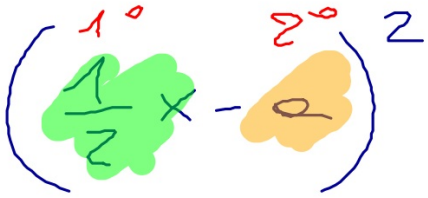


QUADRATO D' BINOMIO

QUADRATO 1° TERM.

DOPPIO PRODOTTO DEL 1° PER IL 2°

QUADRATO 2° TERM

+ CONCORDI

− DISCORDI

$+\frac{1}{4}x^2 - ax + a^2$

OMOGENEO SI 2°

COMPLETO SI

" X SI

DIFFERENZA DI QUADRATI

$$(a+b)\cdot(a-b) =$$

$$= a^2 - \cancel{ab} + \cancel{ab} - b^2 =$$

$$= a^2 - b^2$$

$$\left(\frac{3}{2}a^2 - 2b\right)\left(\frac{3}{2}a^2 + 2b\right) =$$

$$= \frac{9}{4}a^4 - 4b^2$$

$$(a-2b)(a+2b)-(a-b)^2+2b^2=$$

$$=a^2-4b^2-(a^2-2ab+b^2)-a^2+2b^2=$$

$$=a^2-4b^2-a^2+2ab-b^2-a^2+2b^2=$$

$$=-a^2+2ab+(-4-1+2)b^2$$

$$=-a^2+2ab-3b^2$$

$$\frac{3}{4}a\left(a-\frac{2}{3}\right)+\left(\frac{1}{2}a+3\right)^2-(a+5)(a-1)=$$

$$=\frac{3}{4}a^2-\frac{1}{2}a+\frac{1}{4}a^2+2\cdot\frac{1}{2}\cdot 3a+9-a^2+5a+a-\left(a^2-a+5a-5\right)$$

$$=\frac{3}{4}a^2-\frac{1}{2}a+\frac{1}{4}a^2+3a+9-a^2+a-5a+5=$$

$$=\left(\frac{+3+1-4}{4}\right)a^2+\left(\frac{-1+6+2-10}{2}\right)a+14=$$

$$=-\frac{3}{2}a+14$$

$$\left(3a-\frac{1}{2}b\right)^2+\left(3a+\frac{1}{2}b^2\right)\left(3a-\frac{1}{2}b^2\right)-b^2\left(-3a+\frac{1}{2}b^2+1\right)=$$

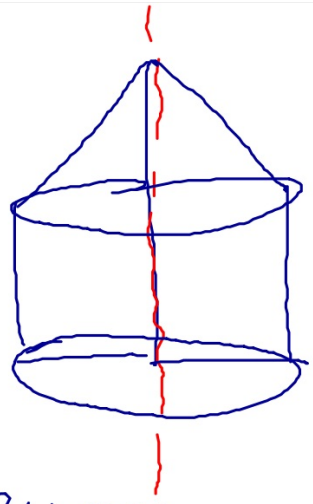
$$=+9a^2-3ab+\frac{1}{4}b^2-\left(+9a^2-\frac{1}{4}b^4\right)+3ab^2-\frac{1}{2}b^4-b^2=$$

$$=+\cancel{9a^2}-3ab+\frac{1}{4}b^2-\cancel{9a^2}+\frac{1}{4}b^4+3ab^2-\frac{1}{2}b^4-b^2=$$

$$=-3ab+3ab^2+\left(\frac{1}{4}-\frac{1}{2}\right)b^4+\left(+\frac{1}{4}-1\right)b^2=$$

$$=-3ab+3ab^2+\left(\frac{+1-2}{4}\right)b^4+\left(\frac{+1-4}{4}\right)b^2=$$

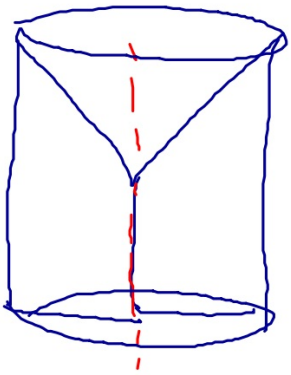
$$=-3ab+3ab^2-\frac{3}{4}b^2-\frac{1}{4}b^4$$



RUOTA INTORNO ALLA BASE MAGGIORE

$ST = Sb_1 + Sl_1 + Sl_2$

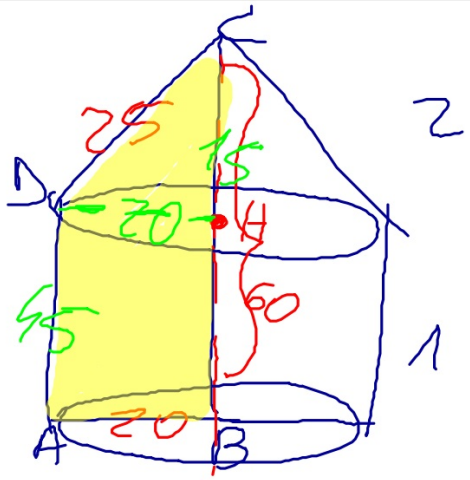
$VT = V_1 + V_2$



RUOTA INTORNO ALLA BASE MINORE

$St = Sb_1 + Sl_1 + Sl_2$

$VT = V_1 - V_2$



2

D

$AB = 20$ cm

$CD = 25$ cm

$CH + HB = 60$ cm

$\mu_s = 0{,}5$

1

S_t

V_t

p

$$CH = \sqrt{CD^2 - DH^2} = \sqrt{25^2 - 20^2} = 15 \text{ cm}$$

$$BH = BC - CH = 60 - 15 = 45 \text{ cm}$$

$$2pb = AB \cdot 2\pi = 20 \cdot 2\pi = 40\pi \text{ cm}$$

$$Sb = AB^2\pi = 20^2\pi = 400\pi \text{ cm}^2$$

$$Sl_1 = 2pb \cdot BH = 40\pi \cdot 45 = 1800\pi \text{ cm}^2$$

$$V_1 = Sb \cdot BH = 400\pi \cdot 45 = 18000\pi \text{ cm}^3$$

$S_{laterale} = \frac{2pb \cdot VK}{2}$ | $V_{cono} = \frac{Sb \cdot Vt}{3}$

$S_{l_2} = \frac{2pb \cdot CD}{2} = \frac{40\pi \cdot 25}{2} = 500\pi \ cm^2$

$V_2 = \frac{Sb \cdot CH}{3} = \frac{400\pi \cdot 45}{3} = 2000\pi$

St

$Vt = V_1 + V_2 = 18000\pi + 2000\pi =$

$= 20000\pi = 20.000 \cdot 3,14$

$62800 \ cm^3$

$P = Vt \cdot p_s$