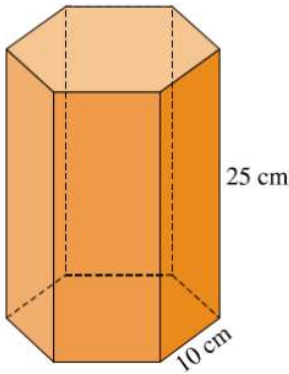


Calcula el área y el volumen de los siguientes cuerpos:



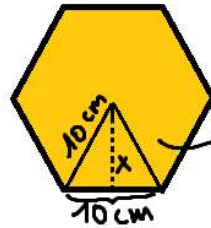
$$\text{Área} = A_{\text{Total}} = A_{\text{lat}} + 2 \cdot A_{\text{base}}$$

$$A_{\text{lat}} = 6 \cdot A_{\text{rectángulo}} = 6 \cdot (10 \cdot 25) = 1500 \text{ cm}^2$$

$$A_{\text{base}} = A_{\text{hexágono}} = \frac{\text{Perímetro} \cdot \text{apotema}}{2} = \frac{60 \cdot 8'66}{2} = 259'8 \text{ cm}^2$$

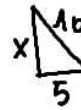
$$\hookrightarrow \text{Perímetro} = 10 \cdot 6 = 60 \text{ cm}$$

$$\hookrightarrow \text{Apotema?} = 8'66 \text{ cm}$$



x = apotema

Utilizando el teorema de Pitágoras:



$$x^2 + 5^2 = 10^2$$

$$x^2 = 75 \Rightarrow x = \sqrt{75}$$

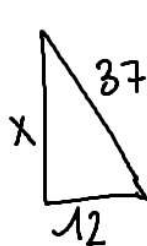
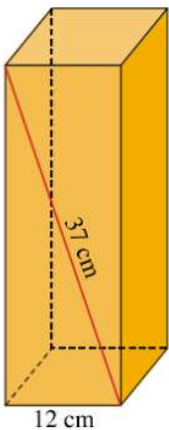
$$x = 8'66 \text{ cm}$$

Por tanto

$$\text{Área} \rightarrow A_{\text{Total}} = 1500 + 2 \cdot 259'8 = 2019'6 \text{ cm}^2$$

$$\text{Volumen} = A_{\text{base}} \cdot \text{altura} = 259'8 \cdot 25 = 6495 \text{ cm}^3$$

Calculamos primero la altura de este prisma:



Teorema de Pitágoras:

$$x^2 + 12^2 = 37^2 \rightarrow x = 35 \text{ cm}$$

$$\text{Área} = A_{\text{lat}} + 2 \cdot A_{\text{base}}$$

$$A_{\text{lat}} = 4 \cdot A_{\text{rectángulos}} = 4 \cdot (12 \cdot 35) = 1680 \text{ cm}^2$$

$$A_{\text{base}} = A_{\text{cuadrado}} = 12 \cdot 12 = 144 \text{ cm}^2$$

$$\text{Área} = 1680 + 2 \cdot 144 = 1968 \text{ cm}^2$$

$$\text{Volumen} = A_{\text{base}} \cdot \text{altura} = 144 \cdot 35 = 5040 \text{ cm}^3$$