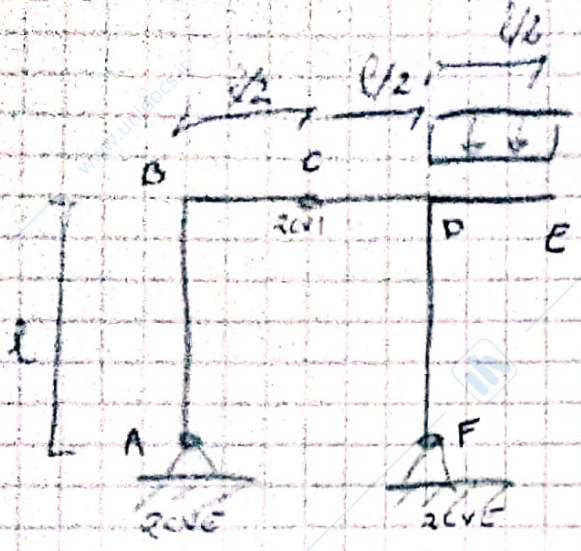
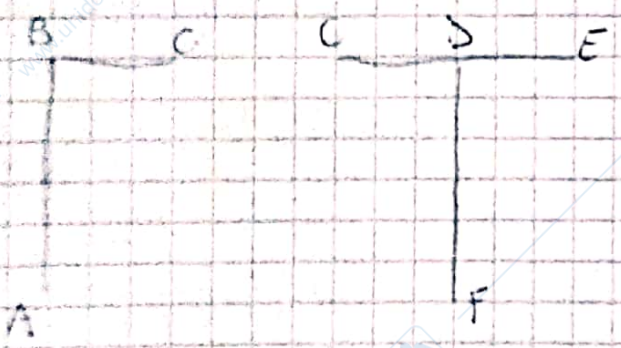


