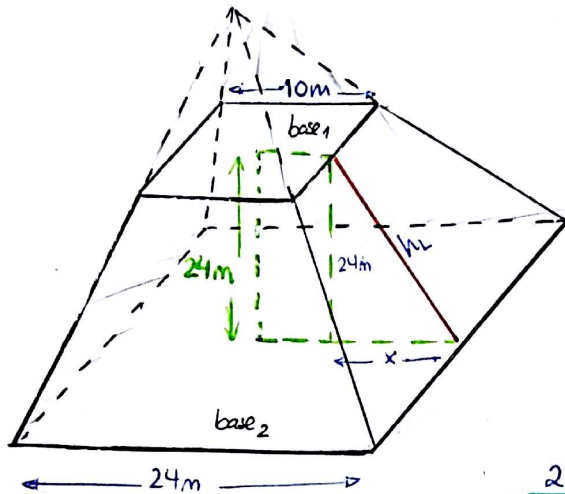


TRONCO DE PIRÁMIDE



1. Cálculo del área total:

$$A_T = Ab_1 + Ab_2 + A_{lateral} =$$

$$= 10^2 + 24^2 + 4 A_{\triangle} =$$

$$= 100 + 576 + 4 \cdot \frac{(24+10) \cdot 25}{2} = 2376 m^2$$

$$x = 12 - 5 = 7 m$$

Teorema de Pitágoras:

$$h_L = \sqrt{24^2 + 7^2} = 25 m$$

2. Cálculo del volumen total:

$$V = V_{grande} - V_{pequeño}$$

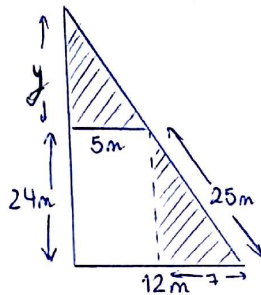
$$\frac{7}{5} = \frac{24}{y}$$

$$y = \frac{24 \cdot 5}{7} = 17,14 m$$

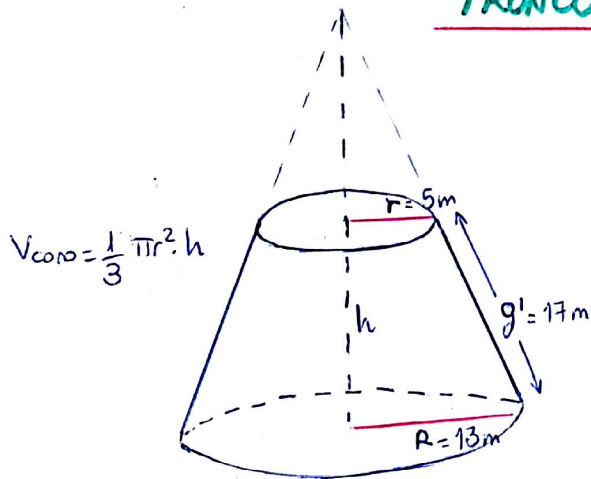
$$V = \frac{1}{3} \cdot 24^2 \cdot (24 + 17,14) - \frac{1}{3} \cdot 10^2 \cdot 17,14 =$$

$$= 7898,88 - 571,33 = 7327,55 m^3$$

$$V_{volumen} = \frac{1}{3} Ab \cdot h$$



TRONCO DE CONO



1. Cálculo del área total:

$$A_T = Ab_1 + Ab_2 + A_{lateral}^{\circledast} =$$

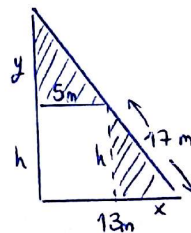
$$= \pi r^2 + \pi R^2 + (\pi r + \pi R) \cdot g' =$$

$$= \pi \cdot 5^2 + \pi \cdot 13^2 + (\pi \cdot 5 + \pi \cdot 13) \cdot 17 =$$

$$= 1570,8 m^2$$

2. Cálculo del volumen total:

$$V = V_{grande} - V_{pequeño}$$



$$x = 13 - 5 = 8 m$$

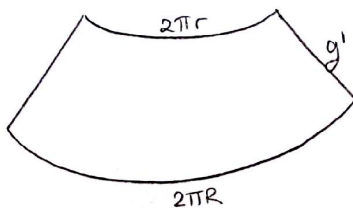
$$h = \sqrt{17^2 - 8^2} = 15 m$$

$$\frac{8}{5} = \frac{15}{y}$$

$$y = \frac{15 \cdot 5}{8} = 9,375 m$$

$$V = \frac{1}{3} \pi R^2 \cdot (15 + 9,375) - \frac{1}{3} \pi r^2 \cdot 9,375 =$$

$$= 4313,8 - 245,44 = 4068,36 m^3$$



⊛ Como si fuese un trapecio

$$A_{lat} = \frac{(2\pi r + 2\pi R) \cdot g'}{2} =$$

$$= (\pi r + \pi R) \cdot g'$$