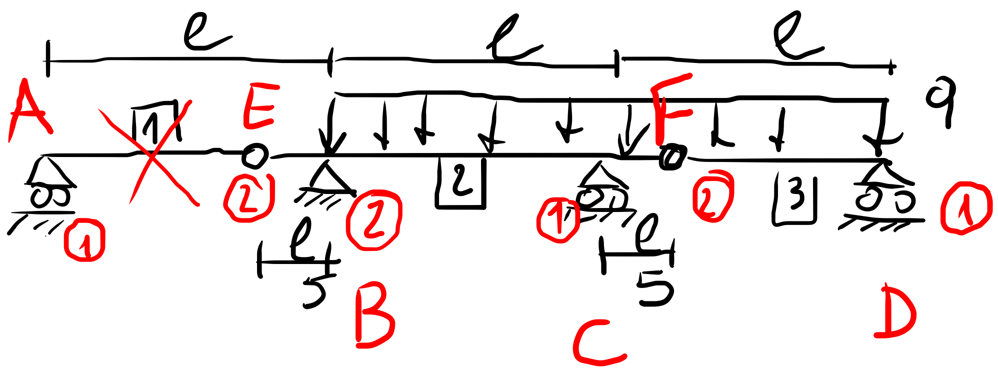
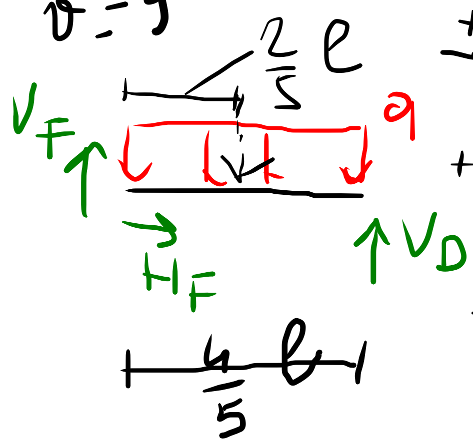
ES:



Il corpo [1] è scarico e le reaz. vincolari che a lui competono (nel n° di 3, sono nulle).

$g = 9$

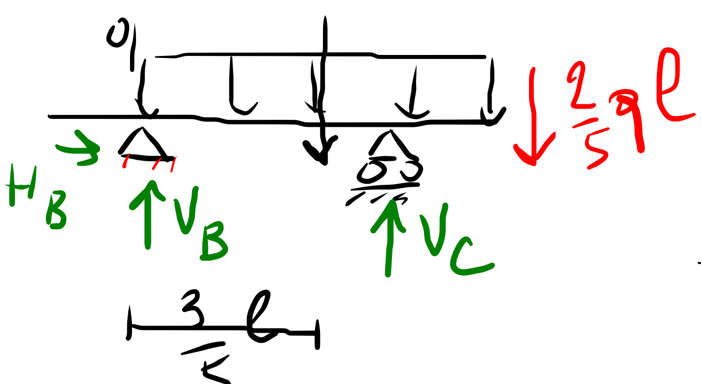
$v = 9$



$\overset{+}{\rightarrow} \; H_F = 0$

$+\uparrow: \; V_F + V_D - \frac{4}{5} q l = 0 \; ; \; V_F = \frac{4}{5} q l - \frac{2}{5} q l = \frac{2}{5} q l$

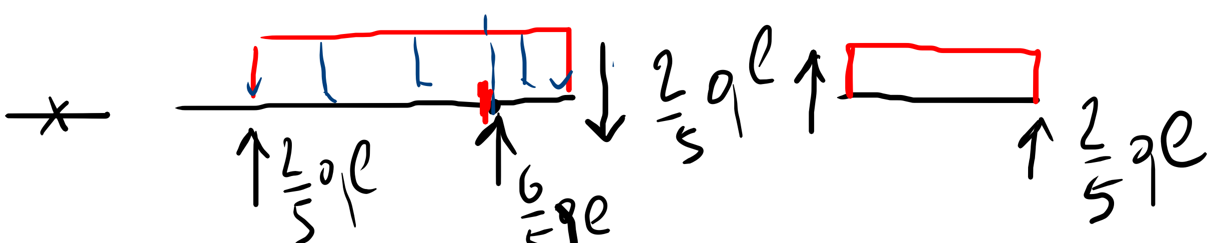
$+F): \; -\frac{4}{5} q l \cdot \frac{2}{5} l + V_D \frac{4}{5} l = 0 \; ; \; V_D = \frac{2}{5} q l$