ESERCIZIO A CASA

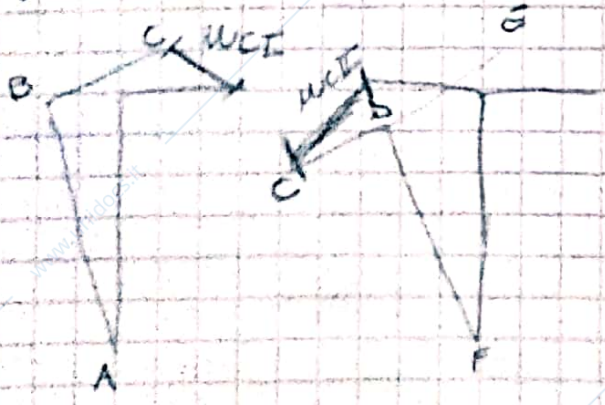
Arco a 3 curve



ANALISI CINEMATICA



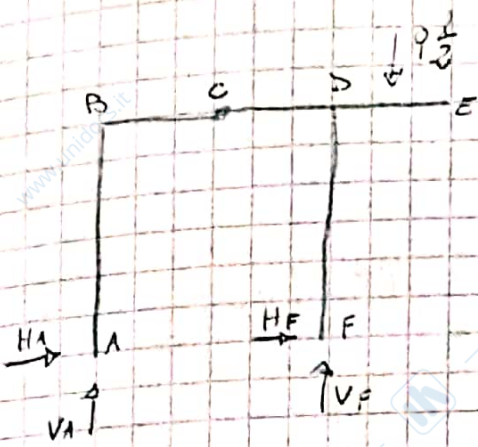
$$G_{gd} = 4CVE + 2CVI$$



$$u_{CF} = u_{AD} \Leftrightarrow CA \parallel CF + \text{VINCOLI EFFICACI}$$

dato che C è retta passante per A
 ↓
 VINCOLI EFFICACI

ISOSTATICO



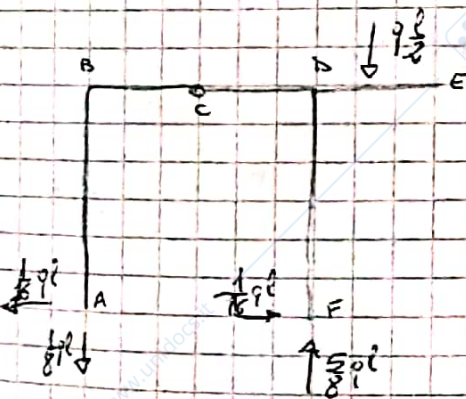
eq. statica della scissione

$$M^+(C) = 0 \rightarrow V_F \frac{l}{2} - q \frac{l}{2} \left(\frac{3l}{4} \right) + H_F l = 0, H_F = \frac{1}{16} q l$$

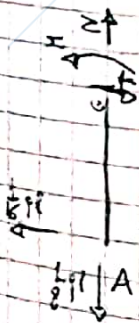
$$\sum F_y = 0 \rightarrow V_F = \frac{q l}{8} - q \frac{l}{2} = 0 \rightarrow V_F = + \frac{5}{8} q l$$

$$M(F) = 0 \rightarrow -V_A l - q \frac{l}{2} \left(\frac{l}{4} \right) = 0 \rightarrow V_A = - \frac{q l}{8}$$

$$\sum F_x = 0 \rightarrow H_A + H_F = 0 \rightarrow H_A = -H_F = - \frac{1}{16} q l$$

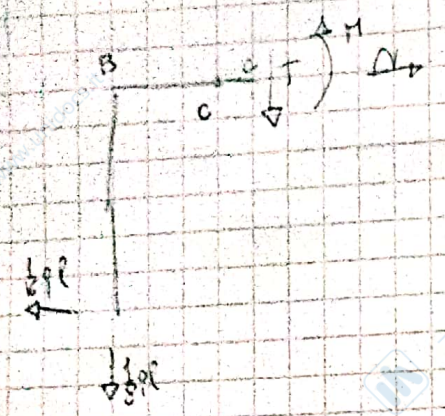


STATICA INTERNA



$$\left\{ \begin{aligned} T &= \frac{1}{16} q l \\ N &= \frac{1}{8} q l \\ M &= + \frac{1}{16} q l z \end{aligned} \right.$$

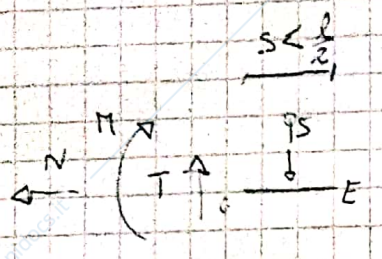
$$\begin{aligned} M(0) &= 0 \\ M(l) &= \frac{1}{16} q l^2 \end{aligned}$$



$$\begin{cases} N = \frac{1}{16} ql \\ T = -\frac{1}{8} ql \\ M = -\frac{1}{8} qlz + \frac{1}{16} ql^2 = \frac{1}{8} ql \left(\frac{l}{2} - z \right) \end{cases}$$

$$M(0) = \frac{1}{16} ql^2$$

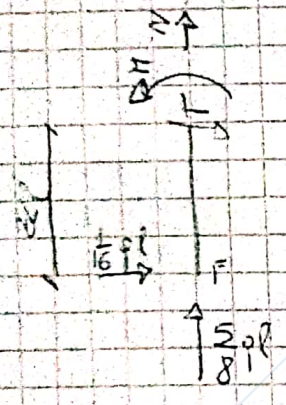
$$M(l) = -\frac{1}{16} ql^2$$



$$\begin{cases} N = 0 \\ T = qs \\ M = -qs \left(\frac{s}{2} \right) \end{cases}$$

$$M(0) = 0$$

$$M\left(\frac{l}{2}\right) = -\frac{ql^2}{8}$$



$$\begin{cases} T = -\frac{1}{16} ql \\ N = -\frac{5}{8} ql \\ M = -\frac{1}{16} qlz \end{cases}$$

$$M(0) = 0$$

$$M(l) = -\frac{1}{16} ql^2$$

GRAFICI

