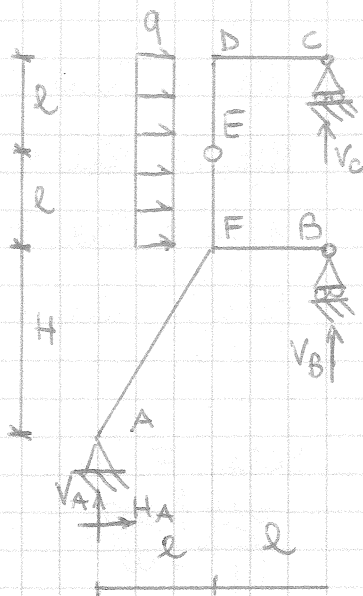
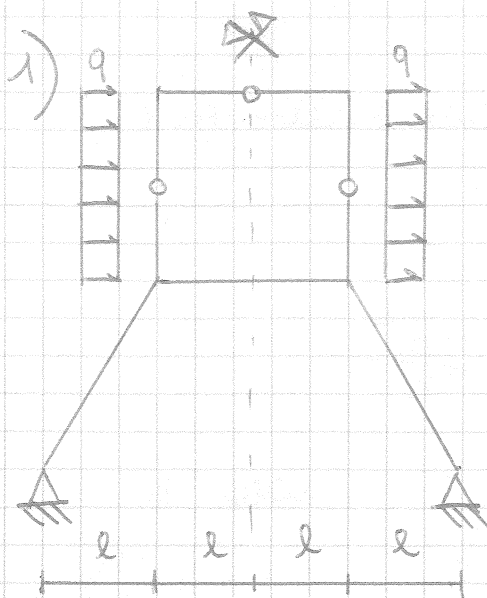




$$l = 2 \text{ m} \quad \alpha = \arctan(H/l)$$

$$H = 2 \text{ m} \quad = 63,43^\circ$$

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

$$\rightarrow) q \cdot 2l + H_A = 0$$

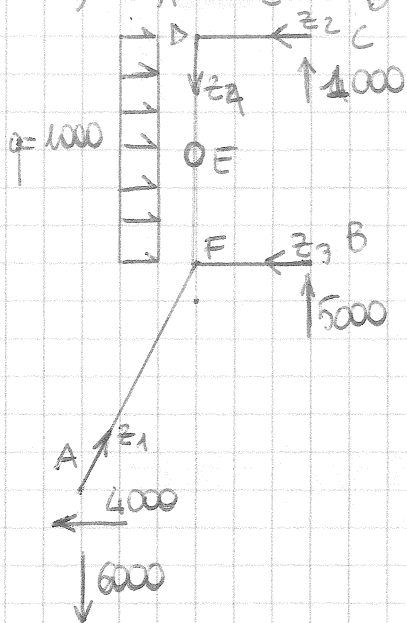
$$H_A = -2ql = -4000 \text{ N}$$

E) tratto FDC

$$V_C \cdot l - \frac{ql^2}{2} = 0 \quad V_C = 1000 \text{ N}$$

$$c) q \cdot 2 \cdot l^2 - H_A \cdot 2H - V_A \cdot 2l = 0 \quad V_A = -6000 \text{ N}$$

