$AB = raggio$

$BC = Altezza\ del\ cilindro\ (AA')$
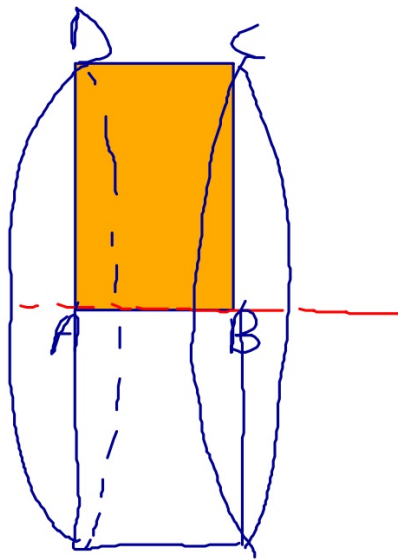
$BC = raggio$

$AB = Altezza\ del\ solido$

$$2pb = 2\pi r$$
$$Sb = r^2\pi$$
$$Sl = 2pb \cdot h$$
$$St = Sl + 2Sb$$
$$V = Sb \cdot h$$

$AB = 12$ cm

$BC = 8$ cm

St_1
V_1
St_2
V_2

$BC = r_{eff}$
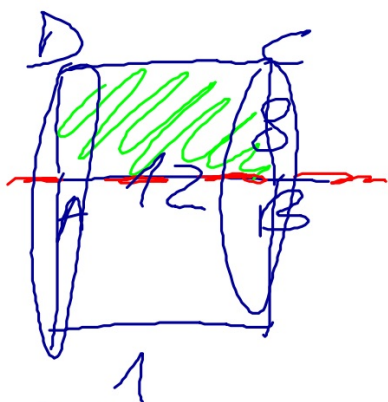
$AB = altezza$

$2pb_1 = 2 \cdot BC \pi = 2 \cdot 8\pi = 16\pi$ cm

$Sb_1 = BC^2 \pi = 8^2 \pi = 64\pi$ cm^2

$Sl_1 = 2pb_1 \cdot AB = 16\pi \cdot 12 = 192\pi$ cm

$St_1 = Sl_1 + 2Sb_1 = 192\pi + 2 \cdot 64\pi = 320\pi$ cm^2

$V_1 = Sb_1 \cdot AB = 64\pi \cdot 12 = 768\pi$ cm^3

$$r = 12 \ (AB)$$
$$h = 8 \ (BC)$$

$$2pb_z = 2 \cdot AB \cdot \pi = 2 \cdot 12\pi = 24\pi \ cm$$

$$Sb_z = AB^2 \cdot \pi = 12^2 \cdot \pi = 144\pi \ cm^2$$

$$Sl_z = 2pb_z \cdot BC = 24\pi \cdot 8 = 192\pi \ cm^2$$

$$St_z = Sl_z + 2Sb_z = 192\pi + 2 \cdot 144\pi = 480\pi \ cm^2$$
$$(192 + 2 \cdot 144)\pi$$

$$V_z = Sb_z \cdot BC = 144\pi \cdot 8 = 1152\pi \ cm^3$$

$$\begin{array}{r} 192 \\ 288 \\ \hline 480 \end{array}$$

$$\left(\frac{1}{2}x - 5y\right)\left(\frac{1}{5}x + 2y\right) =$$

$$= \frac{1}{2} \cdot \frac{1}{5}x^2 + \frac{1}{2} \cdot 2 \, xy - 5 \cdot \frac{1}{5}xy - 5 \cdot 2 \, xy =$$

$$= +\frac{1}{10}x^2 + xy - xy - 10y^2 =$$

$$= +\frac{1}{10}x^2 - 10y^2$$

$$\left(\frac{1}{4}xy - \frac{1}{5}y\right)\left(\frac{4}{5}x + \frac{5}{4}x^2y\right) =$$

$$= +\frac{1}{4}\cdot\frac{4}{5}x^2y + \frac{1}{4}\cdot\frac{5}{4}x^3y^2 - \frac{1}{5}\cdot\frac{4}{5}xy - \frac{1}{5}\cdot\frac{5}{4}x^2y^2$$

$$= +\frac{1}{5}x^2y + \frac{5}{16}x^3y^2 - \frac{4}{25}xy - \frac{1}{4}x^2y^2$$

$$= +\frac{5}{16}x^3y^2 - \frac{1}{4}x^2y^2 + \frac{1}{5}x^2y - \frac{4}{25}xy$$

ORDINATO - NON COMPLETO RISP. $\frac{X}{Y}$

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

$$= -\frac{3}{8}\cdot\frac{2}{3}x^2 + \frac{3}{2}\cdot\frac{1}{2}xy^2 + \frac{1}{3}\cdot\frac{2}{3}xy - \frac{1}{3}\cdot\frac{1}{2}y^3 + \frac{1}{3}\cdot\frac{3}{2}xy^2 - \frac{1}{3}\cdot\frac{1}{2}x^2 -$$

$$-\frac{1}{2}\cdot\frac{3}{2}y^3 + \frac{1}{2}\cdot\frac{1}{2}xy =$$

$$= -x^2 + \frac{3}{4}xy^2 + \frac{2}{9}xy - \frac{1}{6}y^3 + \frac{1}{2}xy^2 - \frac{1}{6}x^2 - \frac{3}{4}y^3 + \frac{1}{4}xy$$

$$= \left(-1 - \frac{1}{6}\right)x^2 + \left(+\frac{3}{4} + \frac{1}{2}\right)xy^2 + \left(+\frac{2}{9} + \frac{1}{4}\right)xy + \left(-\frac{1}{6} - \frac{3}{4}\right)y^3 =$$

$$= \left(\frac{-6-1}{6}\right)x^2 + \left(\frac{+3+2}{4}\right)xy^2 + \left(\frac{+8+9}{36}\right)xy + \left(\frac{-2-9}{12}\right)y^3 =$$

$$= -\frac{7}{6}x^2 + \frac{17}{36}xy + \frac{5}{4}xy^2 - \frac{11}{12}y^3$$

ORDINATO — COMPLETO RISP. x