

NB!: $g.d.l. \left\{ \begin{array}{l} \leq \\ \geq \end{array} \right\} g.d.v$ e' una condizione ②

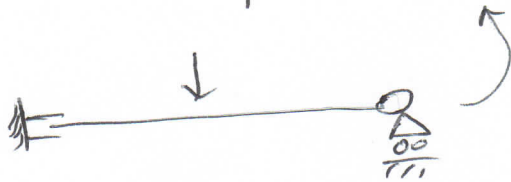
necessaria MA NON sufficiente per l'isostaticità
(=)
perché i vincoli possono essere maldisposti!

e.g.

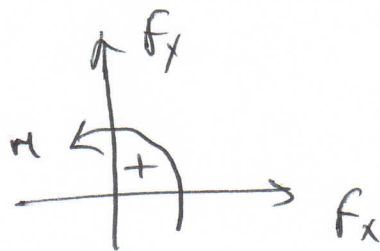


$g.d.l. = 3$
 $g.d.v. = 3$] \Rightarrow iso?

questa orizzontalmente e' labile e verticalmente
una volta iper!

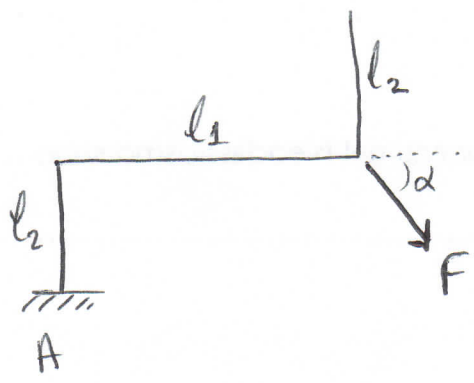


② convenzione per fare l'equilibrio ai
Momenti, forze orizzontali e verticali



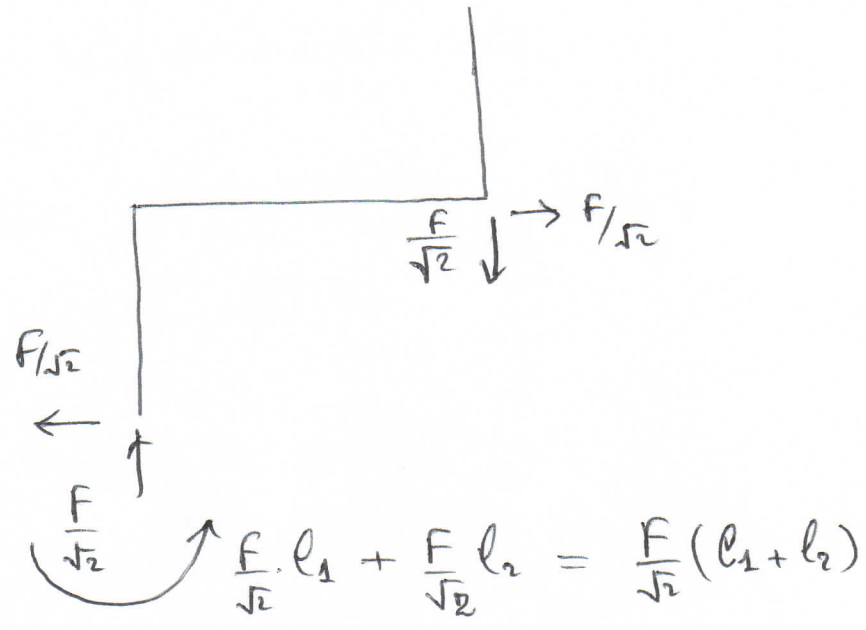
Ex1)

③



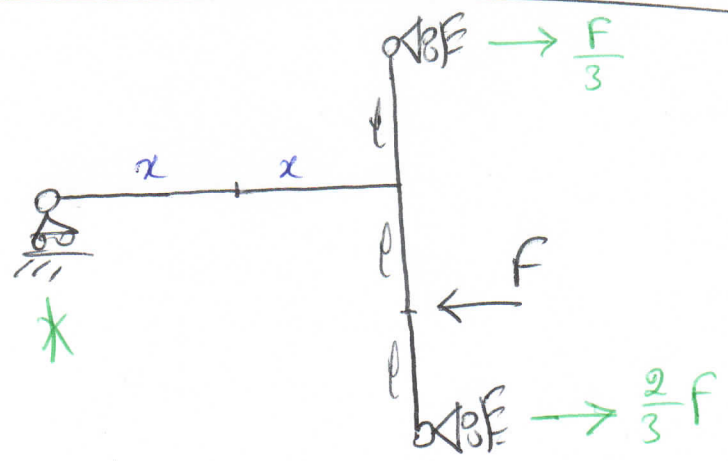
$\alpha = 45^\circ$
 $F = 5 \text{ kN}$
 $l_1 = 10 \text{ m}$
 $l_2 = 5 \text{ m}$

Solution:



