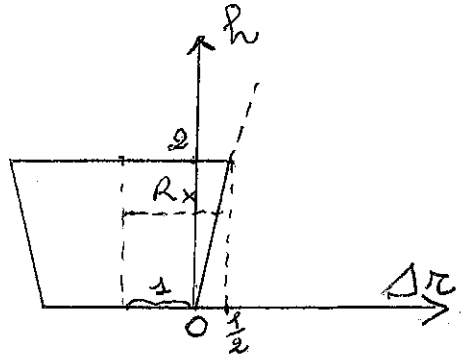
by Giovanni Calleris 5H



$V_{Acque} = 9,17\ ohm^3$

$r_b = 1$

Eq retta "lato contenitore"

$h = \frac{2}{\frac{1}{2}} \Delta r = 4\Delta r = 4(R_x - 1)$

$$V = \frac{\pi h}{3}\left[r_b^2 + r_b R_x + R_x^2\right]$$

$$= \frac{\pi \cdot 4\Delta r}{3}\left(1 + R_x + R_x^2\right) = \frac{4}{3}\pi 4(R_x - 1)\left(1 + R_x + R_x^2\right) =$$

$$\frac{4}{3}\pi\left(R_x^3 - 1\right) \rightarrow \frac{3V}{4\pi} + 1 = R_x^3$$

$$R_x = \sqrt{\frac{3V}{4\pi} + 1} \rightarrow h = 4\left[\sqrt{\frac{3V}{4\pi} + 1} - 1\right] \approx 1,88\ ohm$$