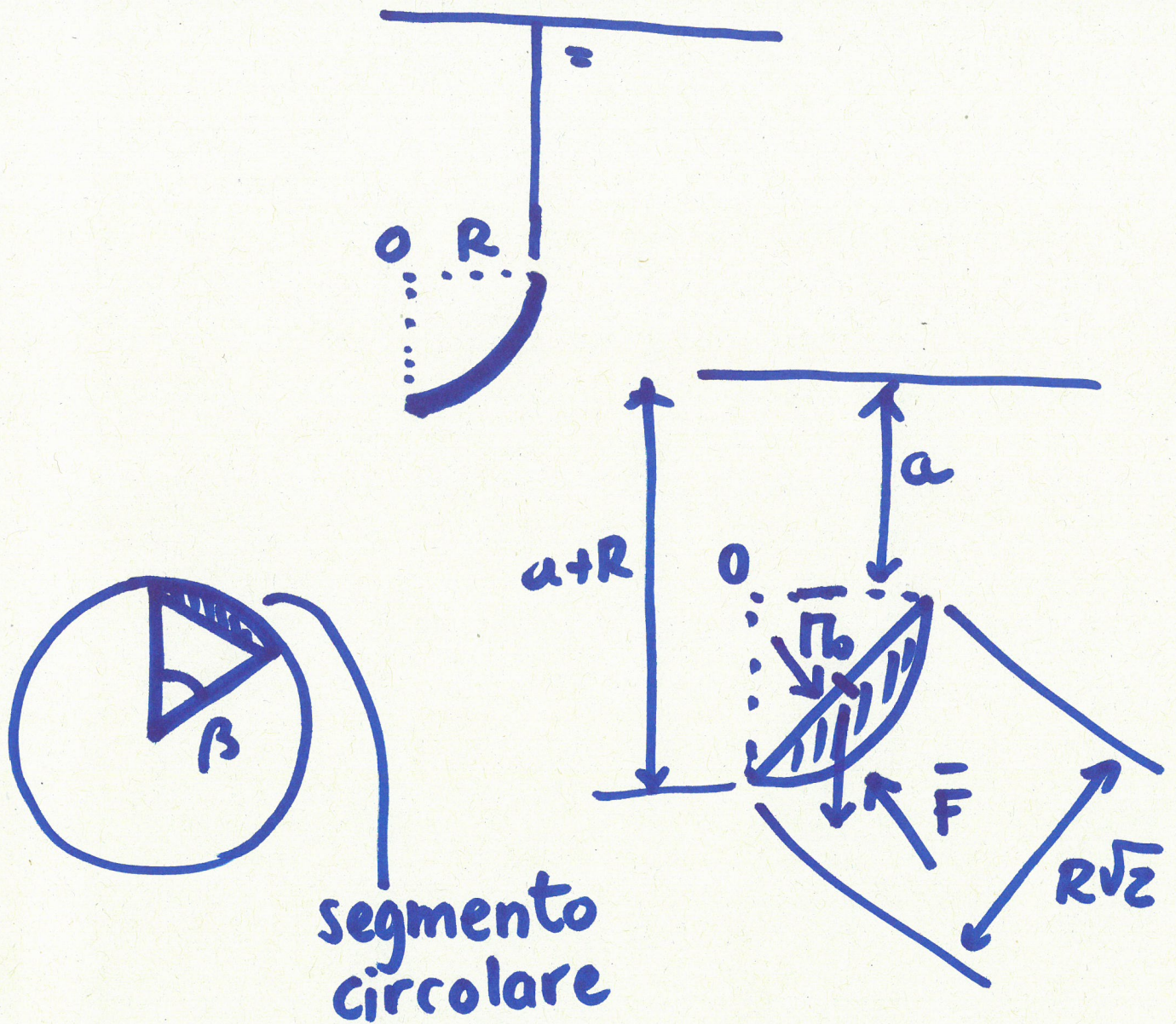




$$A_{sc} = \frac{R^2}{2} (\beta - \sin \beta)$$

$$A_{sc} = \frac{R^2}{2} \left(\frac{\pi}{2} - 1 \right)$$

$$V = A_{sc} \cdot L$$

$$|\bar{G}| = \gamma L \left(\frac{\pi R^2}{4} - \frac{R^2}{2} \right)$$

$$|\bar{\Pi}_0| = \gamma \left(a + \frac{R}{2} \right) RL \sqrt{2}$$

$$|\Pi_{0x}| = \gamma \left(a + \frac{R}{2} \right) RL \sqrt{2} \cdot \frac{\sqrt{2}}{2}$$

$$|\Pi_{0z}| = \gamma \left(a + \frac{R}{2} \right) RL$$

$$x) |\Pi_{0x}| = |F_x|$$

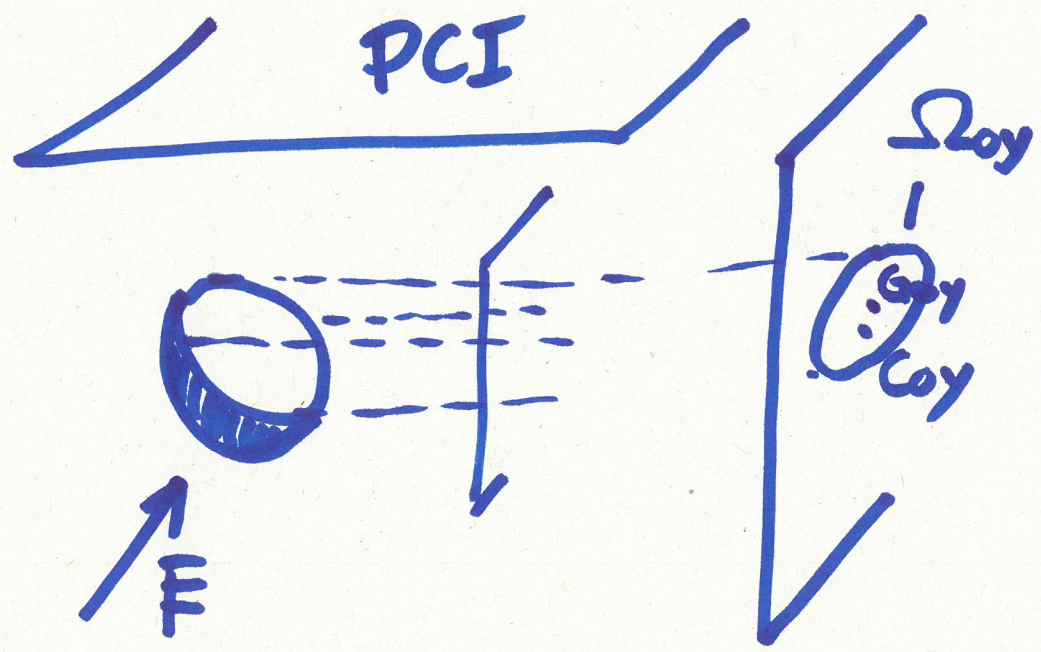
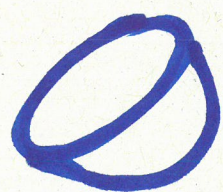
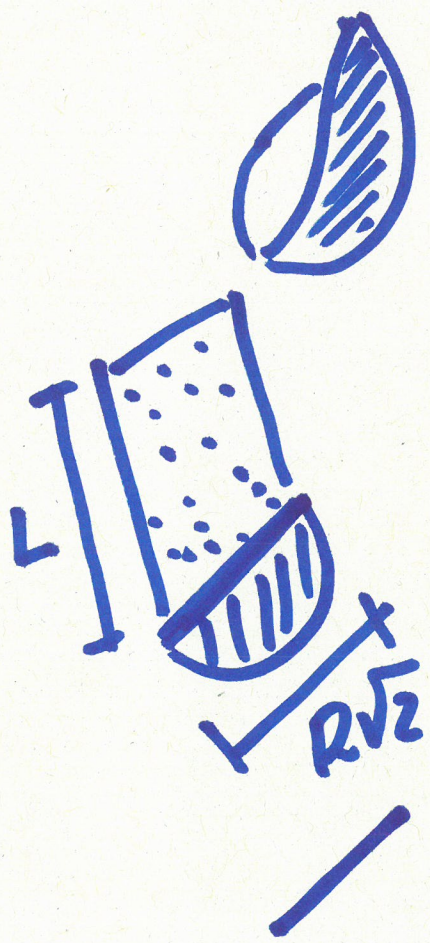
$$F_x = \gamma RL \left(a + \frac{R}{2} \right)$$