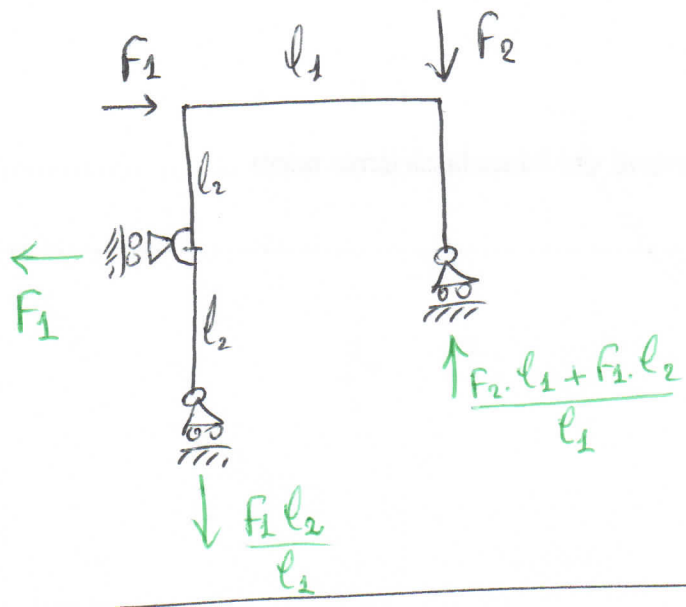
$$\begin{cases} H_A = -F/\sqrt{2} \\ V_A = F/\sqrt{2} \\ M_A = F/\sqrt{2} (l_1 + l_2) \end{cases}$$

Ex2)



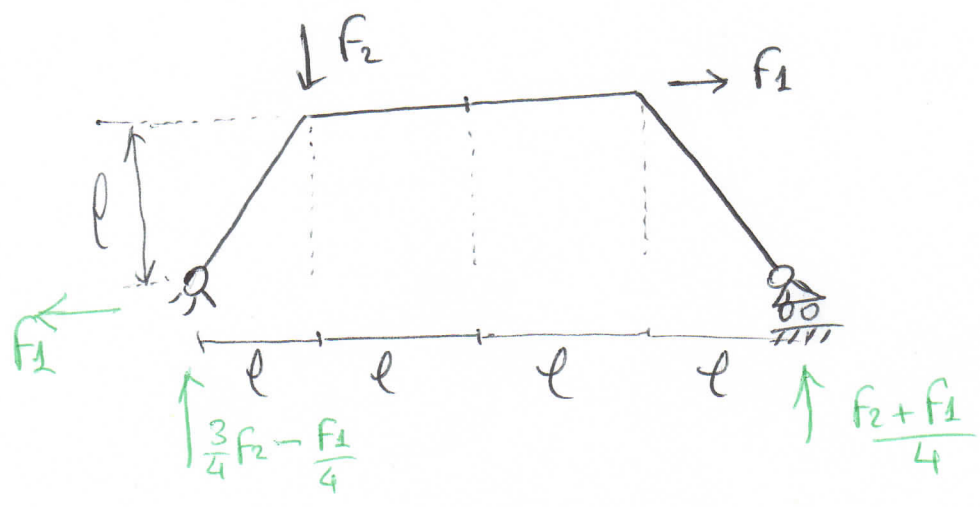
NB! Ris mon dijonde de x!!!

E32)



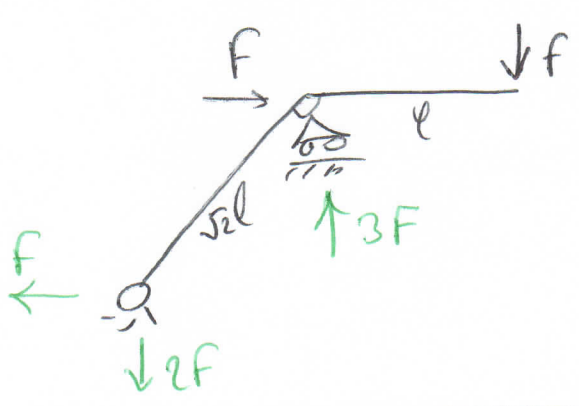
$l_1 = 2\text{m}$
 $l_2 = 1\text{m}$
 $F_1 = 10\text{kN}$
 $F_2 = 20\text{kN}$

E33)



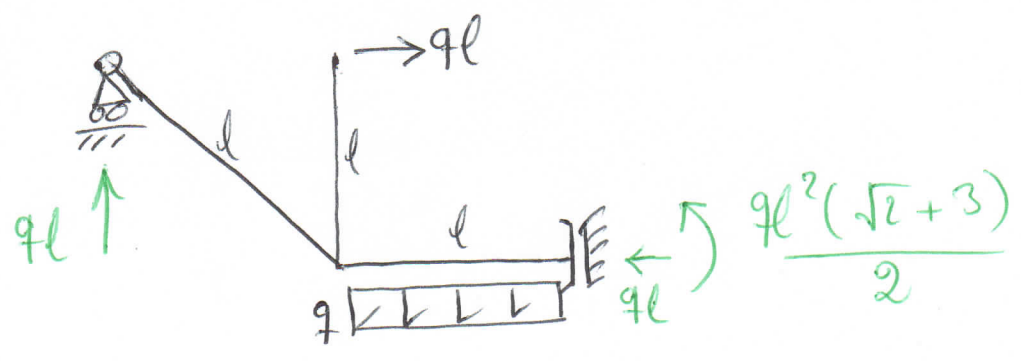
$l = 3\text{m}$
 $F_1 = 5\text{kN}$
 $F_2 = 10\text{kN}$