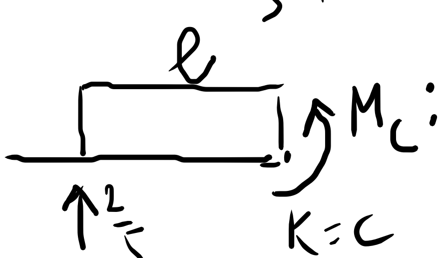


$\overset{+}{\rightarrow} \; H_B = 0$

$+\uparrow: \; V_B + V_C - \frac{6}{5} q l - \frac{2}{5} q l = 0 \; ; \; V_B = \frac{8}{5} - \frac{6}{5} = \frac{2}{5} q l$

$+B): \; V_C l - \frac{6}{5} q l \cdot \frac{3}{5} l - \frac{2}{5} q l \cdot \frac{6}{5} l = 0 \; , \; V_C = \frac{6}{5} q l$

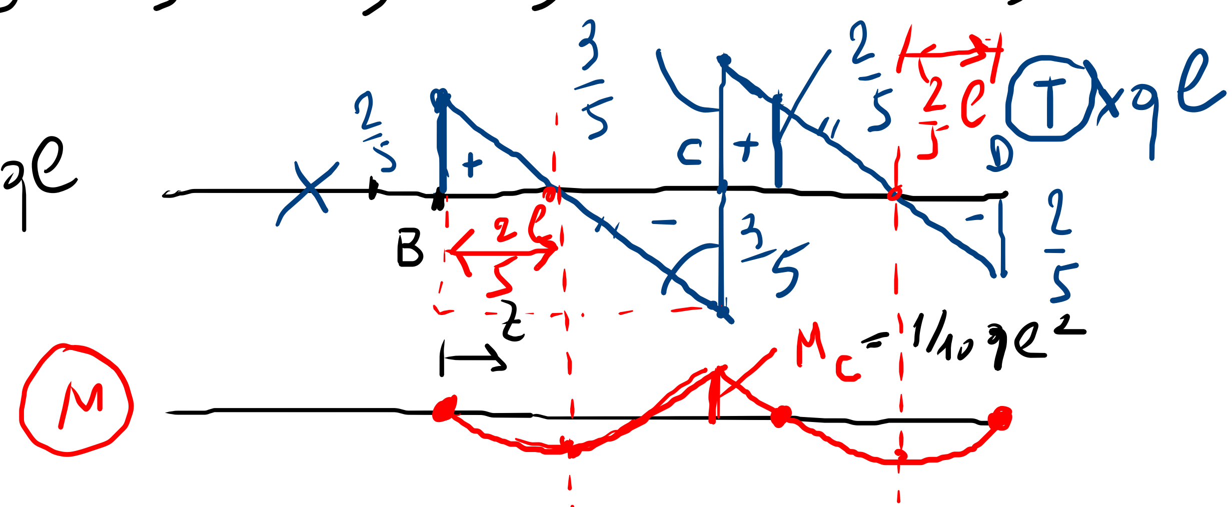


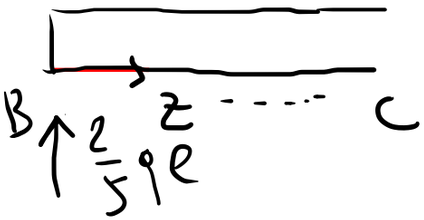


$M_C: \; \frac{2}{5} q l^2 - \frac{q l^2}{2} - M_C = 0$

$K = C$

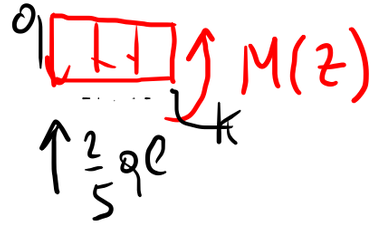
$M_C = -1/10 \, q l^2$



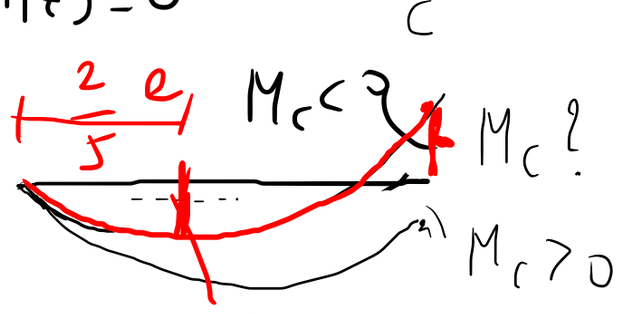


Calcolo $M(z)$ in BC

$$\curvearrowright_K: -\frac{2}{5}q\ell z + q\frac{z^2}{2} + M(z) = 0$$



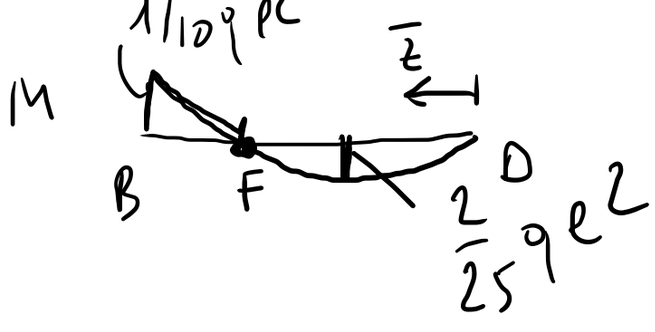
