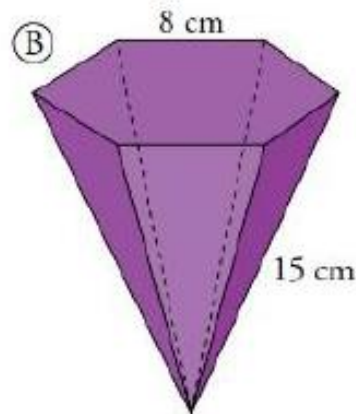
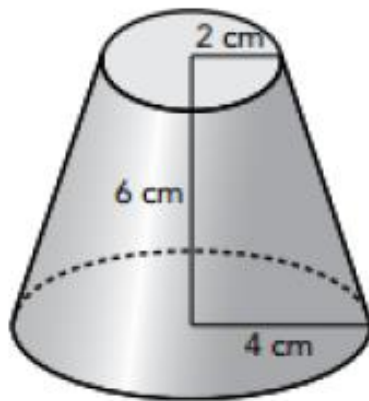


1. Área y volumen total



(A) $g' = \sqrt{6^2 + 2^2} = 6,32 \text{ cm}$
 $g = 6 \text{ cm}$ por seno y coseno de triángulo

$A_T = A_{B1} + A_{B2} + A_{lat} =$
 $= \pi \cdot 2^2 + \pi \cdot 4^2 + (2\pi r + 2\pi R) \cdot g' =$
 $= 12,57 + 50,27 + 119,13 =$
 $= \boxed{181,96 \text{ cm}^2}$

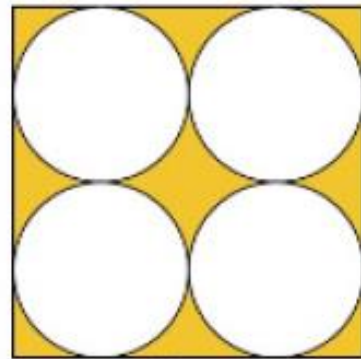
$V = V_{cono mayor} - V_{cono menor} =$
 $= \frac{1}{3} \pi \cdot 4^2 \cdot 12 - \frac{1}{3} \pi \cdot 2^2 \cdot 6 =$
 $= 201,06 - 25,13 = \boxed{175,93 \text{ cm}^3}$

(B) $r = l$
 $h = \sqrt{15^2 - 8^2} = 12,69 \text{ cm}$
 $ap_L = \sqrt{15^2 - 4^2} = 14,46 \text{ cm}$

$A_T = A_{base} + A_{lat} =$
 $= \frac{P \cdot ap}{2} + 6 \cdot \frac{b \cdot h}{2} = *$
 $ap \text{ del hexágono} = \sqrt{8^2 - 4^2} =$
 $= 6,93 \text{ cm}$
 $* = \frac{8 \cdot 6,93}{2} + \frac{6 \cdot 8 \cdot 14,46}{2} =$
 $= \boxed{513,36 \text{ cm}^2}$

$V = \frac{1}{3} A_b \cdot h = \frac{1}{3} \cdot 466,32 \cdot 12,69 =$
 $= \boxed{703,53 \text{ cm}^3}$

2. Área sabiendo que el lado del cuadrado mide 12 cm



(A) $A_{\text{segmento}} = A_D - A_{\Delta} =$
 $= \frac{\pi r^2}{4} - \frac{6 \cdot 6}{2} =$
 $= \frac{\pi \cdot 6^2}{4} - \frac{36}{2} = 10,27 \text{ cm}^2$
 $A_T = 8 \cdot A_{\text{segmento}} = \boxed{82,16 \text{ cm}^2}$

(B) $A_{\text{somb}} = A_{\square} - 4A_{\circ} = 12^2 - 4 \cdot (\pi \cdot 3^2) = 144 - 113,1 = \boxed{30,90 \text{ cm}^2}$