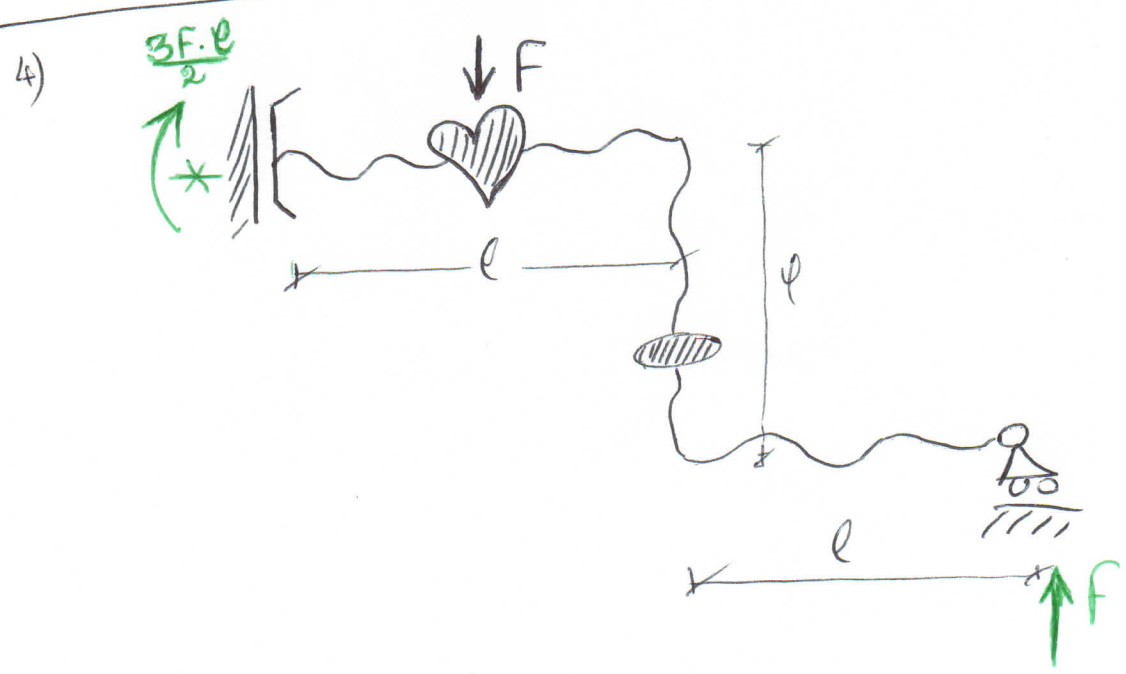
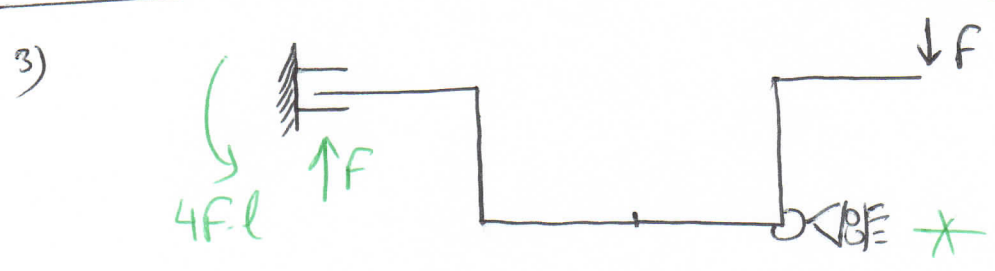
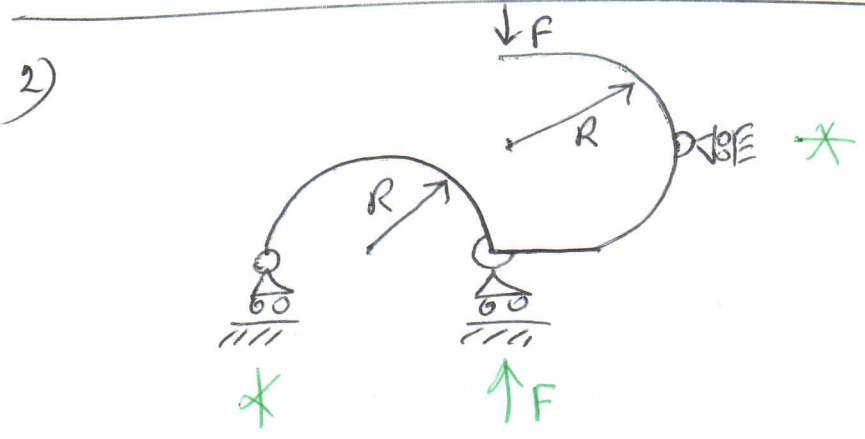
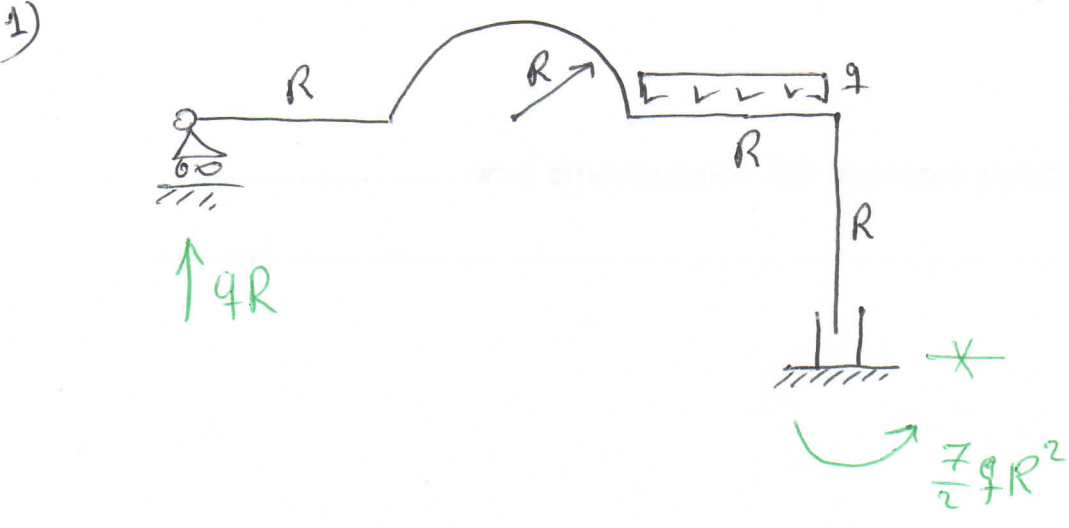
E34)