$$M(z) = \frac{2}{5}q\ell z - q\frac{z^2}{2}$$



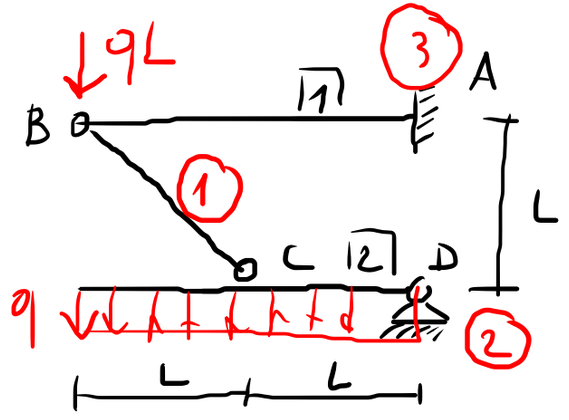
$M_{mot} =$

$$M(\ell) = \frac{2}{5}q\ell^2 - q\frac{\ell^2}{2} = \frac{4-5}{10}q\ell^2 = -\frac{1}{10}q\ell^2$$

$$M_{met} = M\left(\frac{2}{5}\ell\right) = \frac{2}{5}q\ell\cdot\frac{2}{5}\ell - \frac{q}{2}\left(\frac{2}{5}\ell\right)^2 = \frac{4}{25} - \frac{2}{25} = \frac{2}{25}q\ell^2$$

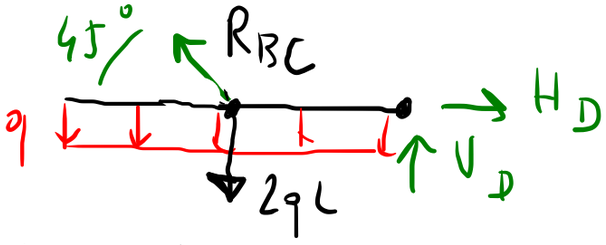


ES.



$g = 6$, $v = 6$

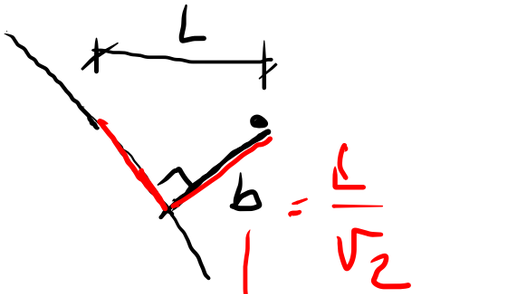
EQ. 2 ;



$+\rightarrow : -\frac{R_{BC}}{\sqrt{2}} + H_D = 0$

$+\uparrow : +\frac{R_{BC}}{\sqrt{2}} - 2qL + V_D = 0$

$+\circlearrowleft D) : -R_{BC}\frac{L}{\sqrt{2}} + 2qL \cdot L = 0$; $R_{BC} = 2\sqrt{2}qL$