$$z) |\Pi_{0z}| + |G_z| = |F_z|$$

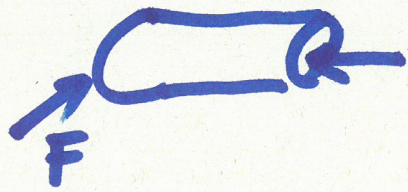
$$\gamma a RL + \cancel{\gamma \frac{R^2 L}{2}} + \gamma L \frac{\pi R^2}{4} - \cancel{\gamma \frac{R^2}{2}} = |F_z| \Rightarrow |F_z| = \gamma RL \left(a + \frac{\pi R}{4} \right)$$

SPINTA IDROST. SUP. CURVA (aperta)

PCI



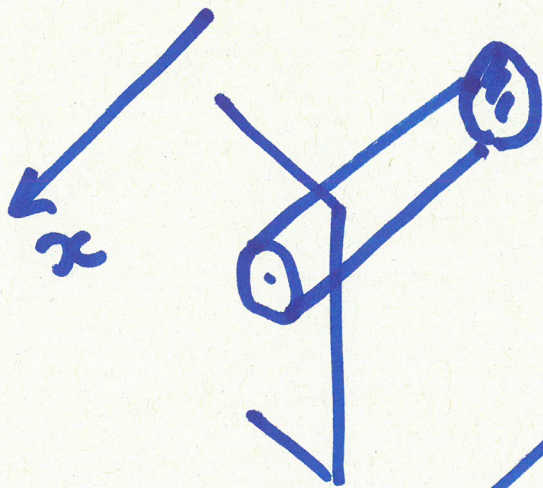
? F_y



$$|F_y| = |F_{oy}|$$

$\gamma \vec{r}_{Go_y} \Omega_{oy}$

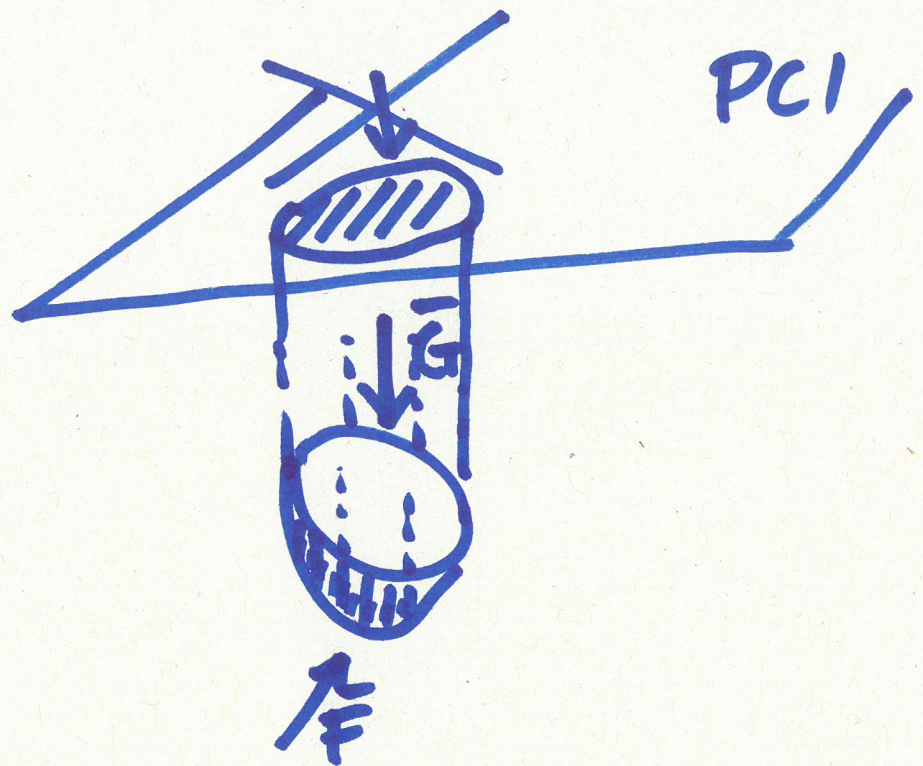
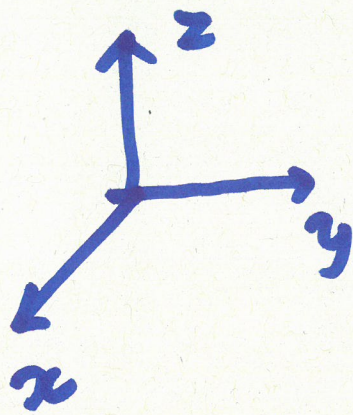
retta d'azione
per C_{oy}



$$|F_x| = |F_{ox}|$$

$\gamma \vec{r}_{Go_x} \Omega_{ox}$

retta
d'azione
per C_{ox}



$$|F_z| = |G_z|$$

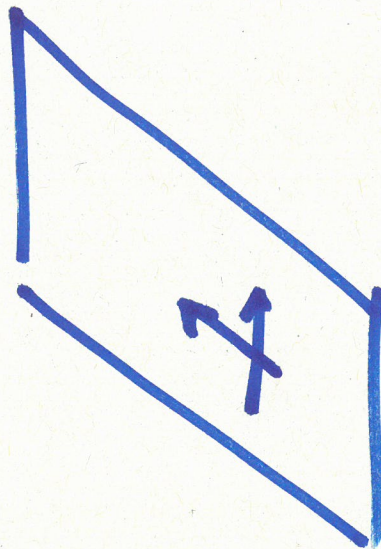
$\swarrow \searrow$
 $\gamma \quad \gamma$

? $\overline{F} \quad \exists \overline{F}$

NON E' DETTO CHE CI SI
POSSA RICONDURRE A UN'UNICA
RISULTANTE

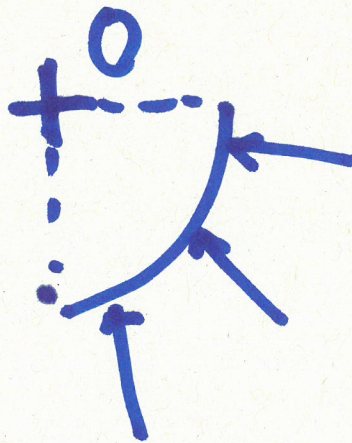
CASI "SEMPLICI"