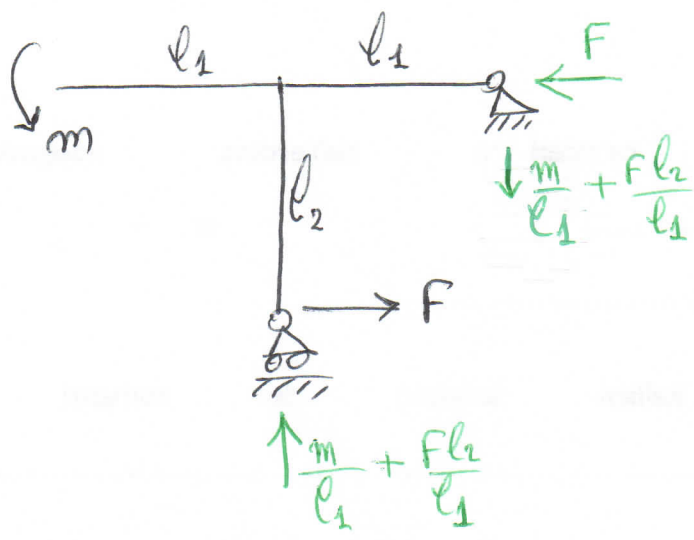
$F = 10\text{kN}$
 $l = 2\text{m}$

E35)

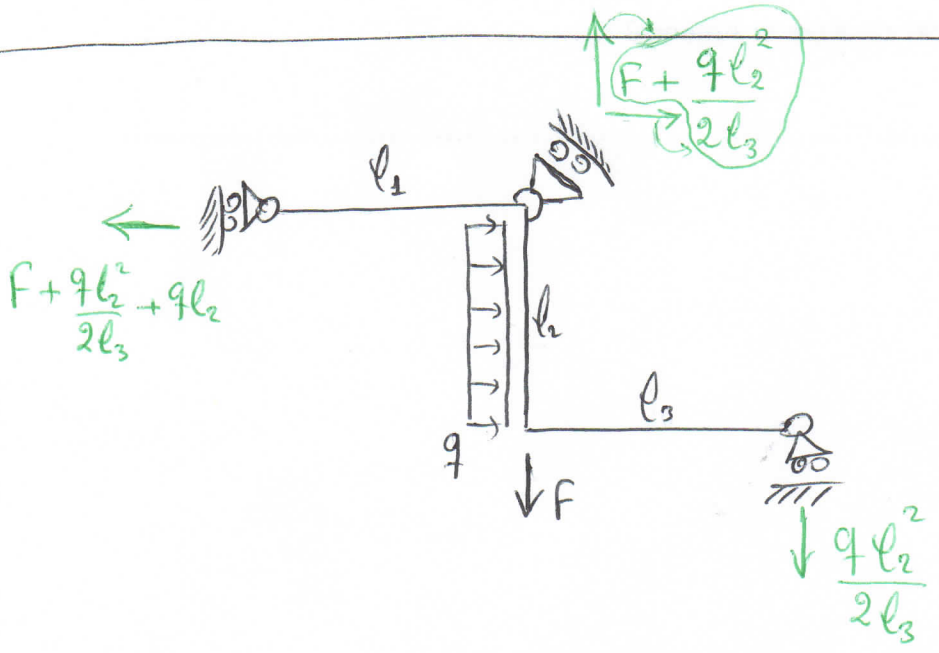




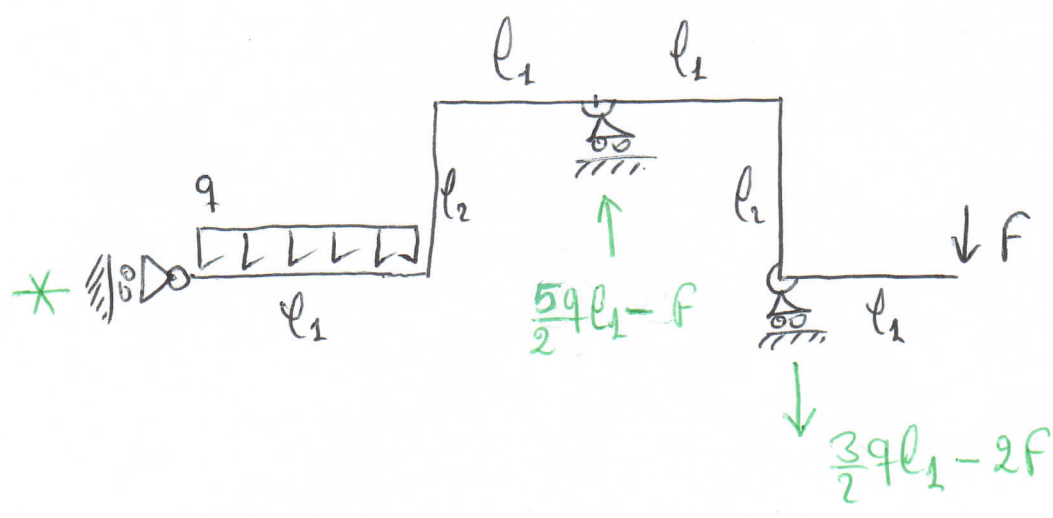
1)



