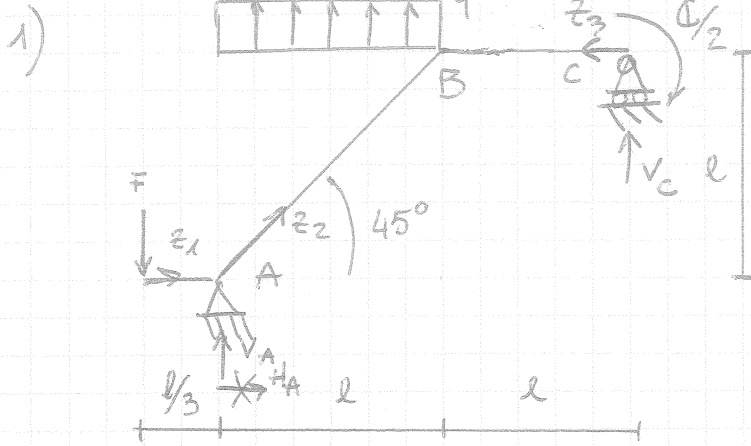




$$l = 3 \text{ m}$$

$$F = 500 \text{ N}$$

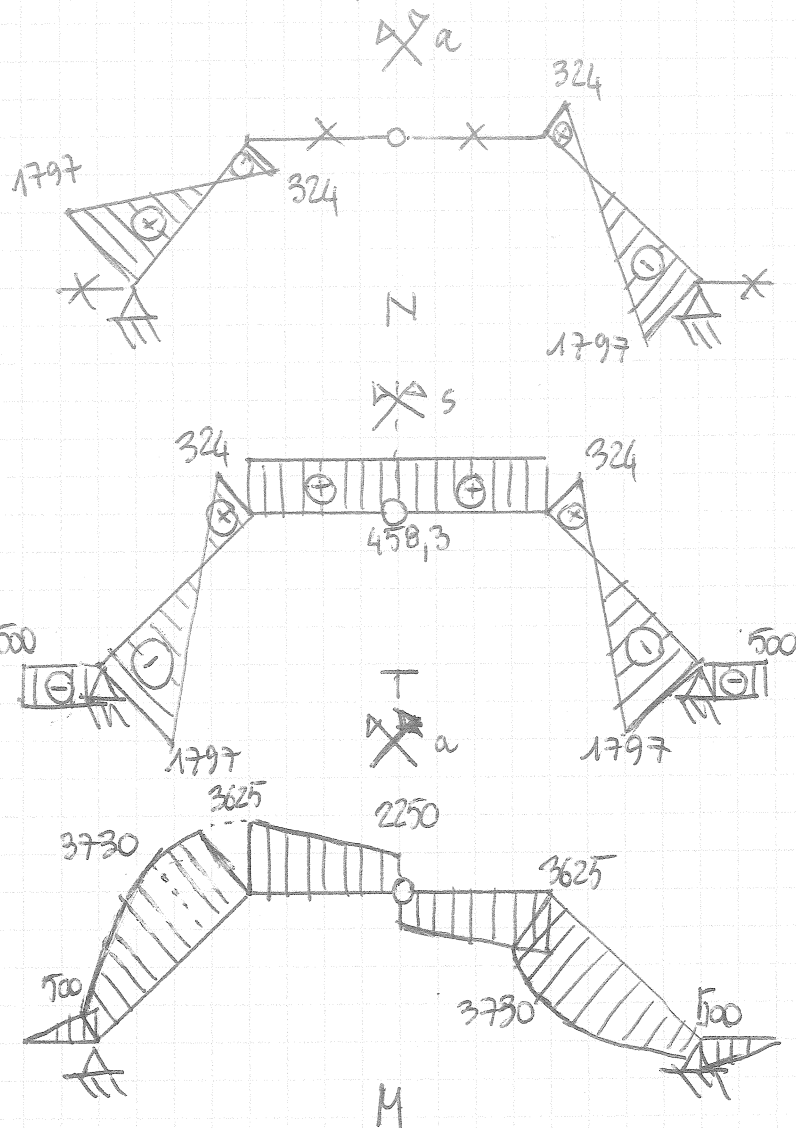
$$q = 1000 \text{ N/m}$$

$$C = ql^2/2$$

$$\rightarrow H_A = 0$$

$$\uparrow F \cdot l/3 + ql^2/2 + V_C \cdot 2l - C/2 = 0 \quad V_C = -458,3 \text{ N}$$

$$\uparrow -F + V_A + ql + V_C = 0 \quad V_A = -2041,7 \text{ N}$$



$$N(z_1) = 0$$

$$N(z_2) = 2041,7 \frac{\sqrt{2}}{2} - q \frac{\sqrt{2}}{2} \frac{\sqrt{2}}{2} + 500 \cdot \frac{\sqrt{2}}{2}$$