PIANI



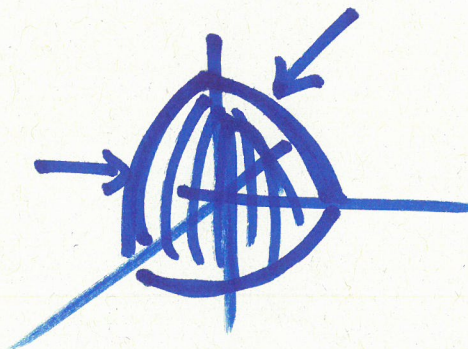
$\vec{F}$

CIL



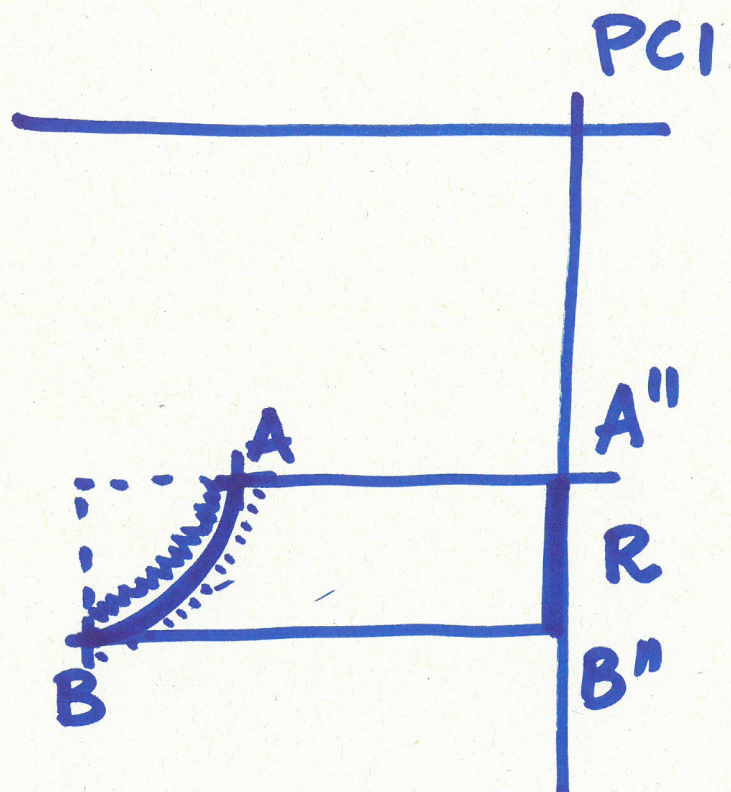
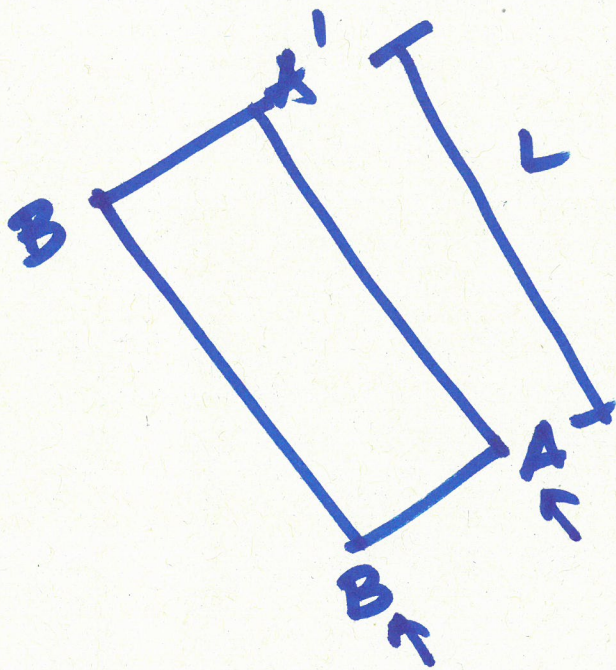
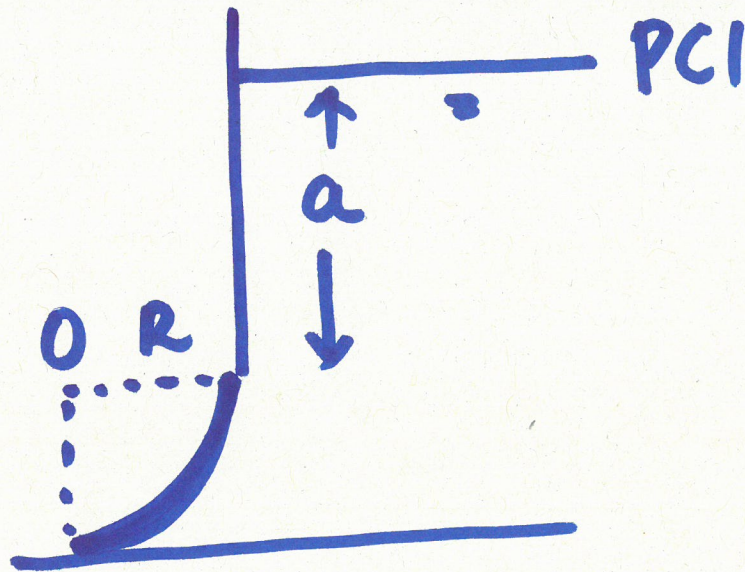
$\vec{F}$ per 0

SF.

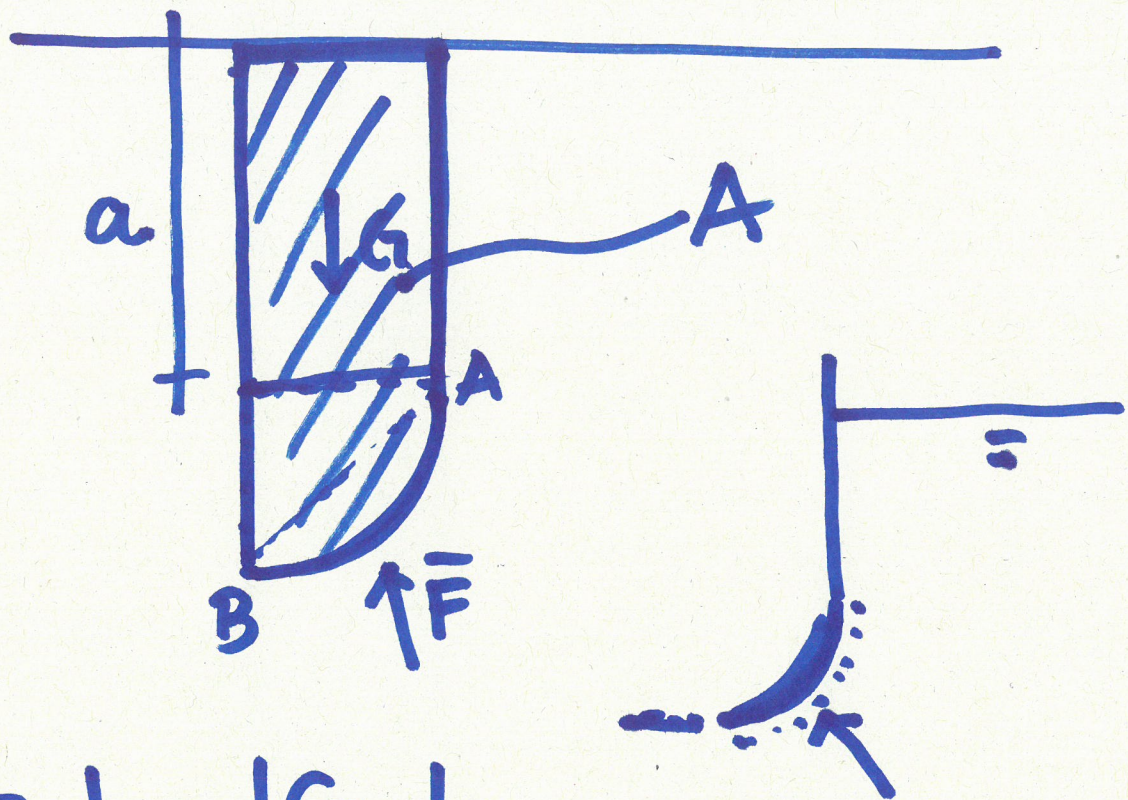


$\vec{F}$ per 0

$$d\vec{F} = p dA \vec{n}$$



$$|F_x| = \gamma \underbrace{\int_{GOx}}_{a + \frac{R}{2}} \underbrace{\Omega_{Ox}}_{RL} = \gamma RL \left(a + \frac{R}{2} \right)$$



