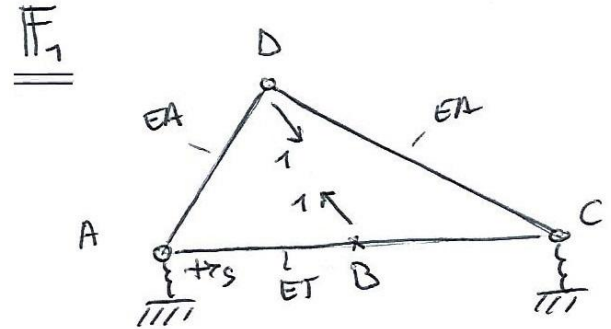
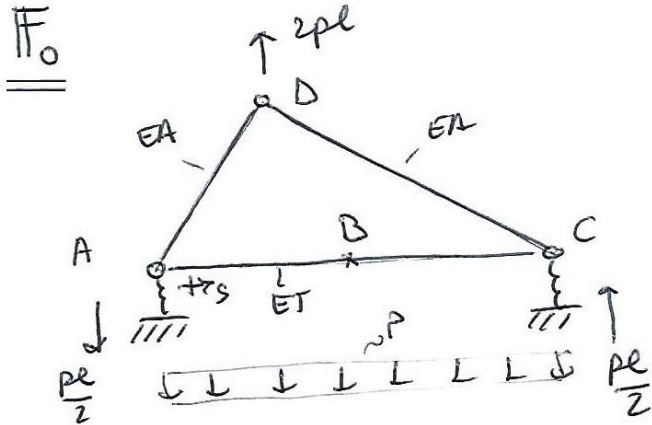


Prova scritta telematica del 6 luglio 2021 – Sintesi soluzione



$$N_{AD} = pl\sqrt{3}$$

$$N_{CD} = pl$$

$$N_{ABC} = -pl\frac{\sqrt{3}}{2}$$

$$T_{ABC} = pl - ps$$

$$M_{ABC} = pls - ps^2$$

$$N_{AD} = -\frac{1}{2}$$

$$N_{CD} = -\frac{\sqrt{3}}{2}$$

$$N_{AB} = \frac{1}{4}$$

$$N_{BC} = \frac{3}{4}$$

$$T_{AB} = -\frac{\sqrt{3}}{4}$$

$$T_{BC} = \frac{\sqrt{3}}{2}$$

$$M_{AB} = -\frac{\sqrt{3}}{4}s$$

$$M_{BC} = \frac{\sqrt{3}}{4}(s-2l)$$

$$\gamma_1 = \gamma_{10} + X_1 \cdot \gamma_{11}$$

con: $\gamma_{11} = -\frac{X_1 l}{EA}$

$$\gamma_{10} = \int_{ABC} \frac{M_1 M_0}{EJ} + \int_{AD} \frac{N_1 N_0}{EA} + \int_{CD} \frac{N_1 N_0}{EA}$$

$$\gamma_{11} = \int_{ABC} \frac{M_1^2}{EJ} + \int_{AD} \frac{N_1^2}{EA} + \int_{CD} \frac{N_1^2}{EA}$$

da cui: $X_1 = \frac{-\gamma_{10}}{\gamma_{11} + \frac{l}{EA}}$

$$N_{DB}^{(e)} = X_1$$