

Es 124

DATI

$$A_{\text{rombo}} = 120 \text{ cm}^2$$

$$d_1 = 24 \text{ cm}$$

$$V = 1680 \text{ cm}^3$$

RICHIESTA

$$S_{\text{tot}} = ?$$



$$S_{\text{tot}} = S_{\text{lat}} + 2 S_{\text{base}}$$

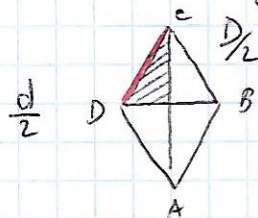
$$2 p_{\text{base}} \cdot h_{\text{prism}} + 2 \cdot \left(\frac{D \cdot d}{2} \right) \rightarrow \text{ci già!}$$

$$\textcircled{14}$$

DATI DA TROVARE

$h_{\text{prism}} \rightarrow$ dal volume ($h = \frac{V}{A_{\text{base}}}$)

il rombo \rightarrow uso Pitagora:



\rightarrow per trovare la diagonale mancante uso la formula dell'area

SOLUZIONE:

$$d_2 = \frac{2 \cdot 120}{24} = \frac{240}{24} = 10 \text{ dm}$$

$$l = \sqrt{\left(\frac{24}{2}\right)^2 + \left(\frac{10}{2}\right)^2} = \sqrt{12^2 + 5^2} = \sqrt{144 + 25} = \sqrt{169} = 13 \text{ dm}$$

$$d_2 = \frac{2A}{d_1}$$

$$2p = 13 \cdot 4 = 52 \text{ dm}$$

$$h_{\text{prism}} = \frac{1680}{120} = 14 \text{ dm}$$

$$S_{\text{tot}} = 52 \cdot 14 + 2 \cdot 120 = 728 + 240 = 968 \text{ dm}^2$$