$l_1 = 0,5 \text{ m}$
 $l_2 = 0,75 \text{ m}$
 $F = 10 \text{ kN}$
 $m = 2 \text{ kN}\cdot\text{m}$

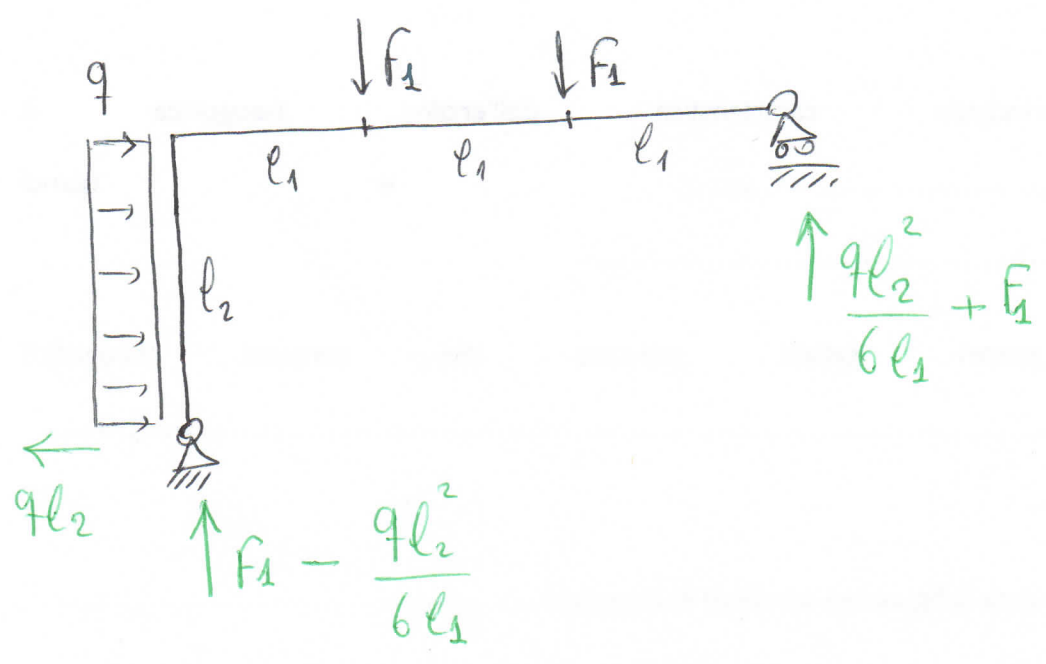


$l_1 = l_2 = l_3 = 1 \text{ m}$
 $q = 2 \text{ kN/m}$
 $F = q \cdot l_2$

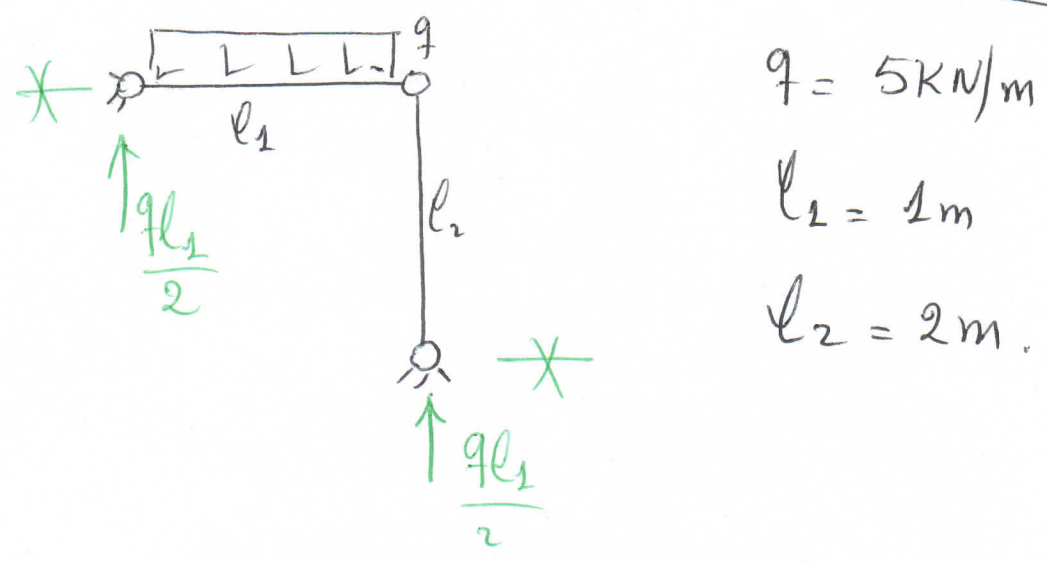