$$\uparrow) V_A + V_C + V_B = 0 \quad V_B = 5000 \text{ N}$$



$$N(z_1) = 6000 \cdot \sin \alpha + 4000 \cos \alpha = 7155 \text{ N}$$

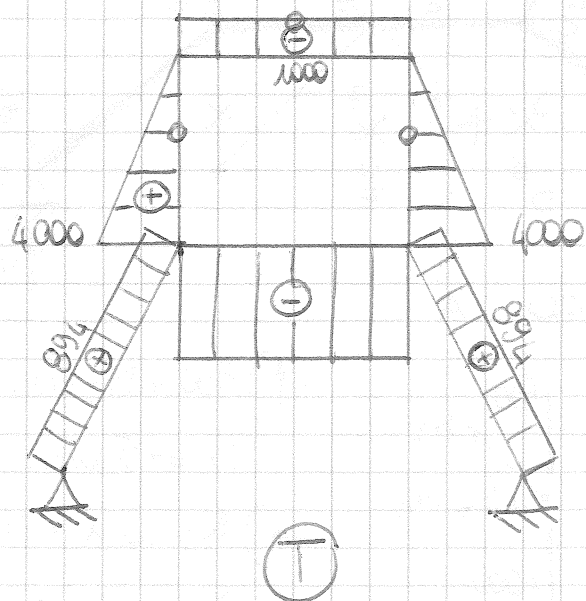
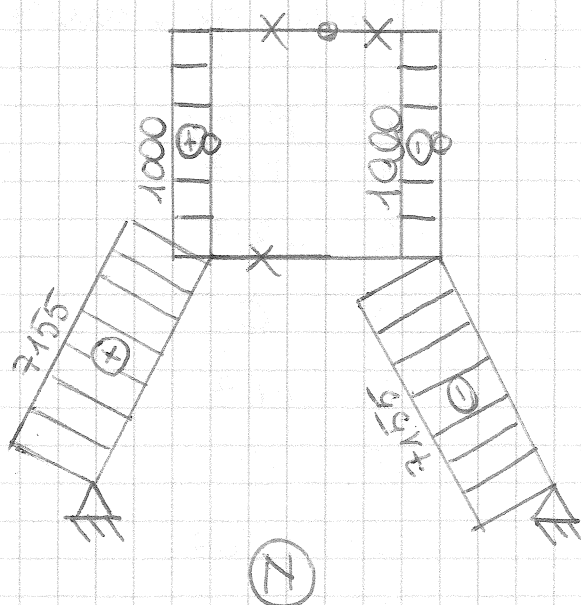
$$N(z_2) = 1000 \text{ N} \quad N(z_3) = N(z_4) = 0$$

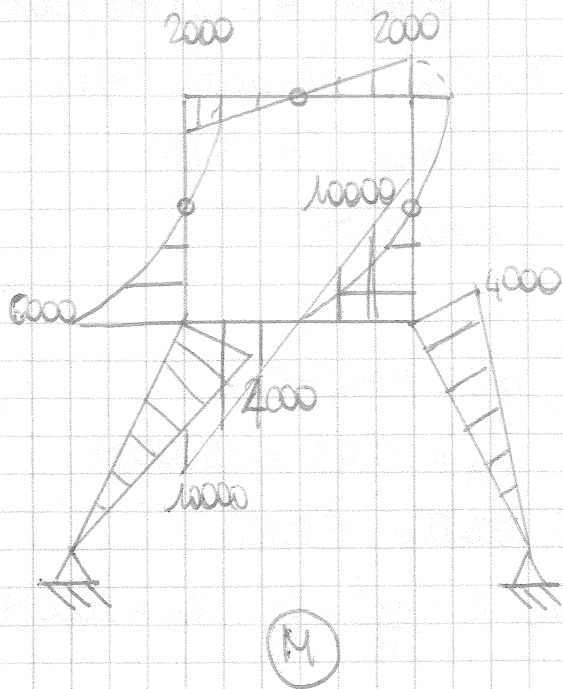
$$T(z_1) = -6000 \cos \alpha + 4000 \sin \alpha = 894 \text{ N}$$

$$T(z_2) = -1000 \text{ N}$$

$$T(z_3) = -5000 \text{ N}$$

$$T(z_4) = +q \cdot z_4$$



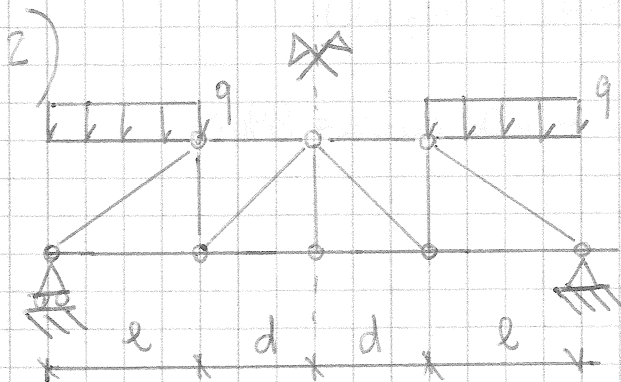
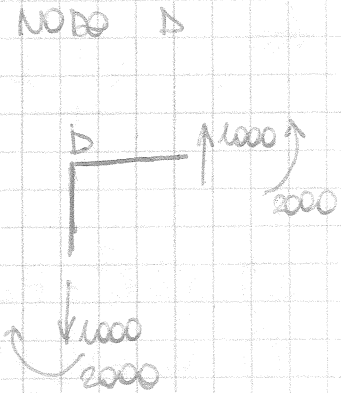
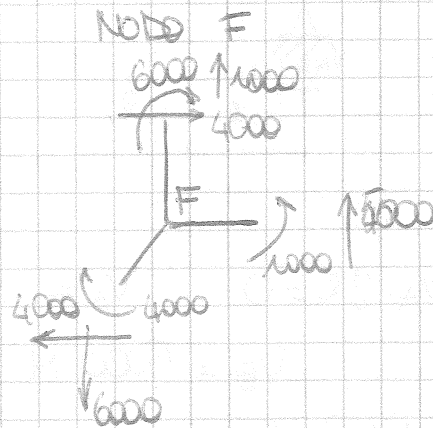