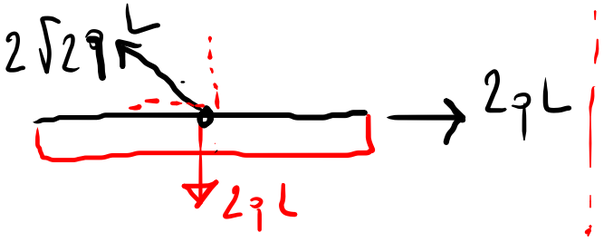


$b = \frac{L}{\sqrt{2}}$

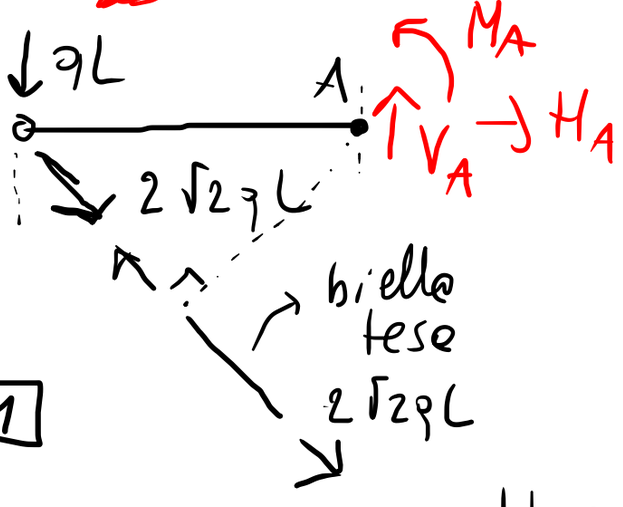
$\frac{L}{2}\sqrt{2} = \frac{L}{\sqrt{2}}$

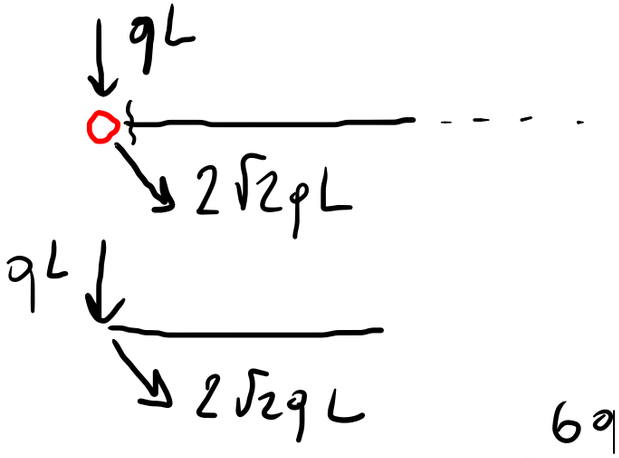
$V_D = 2qL - \frac{R_{BC}}{\sqrt{2}} = 2qL - 2qL = 0$

$H_D = 2qL$



1





$+\rightarrow : 2qL + H_A = 0$

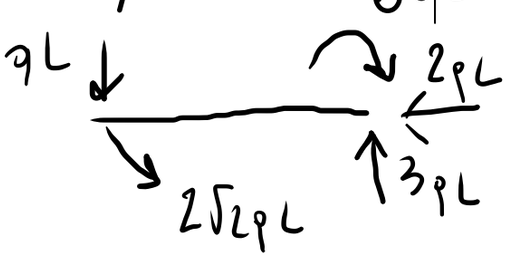
$+\uparrow \; -qL - 2qL + V_A = 0$

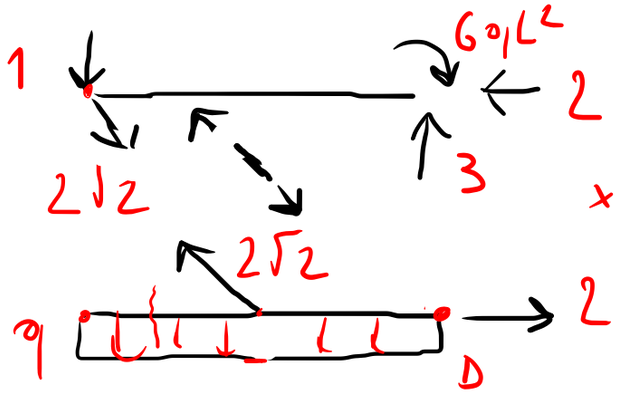
$+\circlearrowleft A) : +qL \cdot 2L + 2\sqrt{2}qL \cdot \frac{2L}{\sqrt{2}} + M_A = 0$