$l_1 = l_2 = l = 1 \text{ m}$
 $F = 10 \text{ kN}$
 $q = 20 \text{ kN/m}$

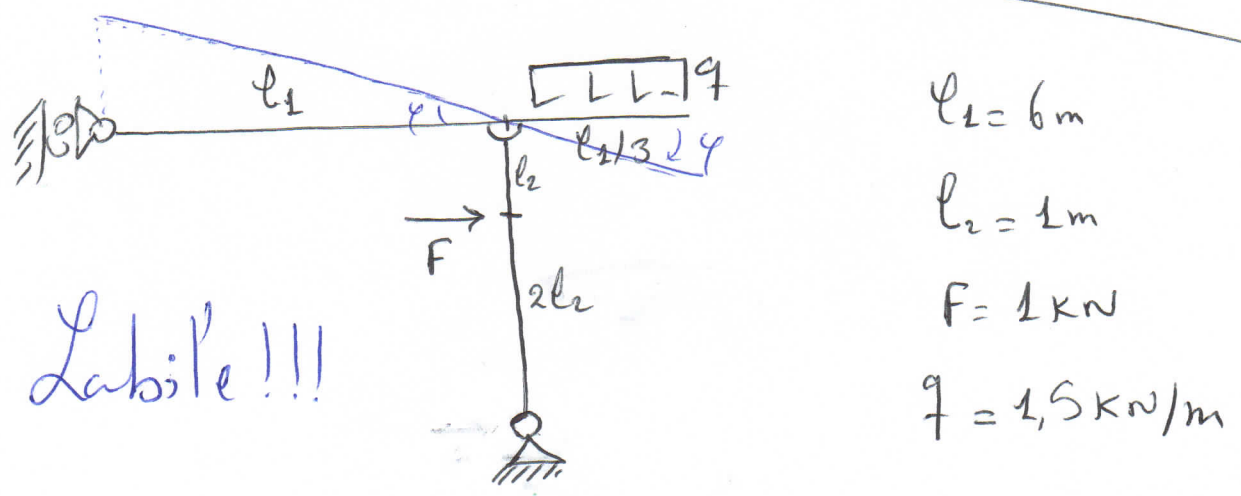
1)



2)



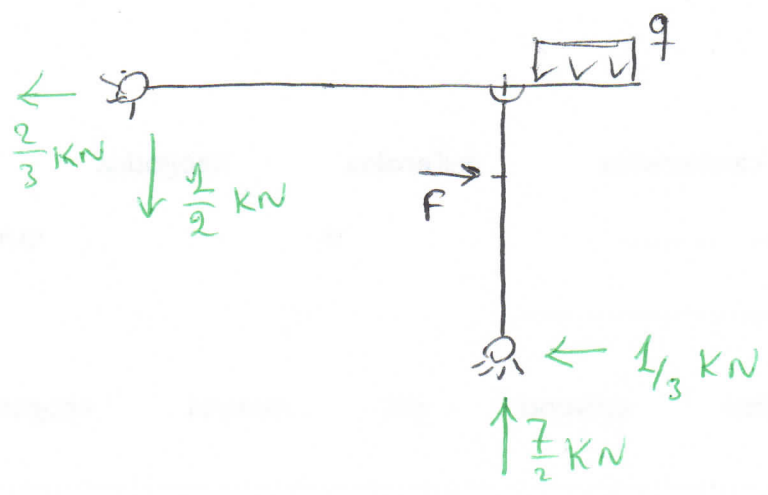
3)



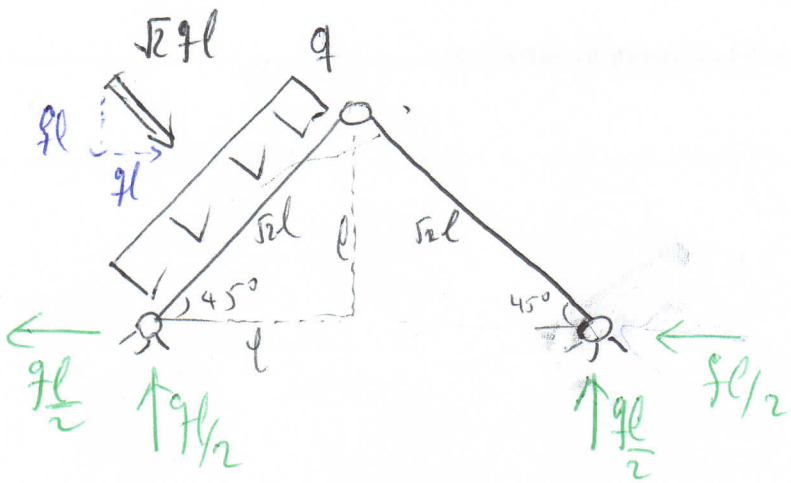
NB! Labile!!!

