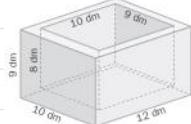


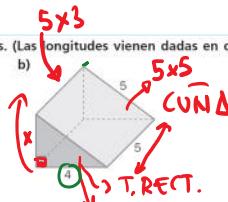
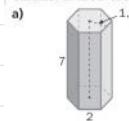
## Piramides y conos problemas

miércoles, 27 de mayo de 2020 12:10

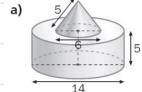
Un decímetro cúbico del material con el que está construido el recipiente representado en la figura pesa 7,8 kilogramos. Calcula cuánto pesa el recipiente.



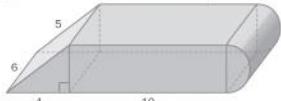
Calcula el área total de los siguientes cuerpos. (Las longitudes vienen dadas en centímetros).



Calcula el volumen de los siguientes cuerpos, cuyas longitudes vienen dadas en centímetros.



La figura representa una pieza de madera, que hay que recubrir con una capa de pintura. ¿Qué superficie hay que pintar? (Las longitudes vienen expresadas en centímetros).



PRISMO TRIÁNGULAR IRREGULAR RECTO

$$\text{ÁREA TRIÁNGULO } A = \frac{c_1 \cdot c_2}{2}$$

$$c_1 = 3, c_2 = \sqrt{25-9} = 4$$

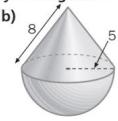
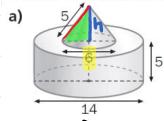
$$\Delta_B = \frac{3 \cdot 4}{2} = 6 \text{ cm}^2$$

$$V = A_B \cdot h = 6 \cdot 5 = 30 \text{ cm}^3$$

$$A_T = 2 \cdot A_B + 5 \cdot 4 + 5 \cdot 3 + 5 \cdot 5 =$$

$$= 12 + 20 + 15 + 25 = 72 \text{ cm}^2$$

Calcula el volumen de los siguientes cuerpos, cuyas longitudes vienen dadas en centímetros.



(a)

CILINDRO  $R = 7 \text{ cm}$   $\phi = 14 \text{ cm}$   
 $H = 5$

COND  $r = 3 \text{ cm}$   $\phi = 6 \text{ cm}$

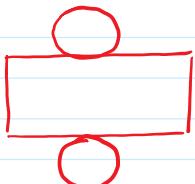
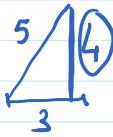
$$V_{CIL} = A_B \cdot H = \pi R^2 \cdot H = 3.14 \cdot 7^2 \cdot 5 = 769.3 \text{ cm}^3$$

$$V_{COND} = \frac{1}{3} A_B \cdot h = \frac{1}{3} \cdot 3.14 \cdot r^2 \cdot h = \frac{5}{14} \text{ (A)}$$

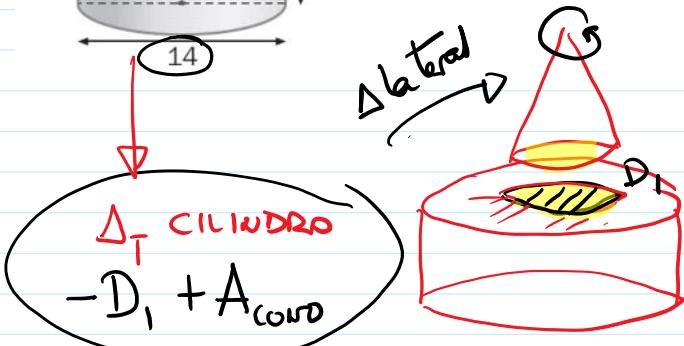
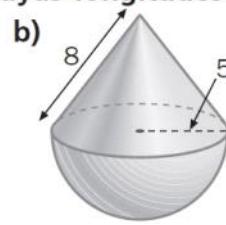
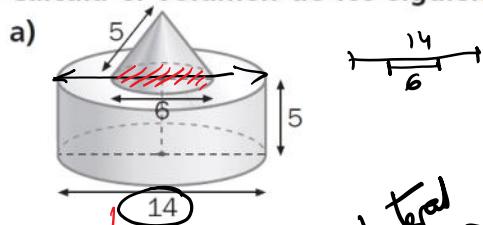
CILINDRO:  $V = \pi r^2 h$

$$V_{cono} = \frac{1}{3} A_B \cdot h = \frac{1}{3} \pi r^2 \cdot h =$$

$$= \frac{1}{3} \cdot \pi \cdot 3^2 \cdot 4 =$$

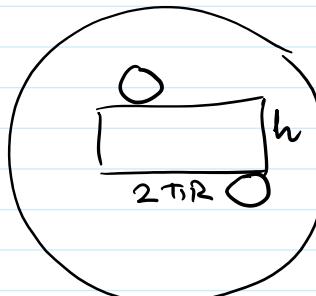


Calcula el volumen de los siguientes cuerpos, cuyas longitudes vienen dadas en centímetros.



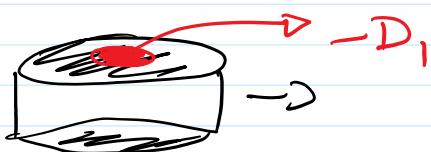
$$\Delta_T \text{ CILINDRO}$$

$$-D_1 + A_{cono}$$



$$A_T = \underbrace{2A_B}_{\Delta \text{ LATERAL}} + 2\pi R \cdot h$$

$$\rightarrow A_T = \underbrace{2\pi r^2}_{2D_{base}} + 2\pi r \cdot h = \pi(58 + 70) = \underline{168\pi}$$



$$D_1 = \pi \cdot 3^2 = 9\pi$$

↓  
RADIO3

$$A_{cono} = \cancel{\pi r^2} + \cancel{\pi r g}$$

$$A_{cono} = \pi \cdot 3 \cdot 5 = 15\pi$$

$$A_{RED} = 168\pi - 9\pi + 15\pi = 174\pi = \underline{546.36 \text{ cm}^2}$$