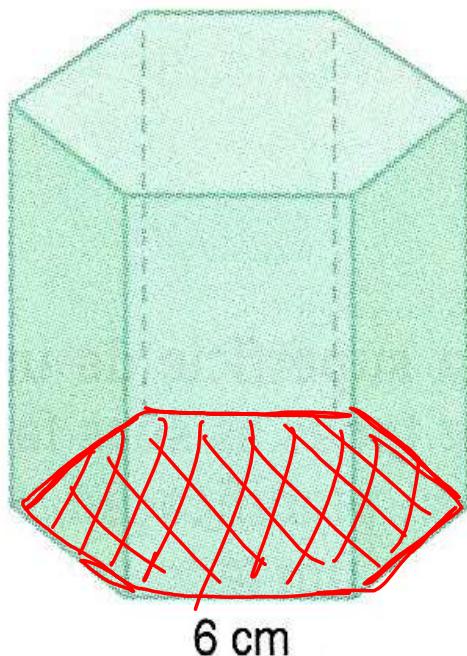
➤ **Prismas**

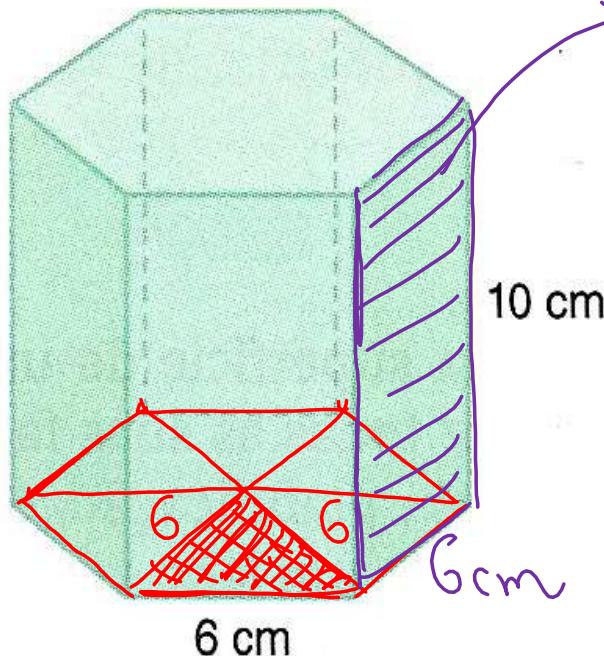
- Áreas e volumes

P/ CASA!

Exercício proposto

Em um **prisma hexagonal regular**, cada aresta da base mede 6 cm e cada aresta lateral mede 10 cm. Calcule a área total desse prisma.





$$A_F = 6 \cdot 10 = 60 \text{ cm}^2$$

$$A_{TOTAL} = 2 \cdot A_B + 6 \cdot A_F$$

$$A_T = 2 \cdot 54\sqrt{3} + 6 \cdot 60$$

$$A_T = (108\sqrt{3} + 360) \text{ cm}^2$$

$$A_B = 6 \cdot 6 \frac{2\sqrt{3}}{4} \Rightarrow 6 \cdot \frac{36\sqrt{3}}{4} \cancel{\downarrow 1} \Rightarrow 54\sqrt{3} \text{ cm}^2$$

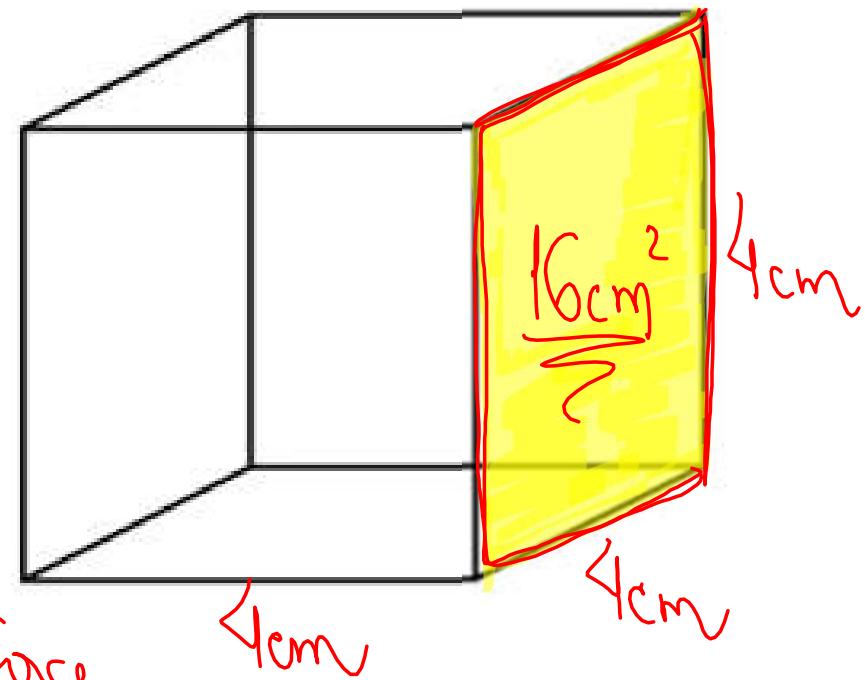
Exercício proposto

6 faces

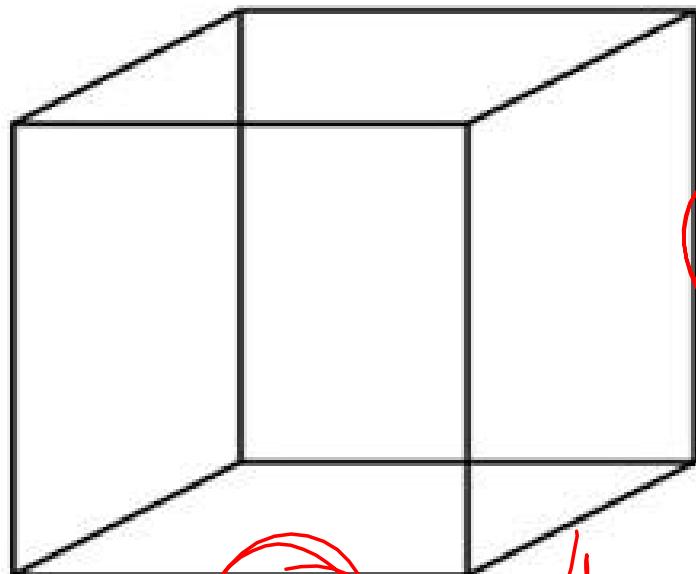
A área total de um cubo é 96 cm^2 . Calcule desse cubo:

- a) A medida da diagonal.
- b) A área lateral.
- c) O volume do cubo

$$\begin{array}{r}
 6 \text{ faces} \\
 96 \text{ } \overline{L} \text{ 6} \\
 36 \quad 16 \text{ cm}^2 \\
 (0) \quad \uparrow \\
 \text{Área 1 face}
 \end{array}$$



a) A medida da diagonal.



DIAGONAL DO UBO (D)

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

$$4\text{cm}$$

$$D = 4\sqrt{3} \text{ cm}$$

DIAGONAL DA BASE

$$d = a \cdot \sqrt{2}$$

$$4\text{cm}$$

$$d = 4\sqrt{2} \text{ cm}$$