3a

4d

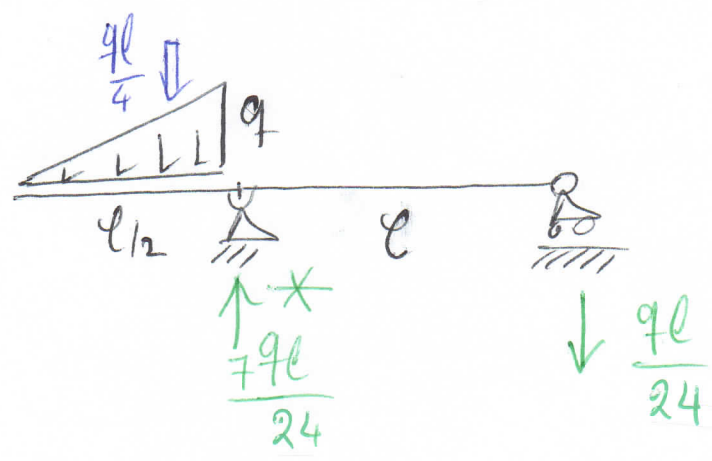


4)



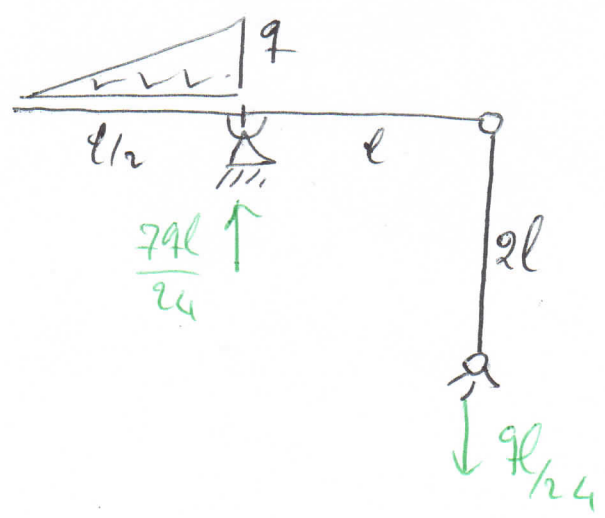
$q = 2 \text{ KN/m}$
 $l = 2,80 \text{ m}$

5)

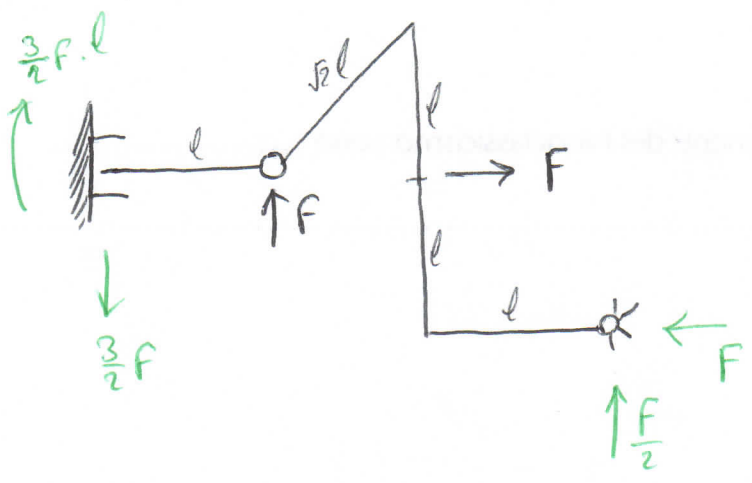


$q = 2 \text{ KN/m}$
 $l = 4 \text{ m}$

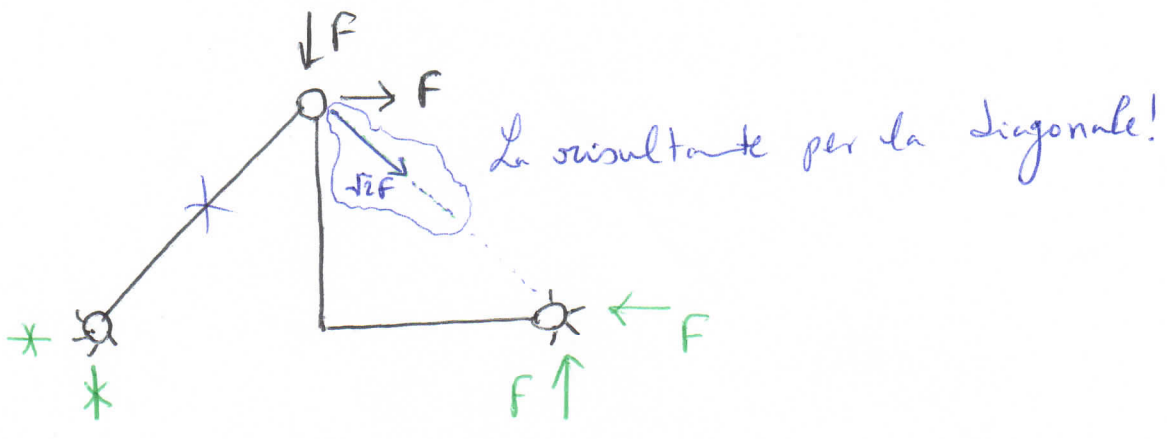
6)