$$|F_z| = |G_z|$$

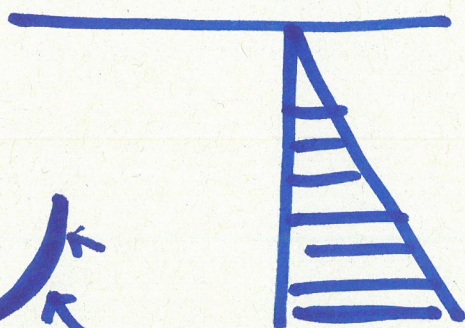
$$= \gamma V = \gamma A \cdot L$$

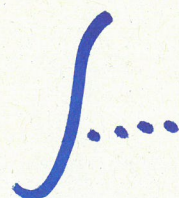
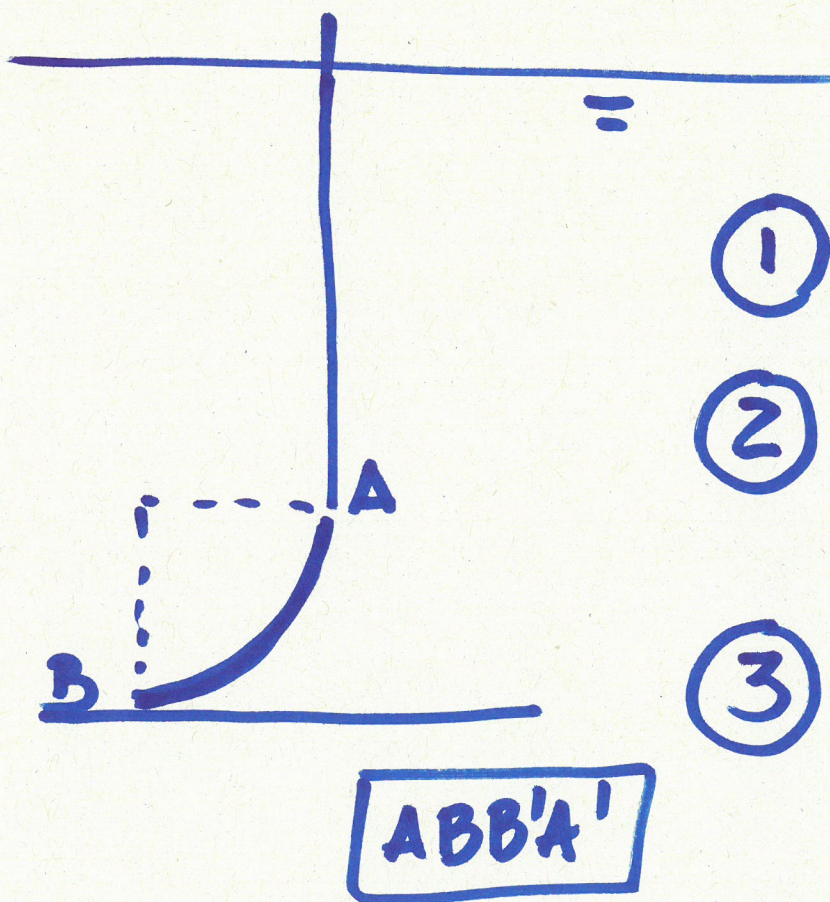
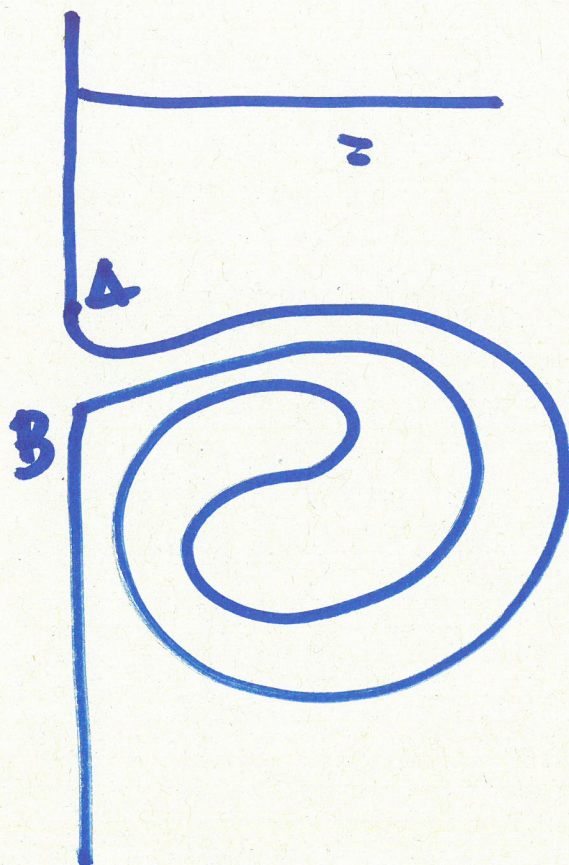
$$= \gamma \left(R a + \frac{\pi R^2}{4} \right)$$

$$|F_z| = \gamma R L \left(a + \frac{\pi R}{4} \right)$$



2 case :