$H_A = -2qL$

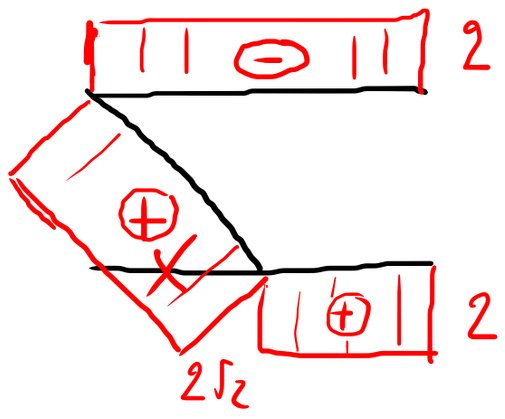
$V_A = 3qL$

$M_A = -6qL^2$



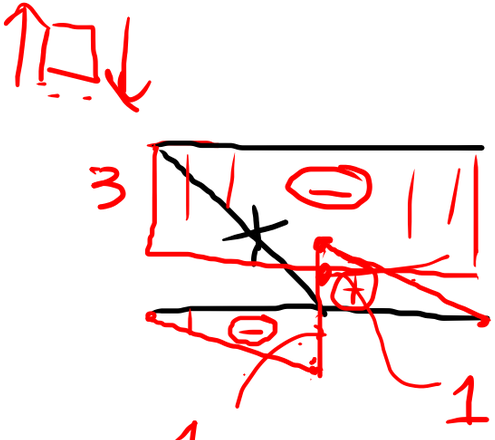


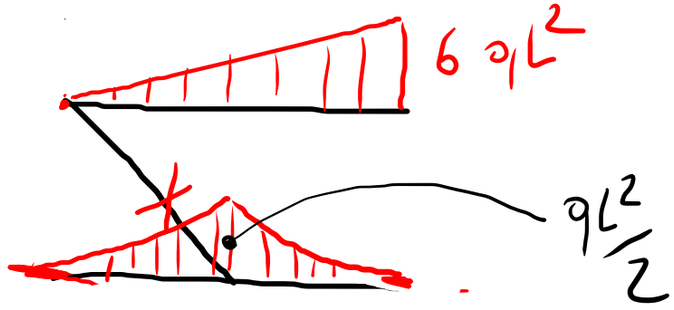
S.C.L.



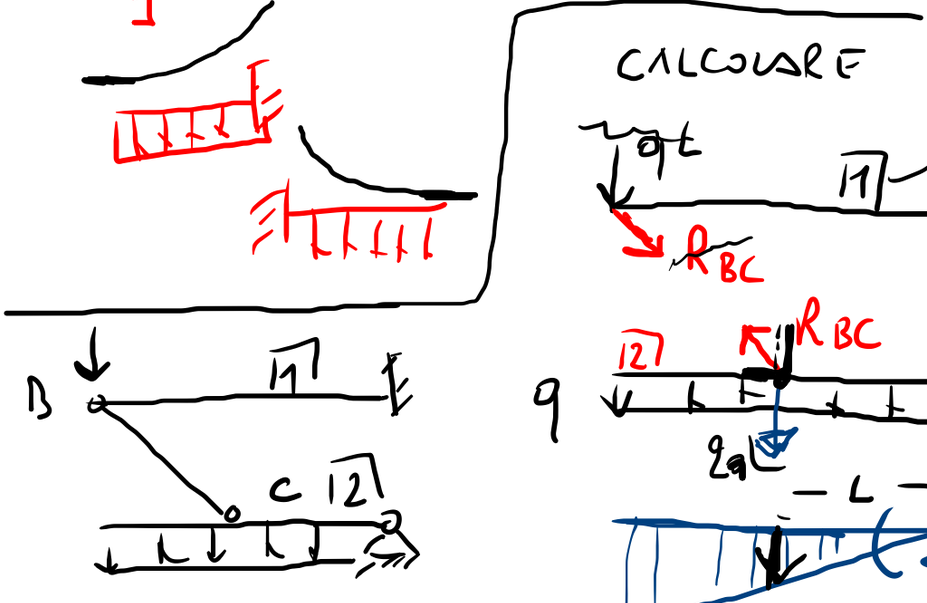
(M) $\times qL$

(T) $\times qL$





(M)



CALCOLARE R_{BC} CON IL P.L.V.

ISOST. C_1

$\delta L = 0 \Rightarrow \delta L^{(2)} = 0$

$$-\frac{R_{BC}}{\sqrt{2}}\delta\theta L + 2qL - \delta\theta L = 0$$

$$R_{BC} = +2\sqrt{2}qL$$

(TRAZIONE NELLA BIELLA)