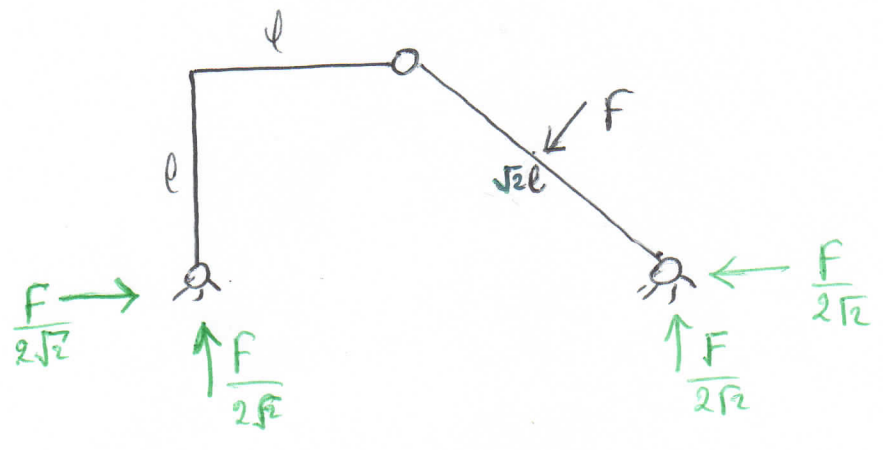
E56)



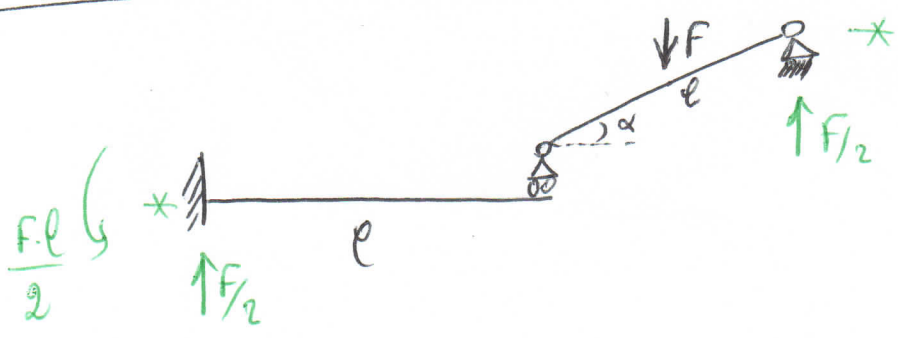
E57)



E58)



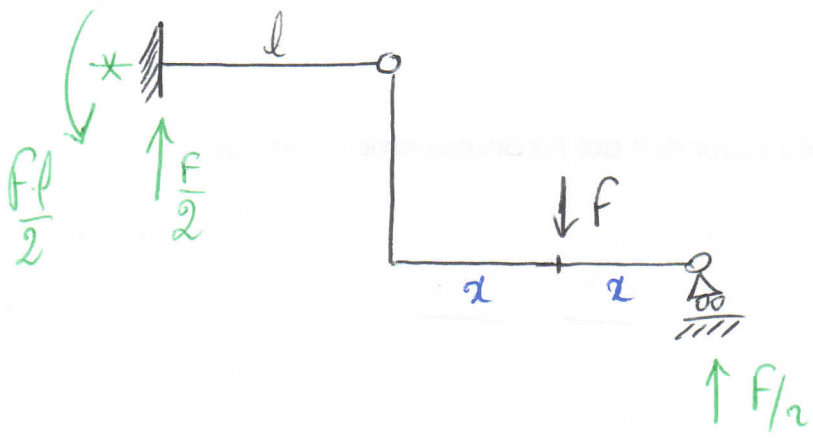
E59)



NB! gli risultati OK $\forall \alpha$!!!

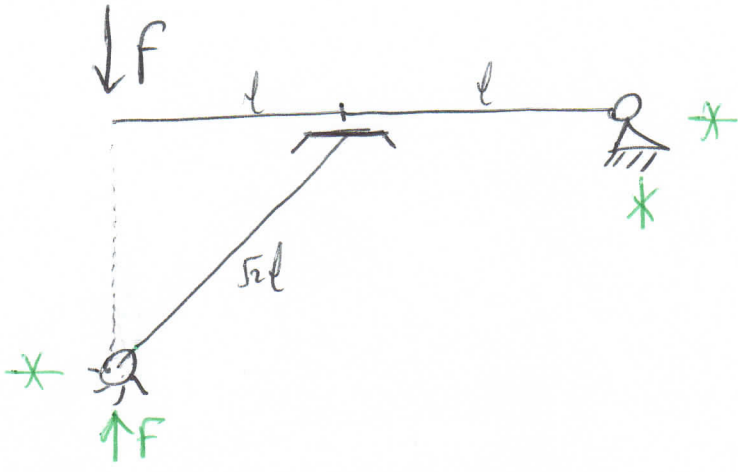
6

E, 10)

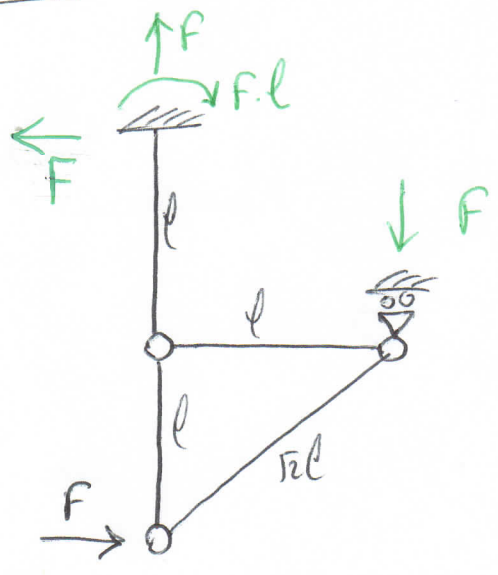


NB! Risultato ok
 $\forall \alpha!!!$

E, 11)



E, 12)



E, 13)

