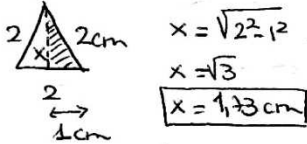


Del tema 10: 72 / 74 / 80b / 81b / 86 / 90a

72] Se trata de un prisma cuya base es un triángulo equilátero.

1º ALURA DE LA BASE

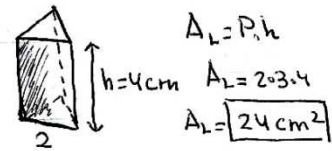


2º AREA BASE

$$A_B = \frac{b \cdot x}{2}$$

$$A_B = \frac{2 \cdot 1,73}{2} = 1,73 \text{ cm}^2$$

3º AREA LATERAL



4º AREA TOTAL

$$A_T = 2 \cdot A_B + A_L = 2 \cdot 1,73 + 24 = 27,66 \text{ cm}^2$$

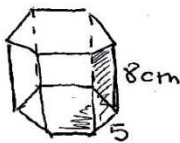
5º VOLUMEN

$$V = A_B \cdot h \rightarrow V = 1,73 \cdot 4 = 6,92 \text{ cm}^3$$

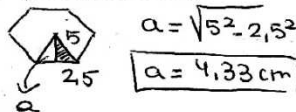
74]

a) AREA TOTAL $\rightarrow A_T = 2ab + 2ac + 2bc = 2 \cdot 3 \cdot 4 + 2 \cdot 3 \cdot 5 + 2 \cdot 4 \cdot 5 = 94 \text{ cm}^2$
VOLUMEN $\rightarrow V = a \cdot b \cdot c \rightarrow V = 3 \cdot 4 \cdot 5 = 60 \text{ cm}^3$

b)



1º APOTEMA BASE



2º ARE BASE

$$A_B = \frac{P \cdot a}{2}$$

$$A_B = \frac{(5 \cdot 6) \cdot 4,33}{2} = 64,95 \text{ cm}^2$$

3º AREA LATERAL

$$A_L = P \cdot h$$

$$A_L = (5 \cdot 6) \cdot 8 = 240 \text{ cm}^2$$

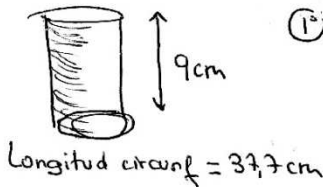
4º AREA TOTAL

$$A_T = 2 \cdot A_B + A_L$$

$$A_T = 2 \cdot 64,95 + 240 = 369,9 \text{ cm}^2$$

5º VOLUMEN $\rightarrow V = A_B \cdot h \rightarrow V = 64,95 \cdot 8 = 519,6 \text{ cm}^3$

80b]



1º RADIO BASE

$$L = 37,7$$

$$L = 2\pi r$$

$$37,7 = 2\pi r$$

$$r = \frac{37,7}{2\pi} = 6,00 \text{ cm}$$

2º AREA BASE

$$A_B = \pi r^2$$

$$A_B = \pi \cdot 6^2$$

$$A_B = 113,10 \text{ cm}^2$$

3º AREA LATERAL

$$A_L = 2\pi r h$$

$$A_L = 2\pi \cdot 6 \cdot 9$$

$$A_L = 339,3 \text{ cm}^2$$

4º AREA TOTAL

$$A_T = 2 \cdot A_B + A_L$$

$$A_T = 2 \cdot 113,10 + 339,3$$

$$A_T = 565,50 \text{ cm}^2$$

5º VOLUMEN

$$V = A_B \cdot h$$

$$V = 113,10 \cdot 9$$

$$V = 1017,9 \text{ cm}^3$$

81b



① GENERATRIZ
 $g = \sqrt{12^2 + 9^2}$
 $g = 15 \text{ cm}$

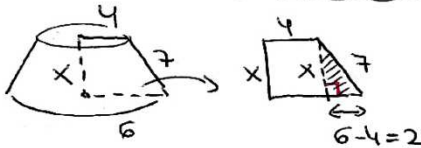
② AREA BASE
 $A_B = \pi r^2$
 $A_B = \pi \cdot 9^2$
 $A_B = 254,47 \text{ cm}^2$

③ AREA LATERAL
 $A_L = \pi r g$
 $A_L = \pi \cdot 9 \cdot 15$
 $A_L = 424,12 \text{ cm}^2$

④ AREA TOTAL
 $A_T = A_B + A_L$
 $A_T = 254,47 + 424,12 = 678,59 \text{ cm}^2$

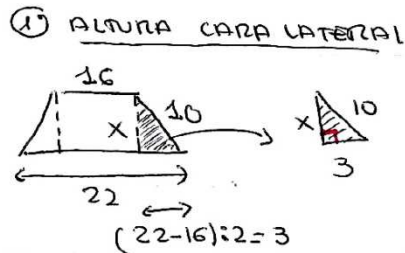
⑤ VOLUMEN
 $V = \frac{A_B \cdot h}{3}$
 $V = \frac{254,47 \cdot 12}{3} = 1017,88 \text{ cm}^3$

86



$x = \sqrt{7^2 - 2^2}$
 $x = 6,71 \text{ cm}$

90 a)



$x = \sqrt{10^2 - 3^2}$
 $x = 9,54 \text{ cm}$

② AREA CARA LATERAL (TRAPECIO)
 $A_{\Delta} = \frac{B+b}{2} \cdot x$
 $A_{CARA L} = \frac{22+16}{2} \cdot 9,54$

$A_{C.L.} = 181,26 \text{ cm}^2$

③ AREA LATERAL
 $A_L = 5 \cdot A_{C.L.} = 5 \cdot 181,26 = 906,3 \text{ cm}^2$

④ AREA BASE GRANDE

$A_{B(1)} = \frac{P \cdot a}{2}$

$A_{B(1)} = \frac{22 \cdot 5 \cdot 15,14}{2} = 832,7 \text{ cm}^2$

⑤ AREA BASE PEQUE.

$A_{B(2)} = \frac{P \cdot a}{2}$

$A_{B(2)} = \frac{16 \cdot 5 \cdot 11,01}{2} = 440,4 \text{ cm}^2$

⑥ AREA TOTAL

$A_T = A_{B(1)} + A_{B(2)} + A_L$

$A_T = 832,7 + 440,4 + 906,3 = 2179,4 \text{ cm}^2$