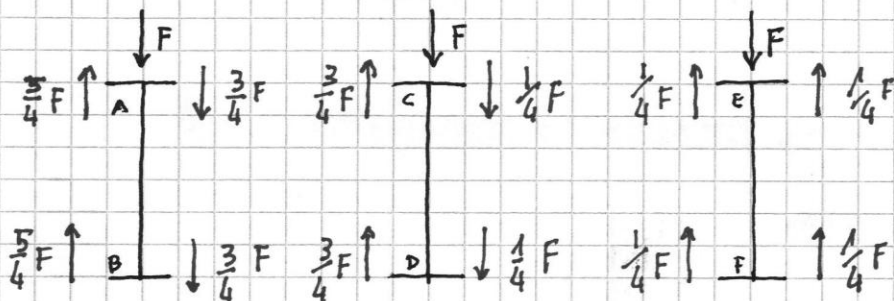
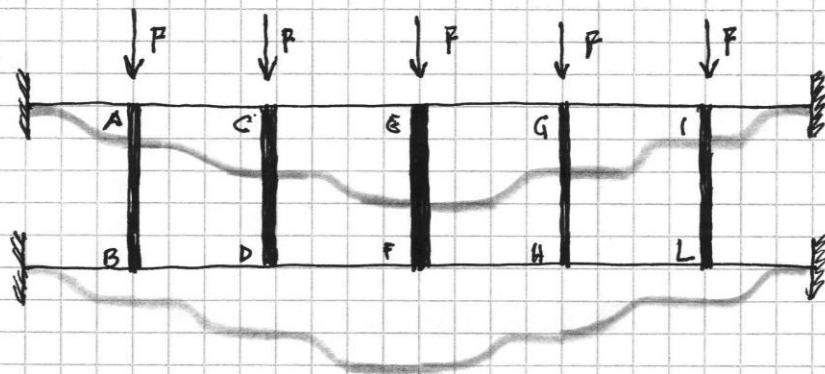


→ ESERCIZIO TRAVE VIERENDEL

20-5-11



$$\overline{AB}: F + \frac{(24EI d_2)}{l^3} - \frac{(24EI d_1)}{l^3} = 0$$

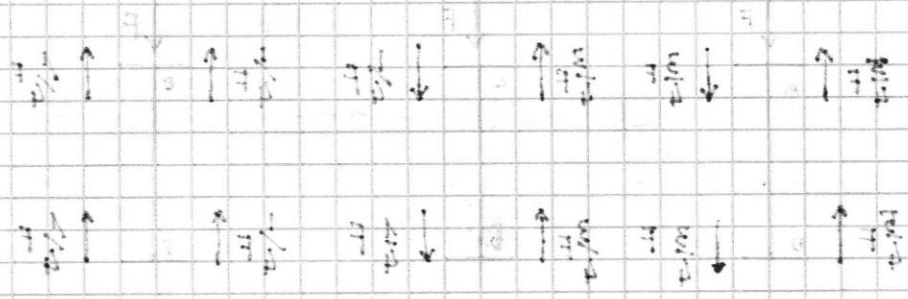
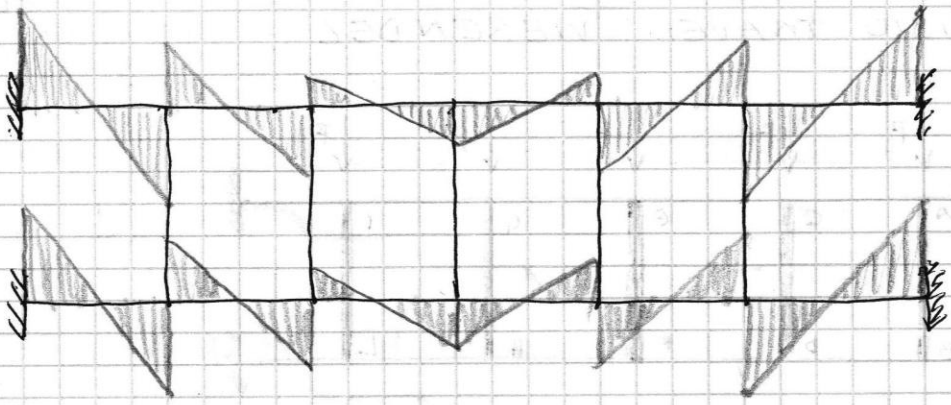
(TRAVI CON
LO STESSO
MOMENTO D'INERZIA)

$$\overline{CD}: F + \frac{(24EI d_3)}{l^3} - \frac{(24EI d_2)}{l^3} = 0$$

$$\overline{EF}: F - \frac{(48EI d_3)}{l^3} = 0 \quad \underline{d_3 = \frac{Fl^3}{48EI}}$$

$$\Rightarrow \underline{d_2 = \frac{Fl^3}{16EI}} \quad \underline{d_1 = \frac{5Fl^3}{48EI}}$$

$$T_1 = \frac{5F}{4} \quad T_2 = \frac{3F}{4} \quad T_3 = \frac{F}{4}$$



- $\sum M = 0$
 - $\sum F_x = 0$
 - $\sum F_y = 0$

$$\begin{aligned}
 \overline{AB} : \quad & \sum M_A = 0 \Rightarrow \frac{1}{2} \cdot \frac{w}{l} \cdot l \cdot \frac{2}{3} l - R_B \cdot l = 0 \Rightarrow R_B = \frac{1}{3} w l \\
 \overline{CD} : \quad & \sum M_C = 0 \Rightarrow \frac{1}{2} \cdot \frac{w}{l} \cdot l \cdot \frac{2}{3} l - R_D \cdot l = 0 \Rightarrow R_D = \frac{1}{3} w l
 \end{aligned}$$

$$\begin{aligned}
 \overline{EF} : \quad & \sum M_E = 0 \Rightarrow \frac{1}{2} \cdot \frac{w}{l} \cdot l \cdot \frac{2}{3} l - R_F \cdot l = 0 \Rightarrow R_F = \frac{1}{3} w l \\
 \Rightarrow \quad & R_B = R_D = R_F = \frac{1}{3} w l
 \end{aligned}$$

$$\begin{aligned}
 \overline{GH} : \quad & \sum M_G = 0 \Rightarrow \frac{1}{2} \cdot \frac{w}{l} \cdot l \cdot \frac{2}{3} l - R_H \cdot l = 0 \Rightarrow R_H = \frac{1}{3} w l \\
 \Rightarrow \quad & R_B = R_D = R_F = R_H = \frac{1}{3} w l
 \end{aligned}$$