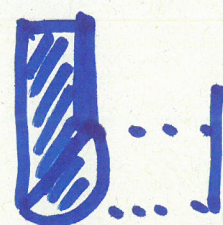
②



③

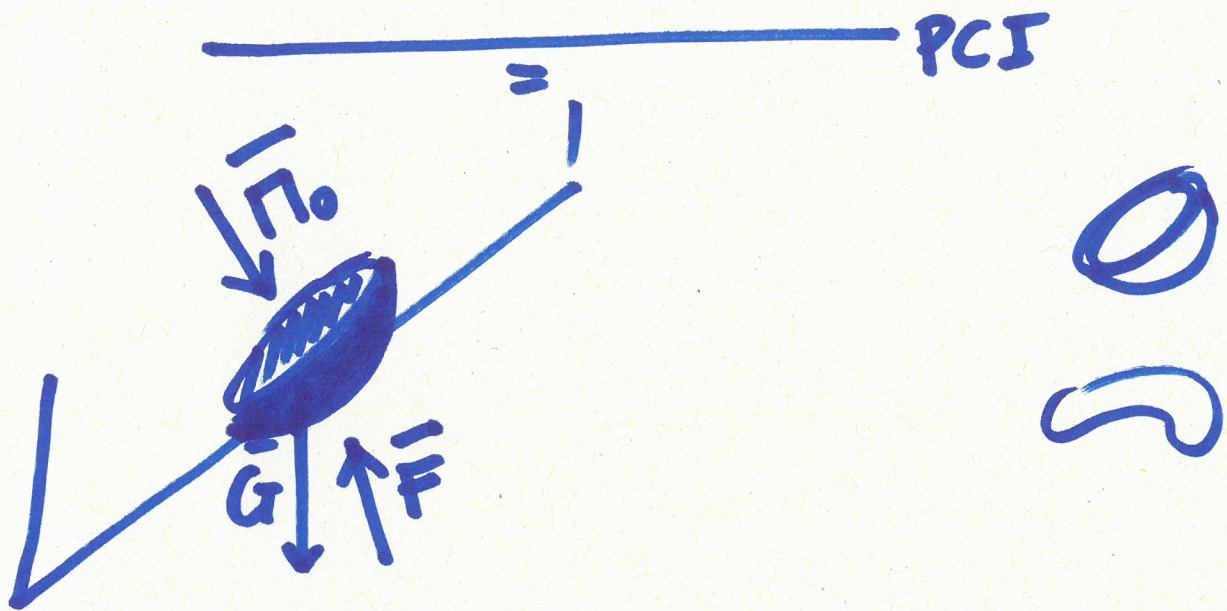


④



SP. IDR. SU SUP. CURVE AP.
con contorno ϵ piano

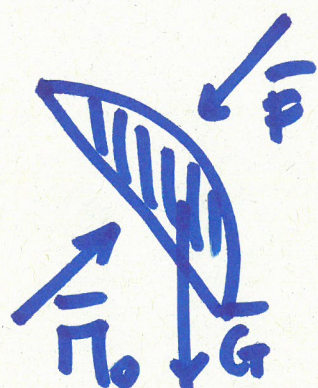
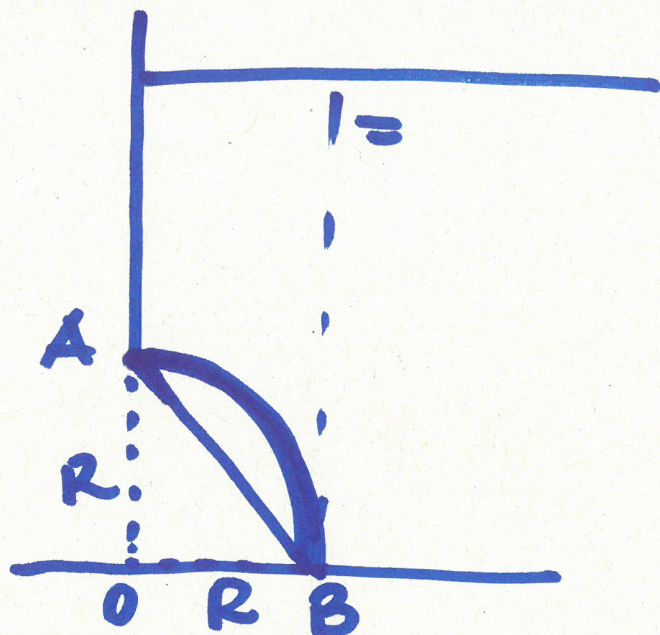
CITRINI NOJEDA
MOSSA PETRILLO



$$|\bar{F}_x| = |\bar{\Pi}_0 x| \quad (y)$$

$$|\bar{F}_z| = |\bar{\Pi}_0 z| + |\bar{G}_z|$$

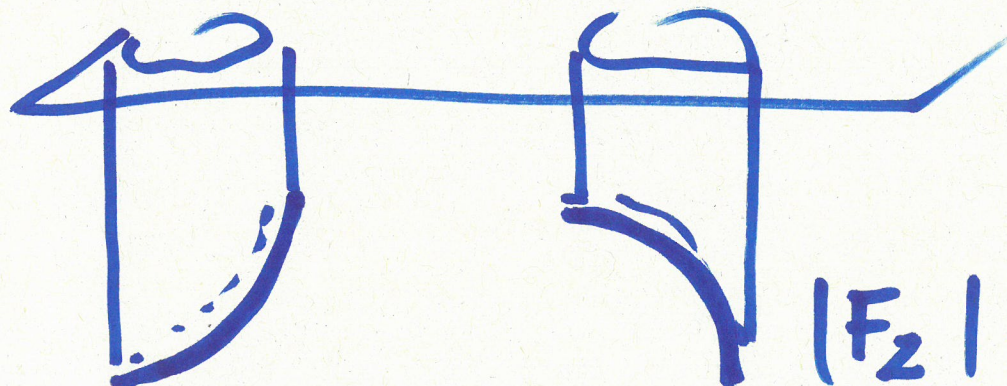




$$|F_z| + |G_z| = |P_{0z}|$$

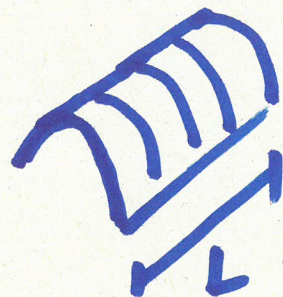
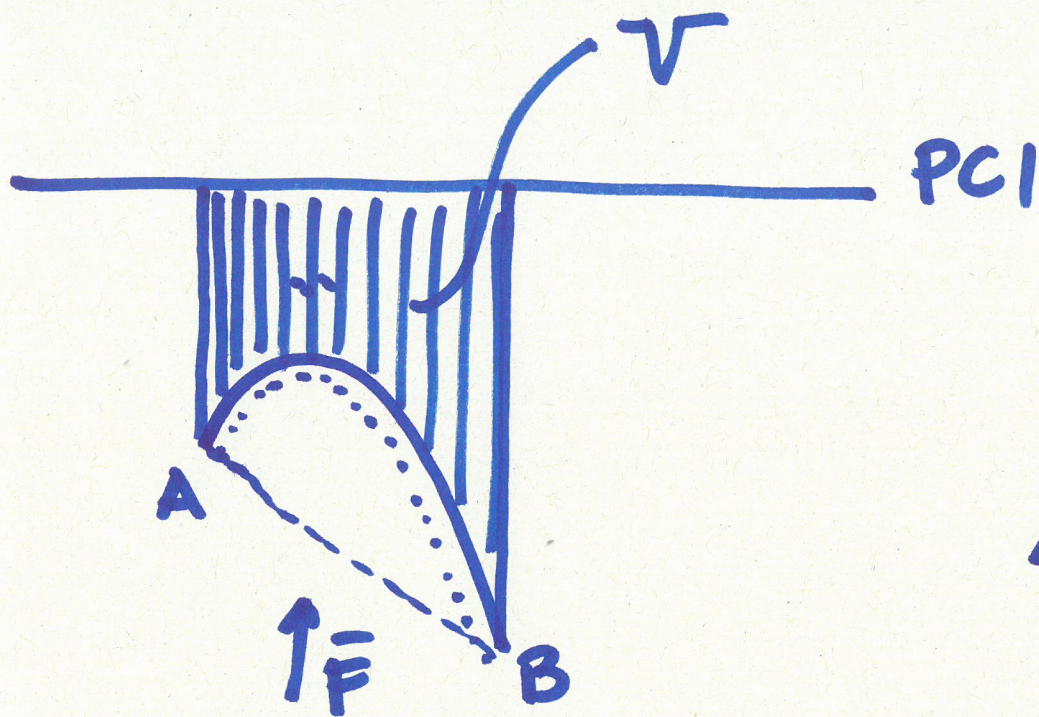
$$|P_{0x}| = |F_x|$$

