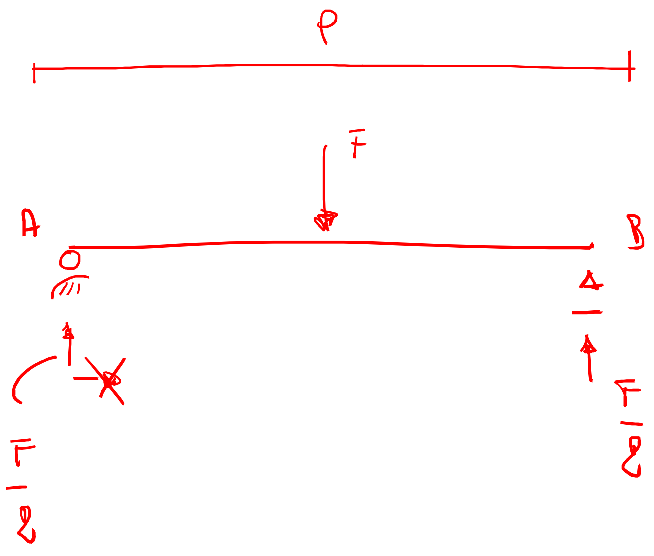
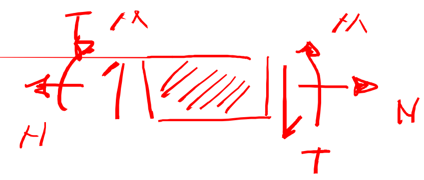
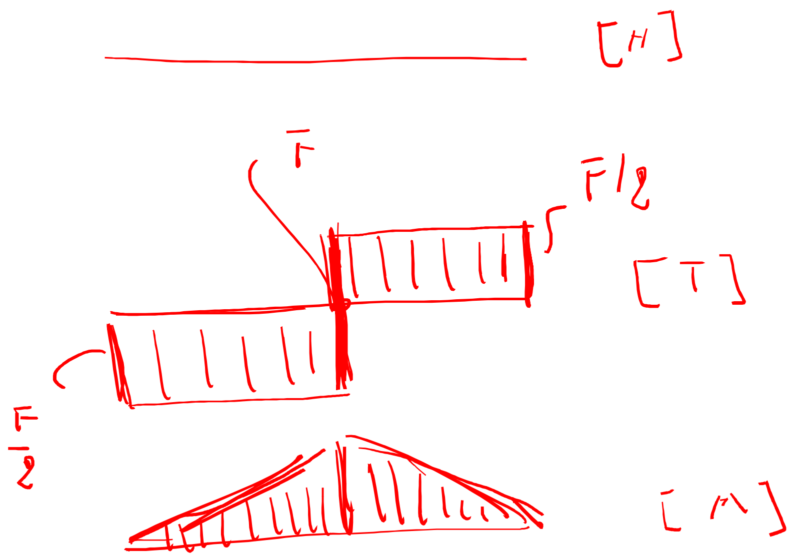
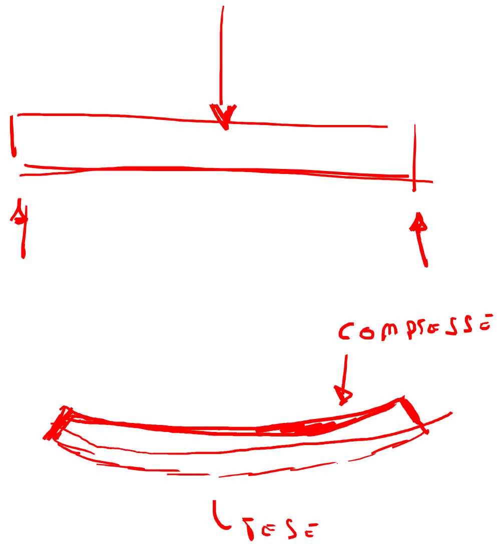
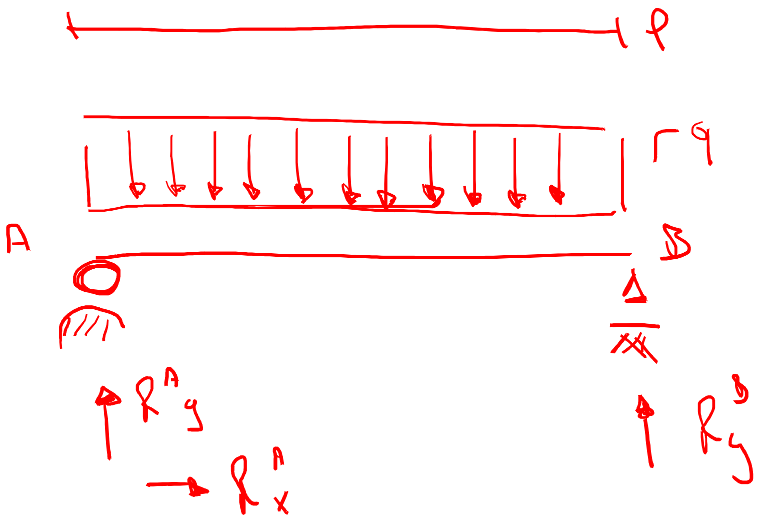
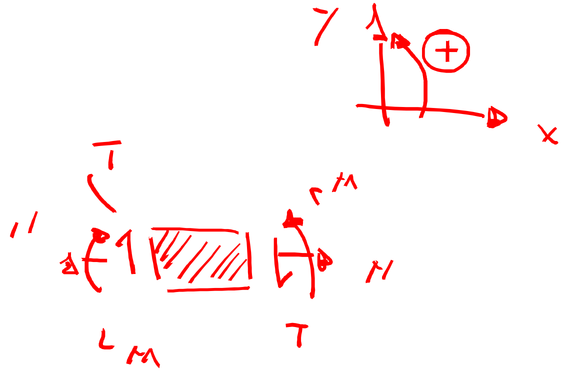