$$N(z_3) = 0$$

$$T(z_1) = -500$$

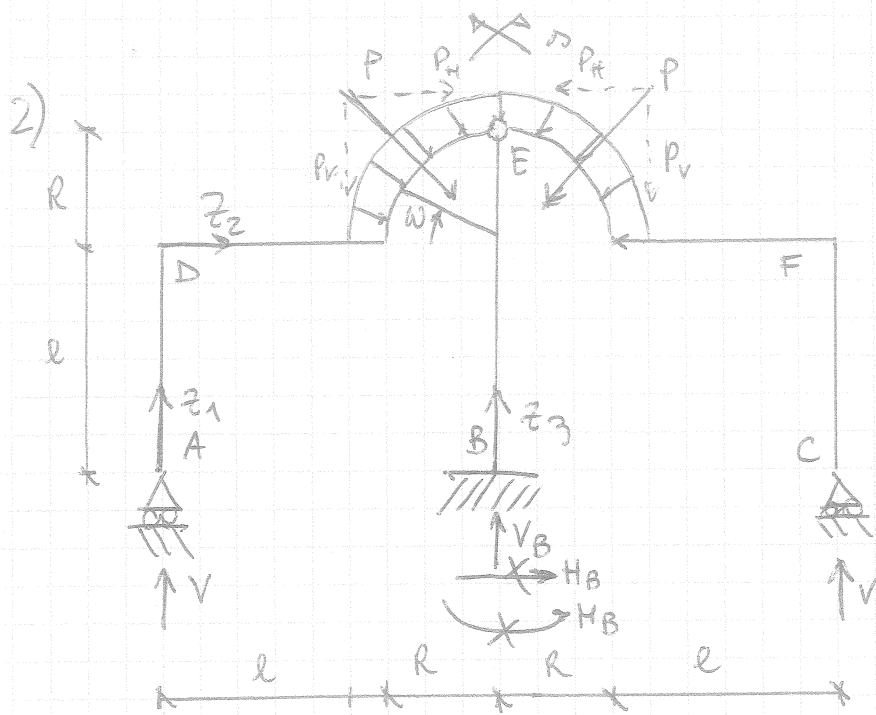
$$T(z_2) = -(500 + 2041,7) \frac{\sqrt{2}}{2} + q \frac{(\sqrt{2})^2}{2}$$

