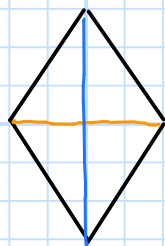
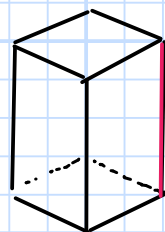


1)



$$P = 60 \text{ cm} \Rightarrow l = 15 \text{ cm}$$

$$d = \text{diag. minore} = 20 \text{ cm}$$



$$h = \frac{3}{2} d = \frac{3}{2} \cdot 20 = 30 \text{ cm}$$

$$D = \text{diag. maggiore} \Rightarrow \frac{D}{2} = \sqrt{15^2 - 10^2} = \sqrt{125} = 5\sqrt{5} \Rightarrow D = 10\sqrt{5}$$

(teorema di Pitagora)

$$\text{Area Romb} = \frac{D \cdot d}{2} = \frac{10\sqrt{5} \cdot 20}{2} = 100\sqrt{5} \text{ cm}^2$$

$$\text{Area laterale Prism} = l \cdot h \cdot 4 = 15 \cdot 30 \cdot 4 = 60 \cdot 30 = 1800 \text{ cm}^2$$

$$\text{Area totale} = \text{Area laterale} + 2 \cdot \text{Area Base} = 1800 + 200\sqrt{5} \text{ cm}^2$$

$$\text{Volume} = \text{Area base} \cdot h = 100\sqrt{5} \cdot 30 = 3000\sqrt{5} \text{ cm}^3$$