p
F
A
B
F/2
F/2

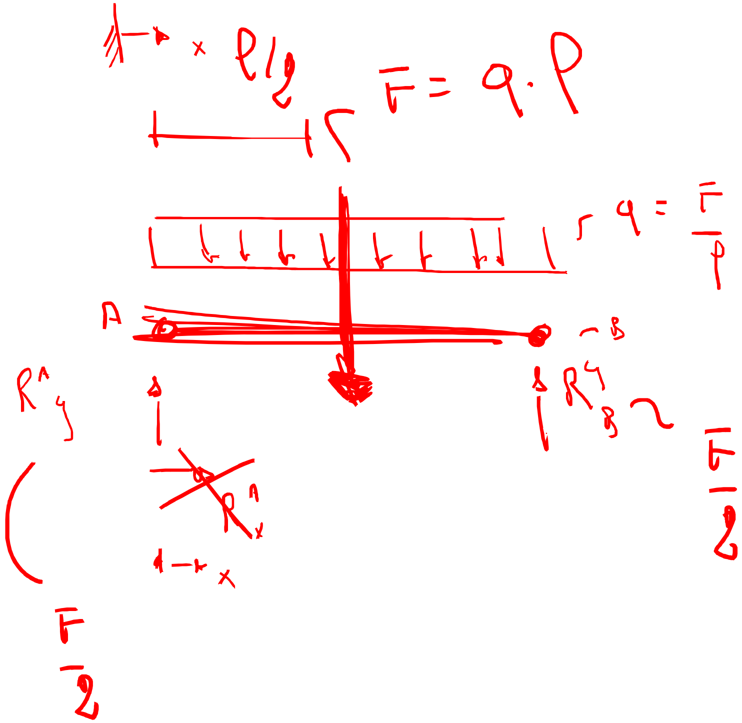

T
M
M
N
T
M


[N]
F
F/2
[T]
F/2
[M]


