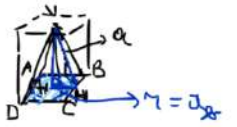
Lezione 26



$\overline{AB} = 8\,cm$

$\overline{VH} = 3\,cm$

$A_T = ?$

$V = ?$

$A_b = \overline{AB}^2 = (8cm)^2 = 64cm^2$

$A_T = A_b + S_l$

$S_l = p \cdot a$

APOTEMA BASE

$a_b = \frac{2A}{2p}$

$\frac{l \cdot l}{2 \cdot 4l} = \frac{l}{8}$

$S_l = \frac{2 \cdot l}{2} a$

$S_l = p \cdot a$

$A = \frac{a \cdot 2p}{2}$

AREA DEI POLIGONI REGOLARI

$\overline{VM} = \sqrt{\overline{VH}^2 + \overline{HM}^2} = \sqrt{(3cm)^2 + (4cm)^2} = \sqrt{9cm^2 + 16cm^2}$

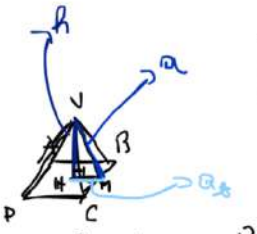
$= \sqrt{25cm^2} = 5\,cm$

$S_l = p \cdot \overline{VM} = 2\overline{AB} \cdot \overline{VM} = 16\,cm \cdot 5\,cm = 80cm^2$

$S_t = A_b + S_l = 80cm^2 + 64cm^2 = 144cm^2$

$V = \frac{1}{3} A_b \cdot \overline{VH} = \frac{1}{3} \cdot 64cm^2 \cdot 3cm$

$= 64cm^3$



$\overline{AB} = 70\,cm$

$\overline{VH} = 60\,cm$

$A_T = ?$

$V = ?$

$A_B = \overline{AB}^2 = (70\,cm)^2 = 4900\,cm^2$

$V = \frac{1}{3} A_B \cdot \overline{VH} = \frac{1}{3} \cdot 4900\,cm^2 \cdot 60\,cm = 98000\,cm^2$

$A_\ell = p \cdot \overline{VM} = 2\overline{AB} \cdot \overline{VM} = ?!?$

$a_p = \frac{2A}{2p} = \frac{\ell^2}{4\ell}$

$a_p = \frac{\ell}{2}$

$\overline{VM} = \sqrt{\overline{VH}^2 + \overline{HM}^2} = \sqrt{(60cm)^2 + (35cm)^2} =$

$= \sqrt{3600cm^2 + 1225\,cm^2} = 4825\,cm^2$

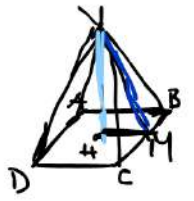
$\approx 69,46\,cm$

$A_\ell = p \cdot \overline{VM} = 2\overline{AB} \cdot \overline{VM} = 140cm \cdot 69,46cm$

$\approx 9724,4cm^2$

$A_T = A_B + A_\ell = 4900\,cm^2 + 9724,4cm^2 \approx$

$14624,4cm^2$



$\overline{AB} = 20\,cm$

$\overline{VH} = 24\,cm$

$\overline{VM} = ?$

$V = ?$

$$ap = \frac{2A}{2p}$$

$$\frac{\cancel{2}l^2}{\cancel{24}l} = \frac{l}{2}$$

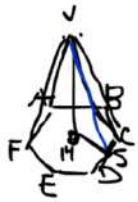
$$\overline{VM} = \sqrt{\overline{VH}^2 + \overline{HM}^2} =$$

$$= \sqrt{(24\,cm)^2 + (10\,cm)^2} = \sqrt{576\,cm^2 + 100\,cm^2}$$

$$= \sqrt{676\,cm^2} = 26\,cm$$

$$A_B = \overline{AB}^2 = (20\,cm)^2 = 400\,cm^2$$

$$V = \frac{1}{3} A_B \cdot VH = \frac{1}{\cancel{3}} \cdot 400\,cm^2 \cdot \cancel{24}^{8}\,cm = 3200\,cm^3$$

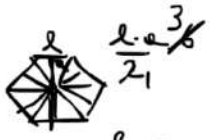


$d = 9{,}25 \frac{g}{cm^3}$

$m = 2700\ g$

$\overline{VH} = 12\ cm$

$A_T = ?$



$\frac{l \cdot a}{2} \cdot 3$

$3 l \cdot a$

$A_b = \frac{p \cdot \overline{HS}}{2} = ?!?$

$d = \frac{m}{V}$

$V = \frac{m}{d} = \frac{2700\ g}{9{,}25 \frac{g}{cm^3}} = 10.800\ cm^3$

$V = \frac{1}{3} A_b \cdot \overline{VH}$

$A_b = \frac{3V}{\overline{VH}} = \frac{3 \cdot 10800\ cm^3}{4{,}12\ cm} = 2700\ cm^2$

$A_b = \frac{3V}{\overline{VH}}$