$$|F_z| = |P_{0z}| - |G_z|$$



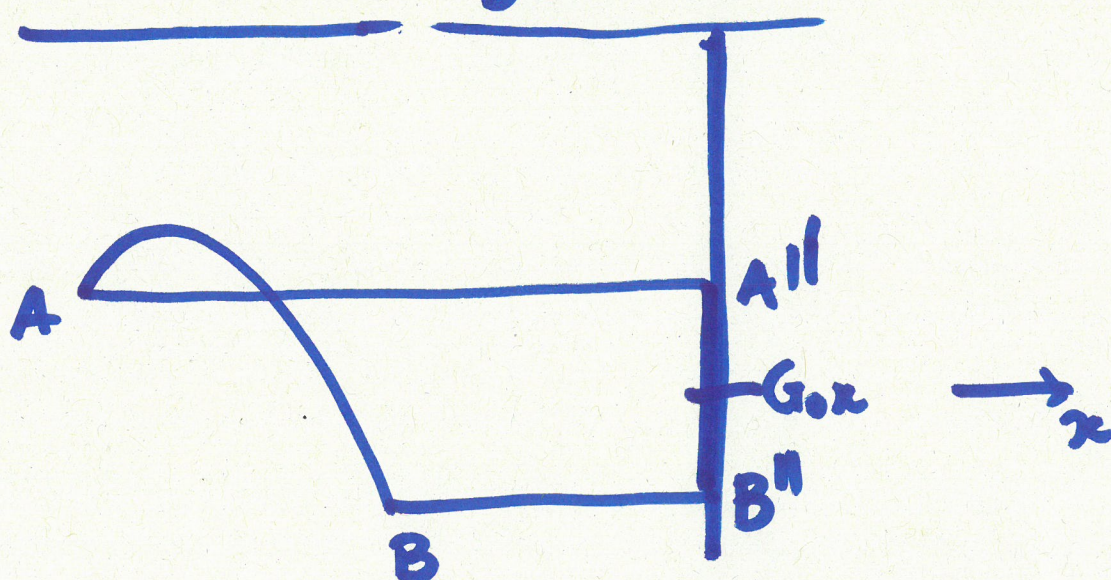
$$|F_z| < |P_{0z}|$$

$$|F_z| > |P_{0z}|$$

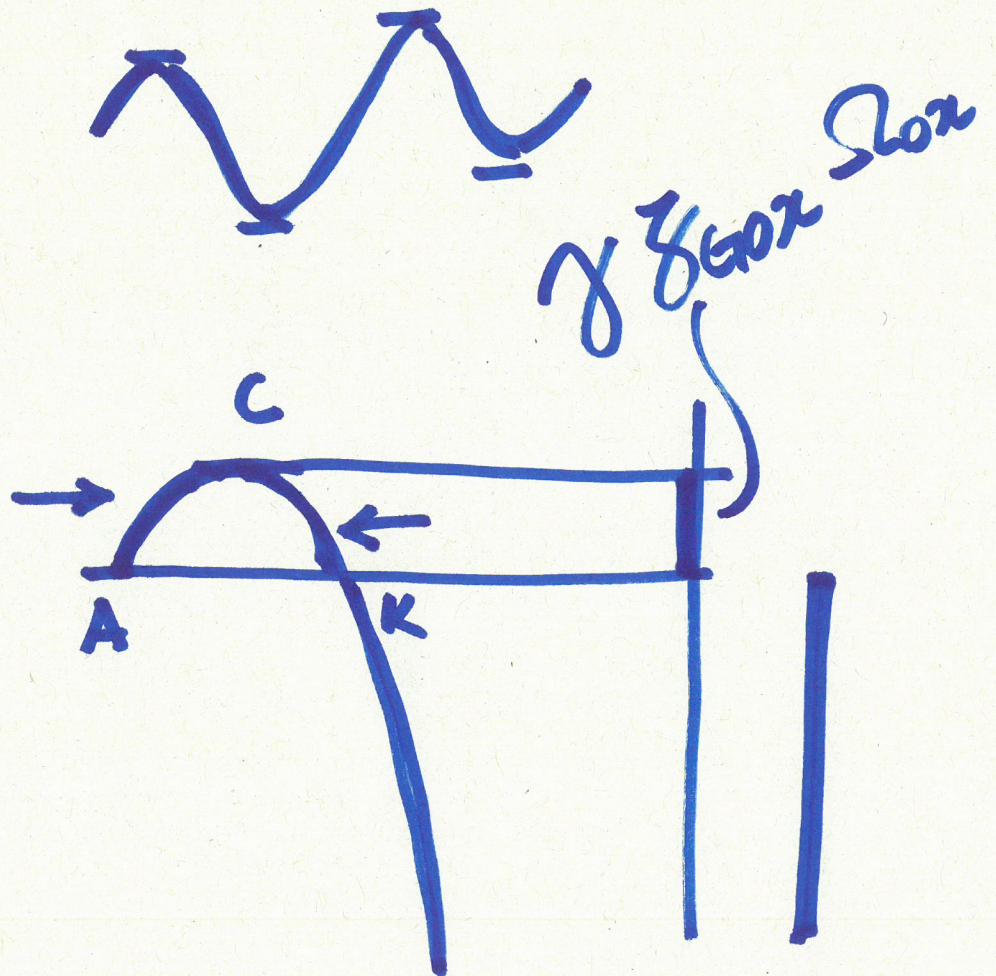
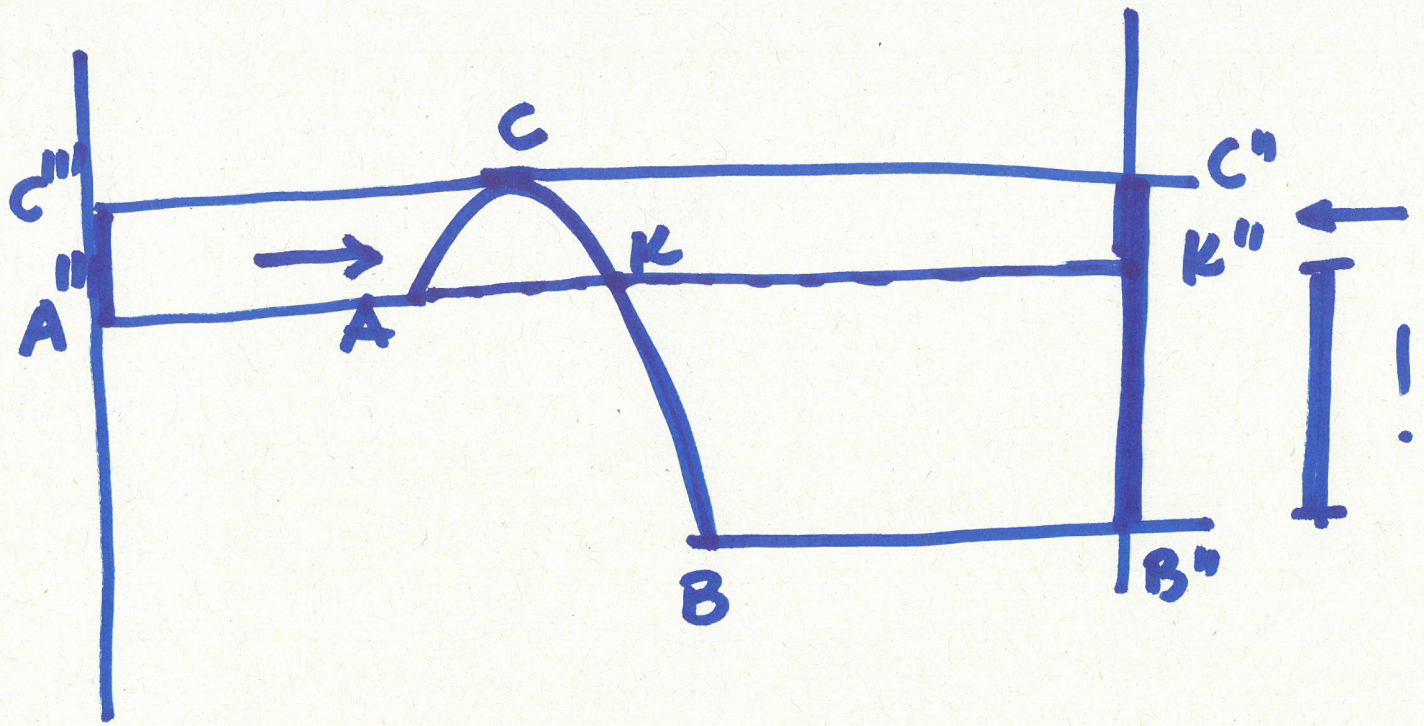