compresse
tese







$X : R^A_x = 0$

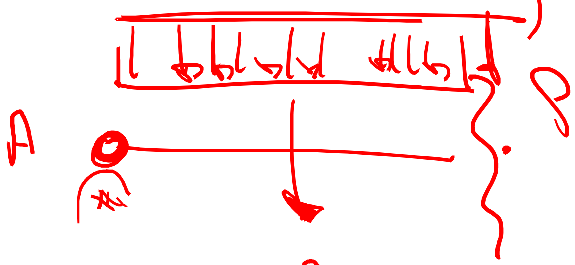
$y : R^A_y + R^B_y = q\ell = \frac{F}{\ell}\ell = F$

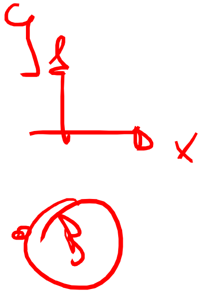
$O|_A : \underbrace{R^B_y \cdot \ell}_{C_D R^B_y} = (q\ell) \cdot \frac{\ell}{2}$

FORZA del CARICO distribuito

$R^B_y = \frac{q\ell}{2} = \frac{F}{2}$

$$q \quad \frac{F}{\rho}$$



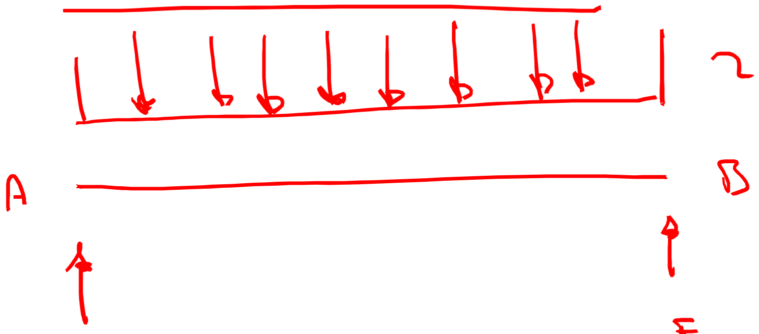


$$\int_{o}^{x-\rho} q\,dx = qx$$

A

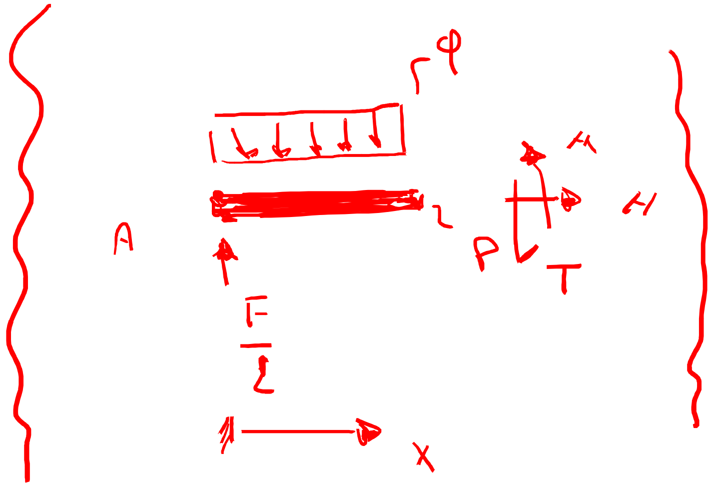
$$\begin{cases} F(q(o-x)) = qx \\ F(A-B) = q\rho \end{cases}$$

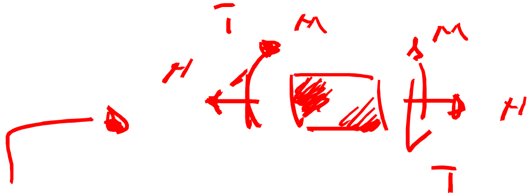
$$\begin{cases} F^{o-x} = qx \\ F^{A-B} = q\rho = \frac{F}{\rho}\rho = F \end{cases}$$



