

11

DATI

$e_1 = 21 \text{ cm}$

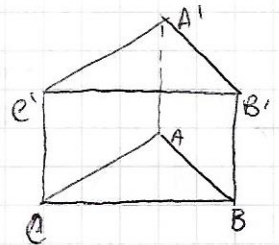
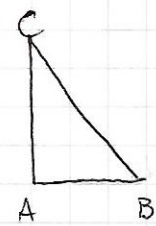
$i = 29 \text{ cm}$

$h_p = \frac{6}{5} \text{ cm minore}$

RICHIESTA

$V = ?$

$St_{tot} = ?$



(NOTA = il solido non è deformato nella giusta proporzione)

$h_p = \frac{6}{5} \cdot 20 = 24 \text{ cm}$

SVOLGIMENTO

$e_2 = \sqrt{29^2 - 21^2} = \sqrt{841 - 441} = \sqrt{400} = 20 \text{ cm}$

$A_{base} = \frac{e_1 \cdot e_2}{2} = \frac{21 \cdot 20}{2} = 210 \text{ cm}^2$

$2p_{base} = 20 + 21 + 29 = 70 \text{ cm}$

$St_{tot} = St_{lat} + 2A_{base} = 2p_{base} \cdot h + 2A_{base} = 70 \cdot 24 + 2 \cdot 210 = 1680 + 420 = 2100 \text{ cm}^2$

$V = A_{base} \cdot h = 210 \cdot 24 = 5040 \text{ cm}^3$

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DATI

$d_1 = 9 \text{ cm}$

$d_2 = 24 \text{ cm}$

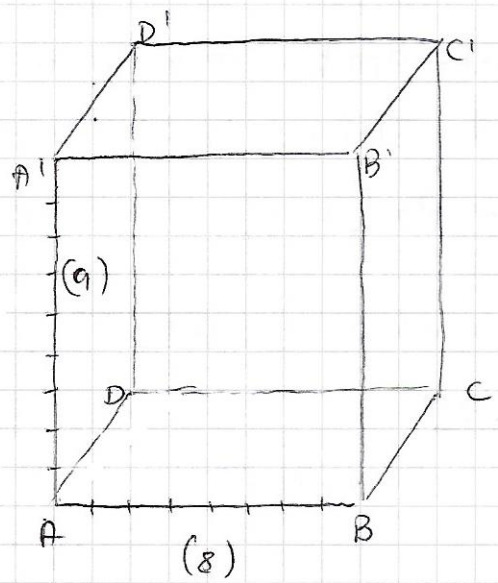
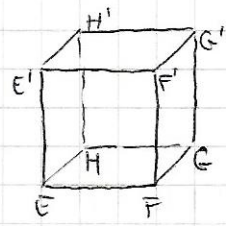
$h = \frac{9}{8} d_2$

$St_{lat} \text{ cubo} = \frac{2}{11} St_{lat} p$

RICHIESTA

$St_{lat} \text{ cubo} = ?$

$V \text{ cubo} = ?$



SVOLGIMENTO

$h = \frac{9}{8} \cdot 24 = 27 \text{ cm}$

$St_{lat} p = 2p_{base} \cdot h = (9+9+24+24) \cdot 27 = 66 \cdot 27 = 1782 \text{ cm}^2$

$St_{lat} \text{ cubo} = \frac{2}{11} \cdot 1782 = 324 \text{ cm}^2 \rightarrow \text{SONO } 4 \text{ FACCE}$

$324 : 4 = 81 \text{ cm}^2 \quad 1 \text{ FACCE (BASE)}$

$\sqrt{81} = 9 \text{ cm} \text{ spigolo (altezza)}$

$St_{tot} = A_{base} \cdot 6 = 81 \cdot 6 = 486 \text{ cm}^2$

$V = A_{base} \cdot h = 81 \cdot 9 = 729 \text{ cm}^3$