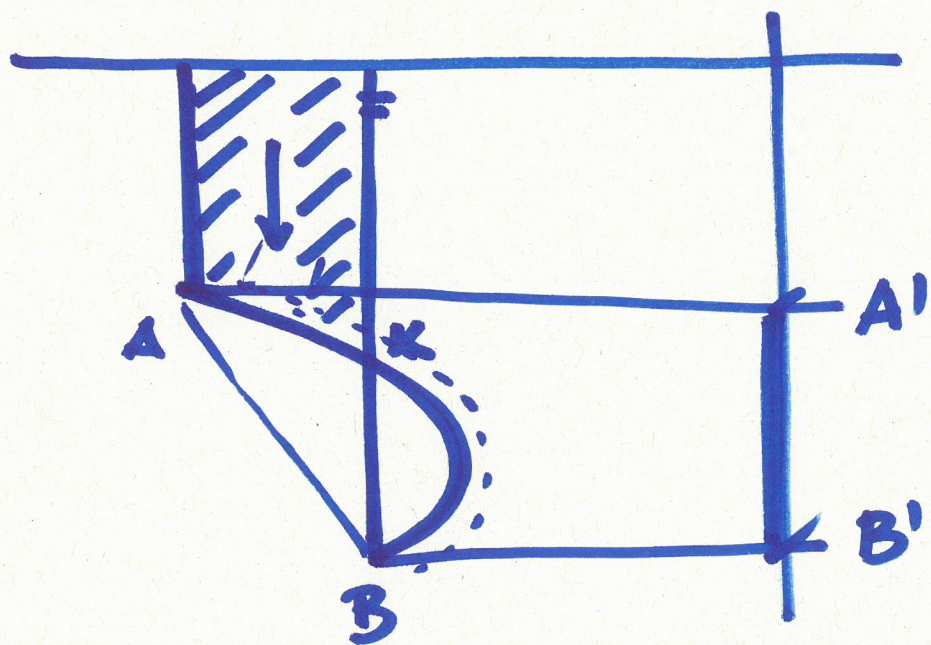
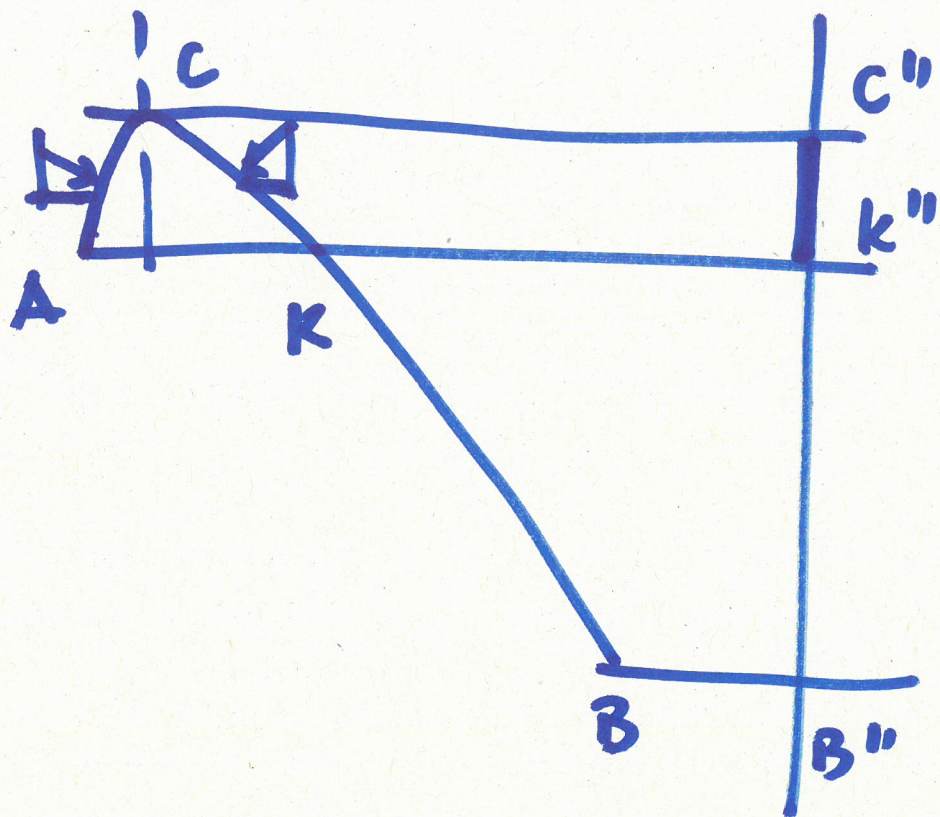
$$F_z = \gamma V$$

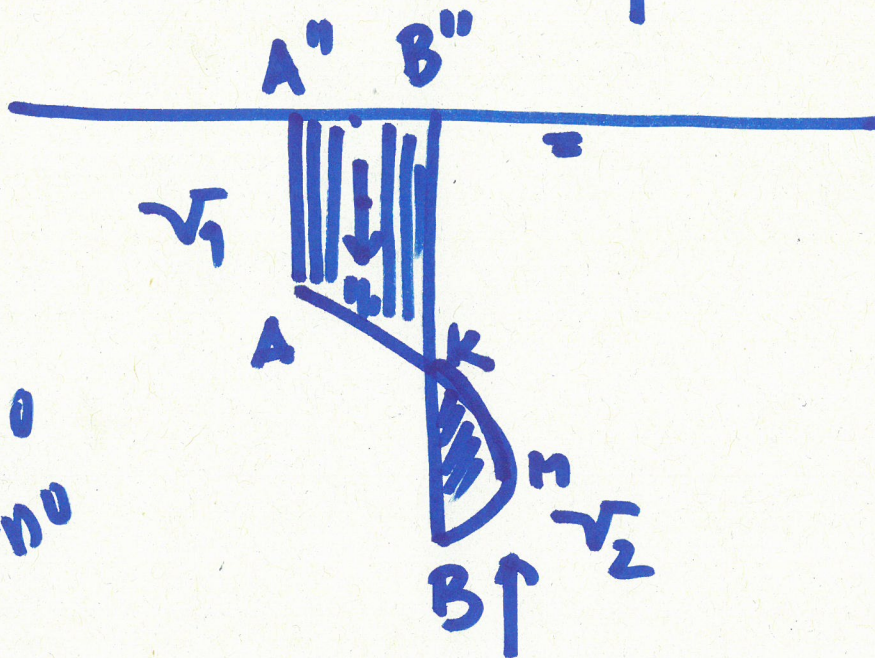
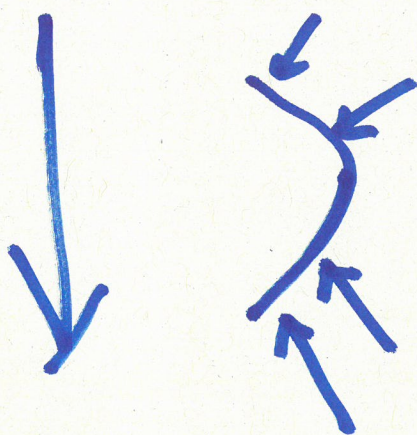
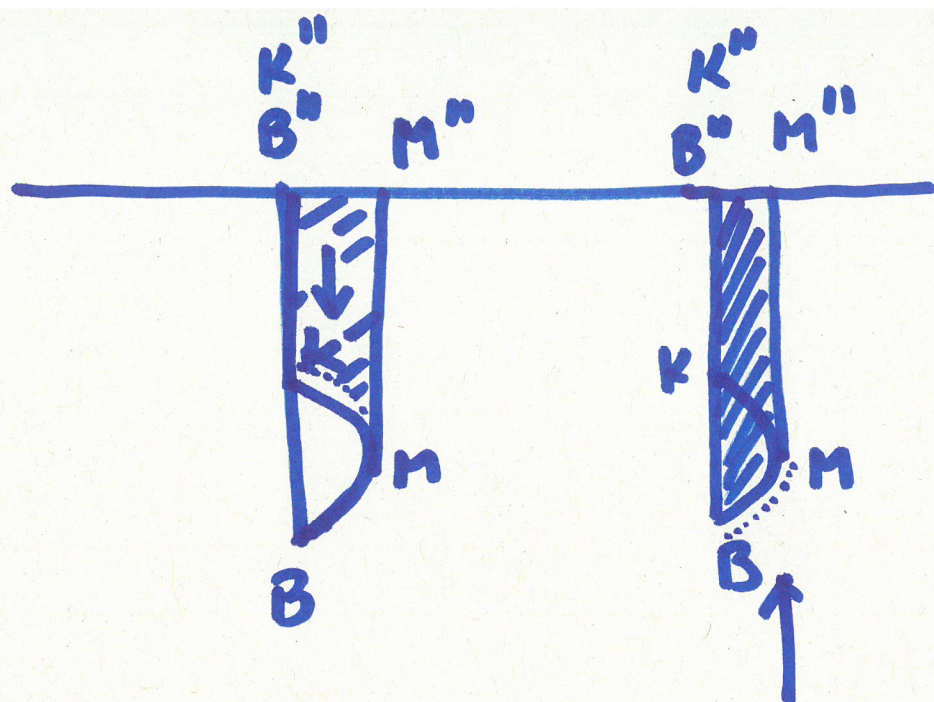
retta d'az F_z
baricentro V