$\sim q = \frac{F}{\ell}$

$\frac{F}{2} = \frac{q\ell}{2}$ $\qquad$ $\frac{F}{2} = \frac{q\ell}{2}$





$x:\ N = 0$

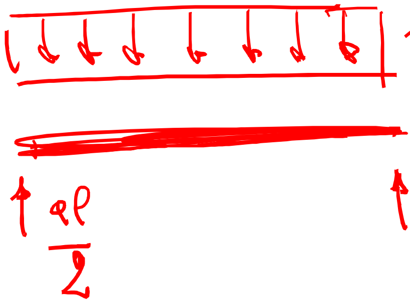
$y:\ F/2 - \cancel{T}\ qx = T$

$O\big|_P:\ -\frac{F}{2}x + M + (qx)\frac{x}{2} = 0$

- $N = 0 \rightarrow$ costante
- $T = \frac{F}{2} - qx = \frac{F}{2} - \frac{F x}{\ell} = F\left(\frac{\ell}{2} - \frac{x}{\ell}\right)$ $\underline{x=0}$ $F/2$; $\underline{x=\ell/2}$ 0 $\rightarrow$ Lineare in x

  $x=\ell$ $-F/2$
- $M = \frac{F}{2}x - q\frac{x^2}{2} = \frac{F}{2}x - \frac{F}{\ell}x\frac{x}{2}$

$$= \frac{F x}{2}\left(\ell - x/\ell\right) \rightarrow \text{quadratica in } x$$



$\sim q = F/\ell$

$\frac{q\ell}{2}$ $\frac{q\ell}{2}$

[N]

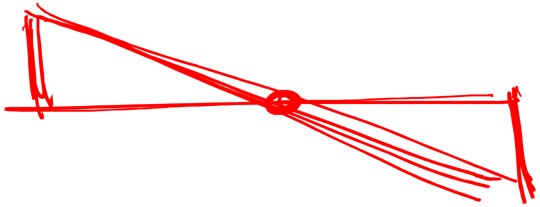
[T]

M

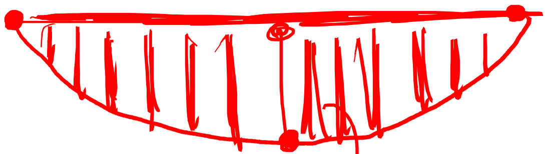
A B

[N]

[T]



[M]



$$\frac{q\ell^2}{8}$$

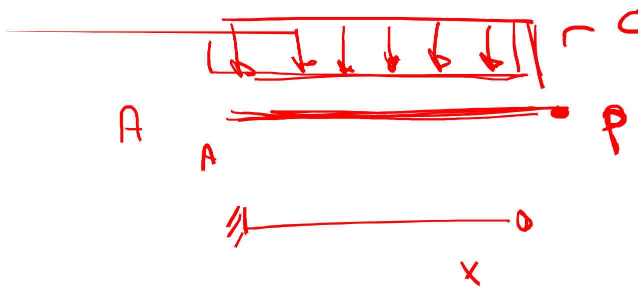
$$\frac{q\ell^2}{8}$$

$$\frac{F}{\ell}\frac{\ell}{2}\left(1-\frac{1}{2}\right) = \frac{F\ell}{2\cdot 2\cdot 2} = \frac{F\ell}{8}$$

$$\frac{F}{2}\, x \left(\ell - \frac{x}{\ell}\right)$$

diagrammiamo T

Dalla parte delle fibre tese



$$q = \frac{F}{\ell}$$

$$F(q_{A-B}) = q\,x$$

$$M_A(q_{A-B}) = q\,x\,\frac{x}{2} = \frac{q x^2}{2}$$