$$T(z_3) = 458,3$$

$$M(z_1) = -500z$$

$$M(z_2) = -500 + 2041,7 \cdot z + \frac{qz^2}{2}$$

$$M(z_3) = -\frac{ql^2}{4} - 458,3 \cdot z$$



$$l = 3 \text{ m}$$

$$R = \frac{l}{2} = 1,5 \text{ m}$$

$$q = 1000 \text{ N/m}$$

$$P = q \cdot R \cdot \sqrt{2} = \frac{q l \sqrt{2}}{2}$$

$$P_H = q R$$

$$P_V = q \cdot R$$

⇒ Tratto EDA

$$-V \cdot \frac{3l}{2} + P \cdot \frac{l}{2} \cdot \frac{\sqrt{2}}{2} = 0$$

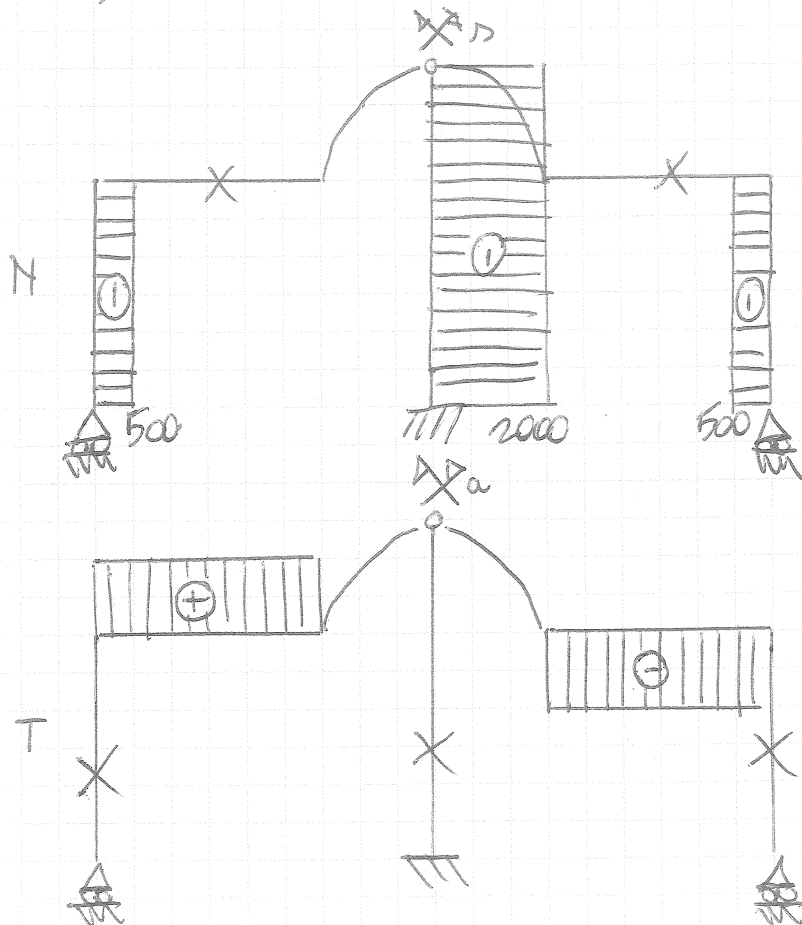
$$V = 500 \text{ N}$$

$$\uparrow) 2V - 2P_V + V_B = 0$$

$$V_B = \frac{2q l}{2} - 2V = 2000 \text{ N}$$

$$\rightarrow) H_B + P_H - P_H = 0 \quad H_B = 0$$

$$\Rightarrow \text{Tratto EB} \quad H_B = 0$$



$$N(z_1) = -V = -500 \text{ N}$$

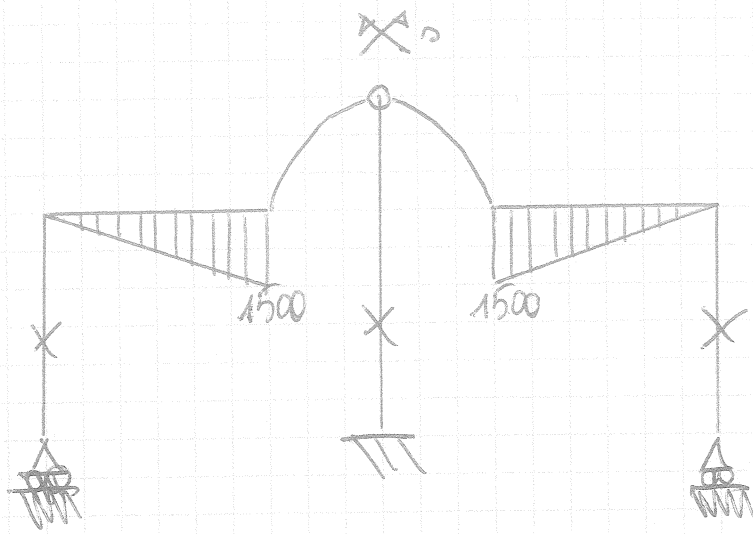
$$N(z_2) = 0$$

$$N(z_3) = -V_B = -2000 \text{ N}$$

$$T(z_1) = 0$$

$$T(z_2) = 500 \text{ N}$$

$$T(z_3) = 0$$



$$M(z_1) = 0$$

$$M(z_2) = V \cdot z = 500z$$

$$M(z_3) = 0$$

$$N(w) = -V \cos w - \int_0^w p R \sin(w-\theta) d\theta$$

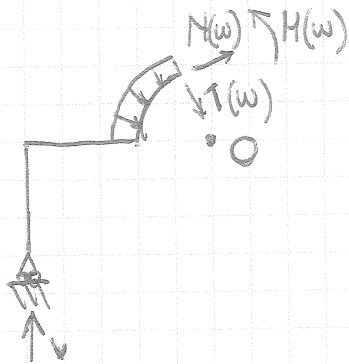
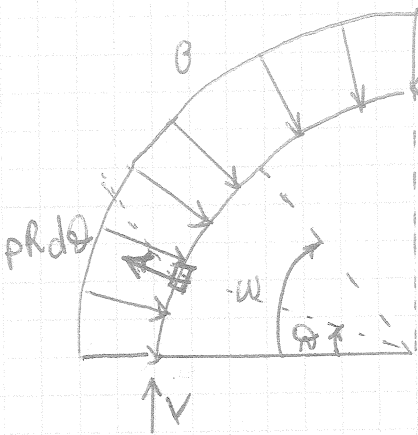
$$= -V \cos w - p R (1 - \cos(w))$$

$$T(w) = V \sin w - \int_0^w p R \cos(w-\theta) d\theta$$

$$= V \sin w - p R \sin(w)$$

$$\circ \uparrow M(w) - N(w) \cdot R - V(e+R) = 0$$

$$M(w) = -VR \cos(w) - pR^2(1 - \cos w) + V(e+R)$$



Per simmetria i risultati per il lato destro sono facilmente deducibili