$$M(z_1) = -6000 \cdot z_1 \cos \alpha + 4000 z_1 \sin \alpha$$

$$M(z_2) = 1000 \cdot z$$

$$M(z_3) = 5000 \cdot z$$

$$M(z_4) = 1000 \cdot l - \frac{q z^2}{2}$$



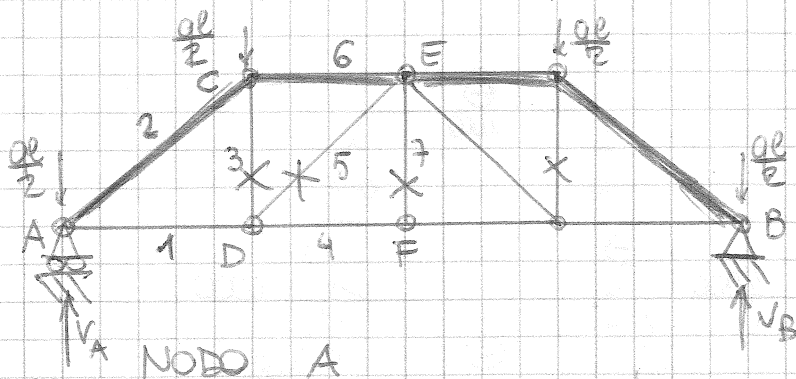
$$d = 1,5 \text{ m}$$

$$l = 2 \text{ m}$$

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

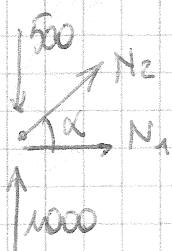
$$\alpha = \arctan(1,5/2) = 36,87^\circ$$

SOLECCITAZIONE PRIMARIA



$$H_B = 0 \quad \uparrow V_A = V_B = ql = 1000 \text{ N}$$

i	N [N]
1	667
2	-833
3	0
4	667
5	0
6	-667
7	0



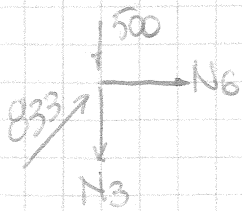
$$\uparrow 500 + N_2 \sin \alpha = 0$$

$$N_2 = -500 / \sin \alpha = -833$$

$$\rightarrow N_2 \cos \alpha + N_1 = 0$$

$$N_1 = -N_2 \cos \alpha = 667$$

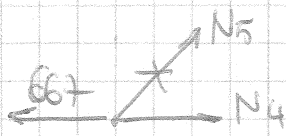
NODE C



$$\rightarrow) N_6 + 833 \cdot \cos \alpha = 0 \quad N_6 = -667$$

$$\uparrow) 833 \cdot \sin \alpha - 500 - N_3 = 0 \quad N_3 = 833 \cdot \sin \alpha - 500 = 0$$

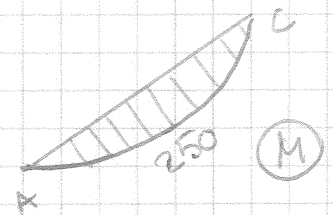
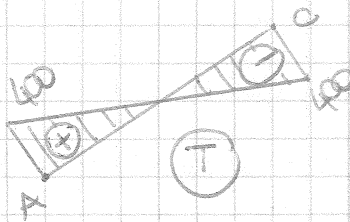
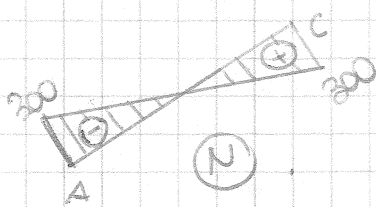
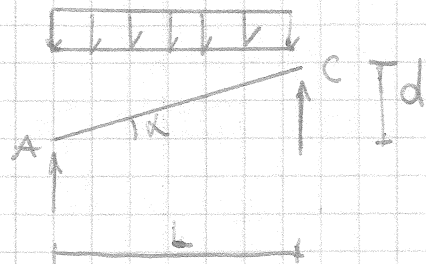
NODE D



$$\uparrow) N_5 = 0$$

$$\rightarrow) N_4 = 667$$

SOLLECITAZIONE SECONDARIA



$$N(z) = -500 \cos \alpha + q z \cos \alpha$$

$$T(z) = 500 \sin \alpha - q z \sin \alpha$$

$$M(z) = 500 z \cos \alpha - q \frac{(\cos \alpha \cdot z)^2}{2}$$