$$F_x = \gamma (L \cdot \overline{A'B'}) \xi_{G0x}$$



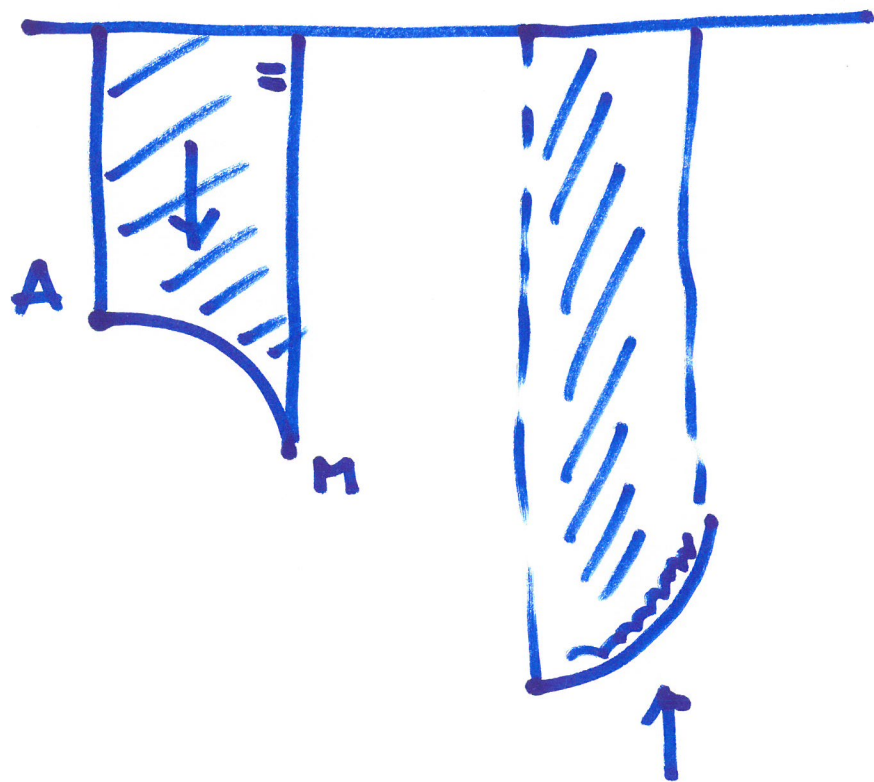
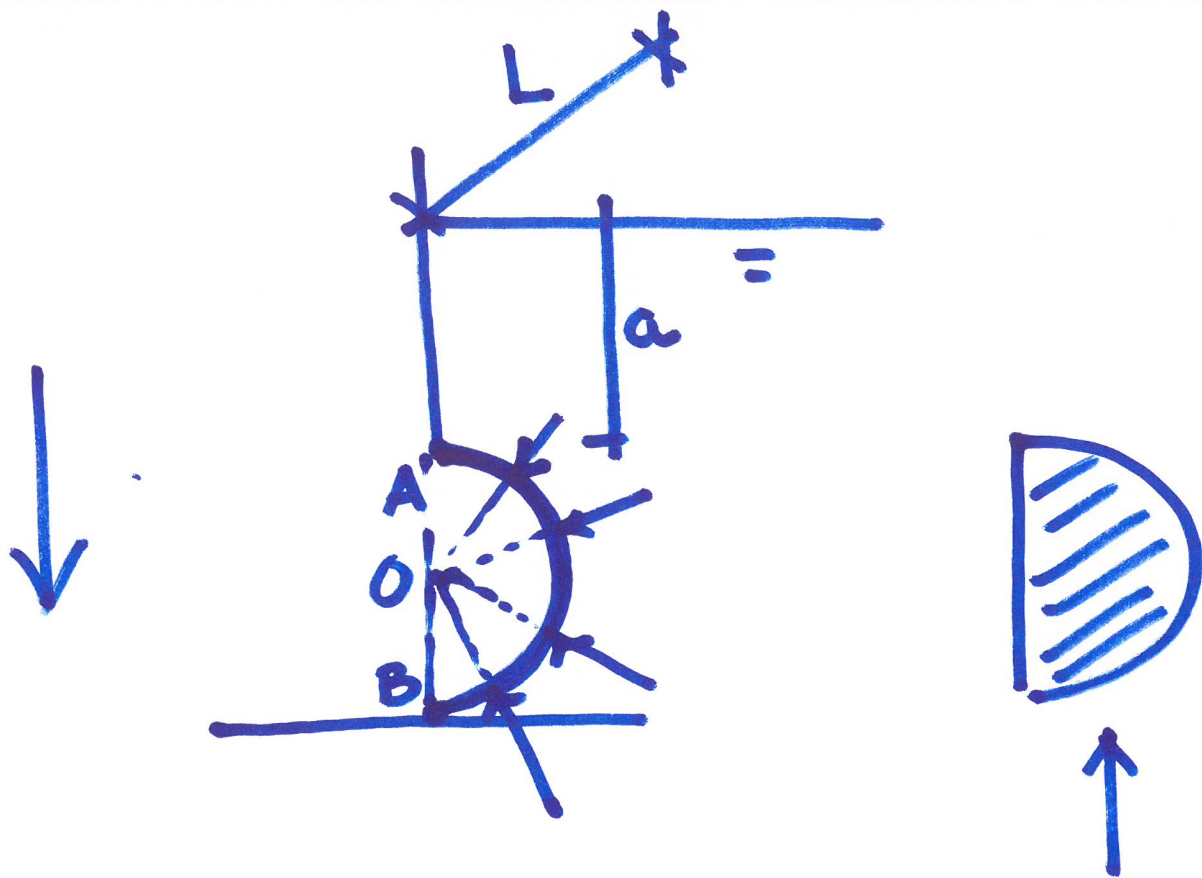




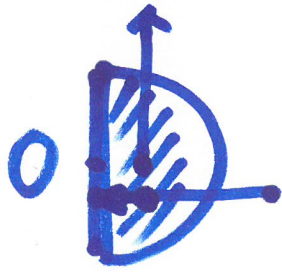
Lembo
esterno

$$\downarrow |F_z| = \gamma (\nu_1 - \nu_2)$$





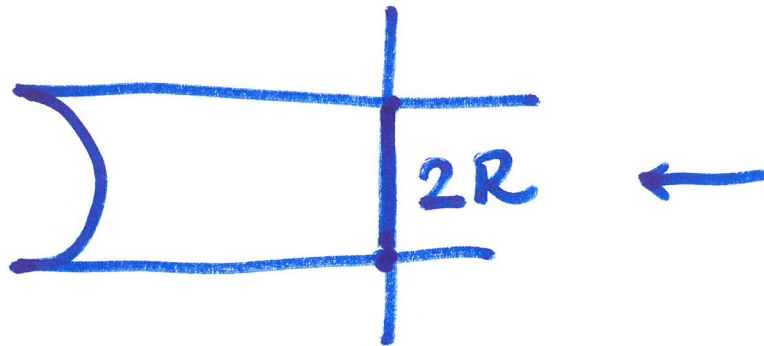
$$|F_z| = \gamma \left(\frac{\pi R^2}{2} \right) L \quad \uparrow$$



F_x non passa per 0

F_z non passa per 0

$\bar{F}$ passa per 0



$$|F_x| = \gamma \int_{G0x} \Omega_{0x}$$

$$\downarrow$$

$$(a+R) (R\perp)$$



$$|\bar{F}| = \sqrt{F_x^2 + F_z^2}$$

$$\theta = \arctg \left| \frac{F_z}{F_x} \right|$$