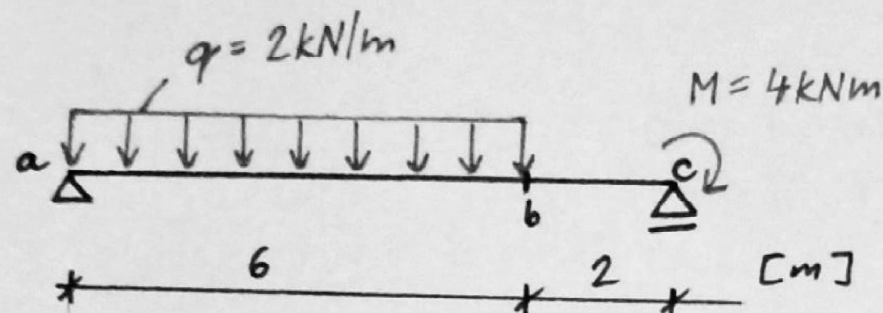
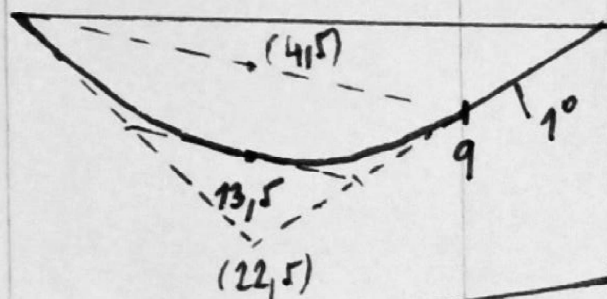


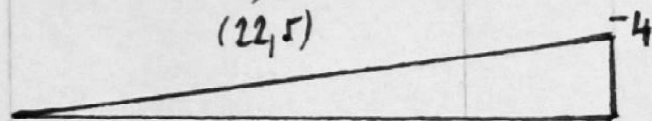


(M_q)

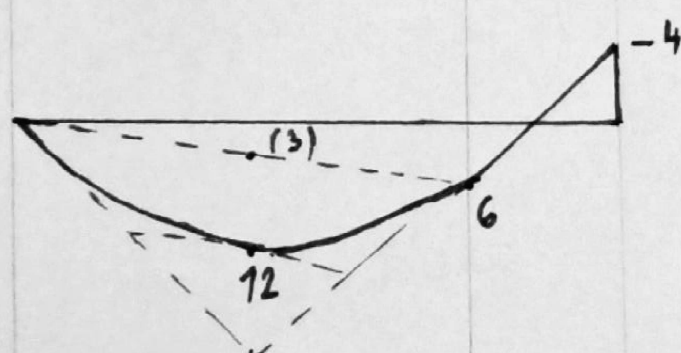


$$f = \frac{1}{8} q l^2 = 9$$

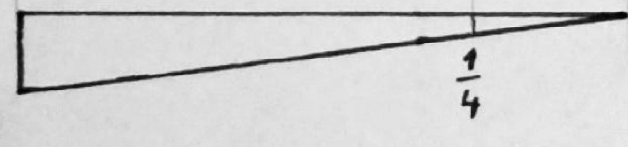
(M_H)



(M)



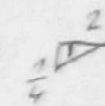
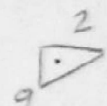
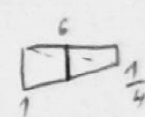
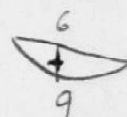
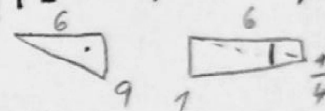
$(\bar{M})$



$$\varphi_a = ?$$

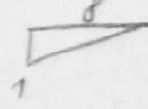
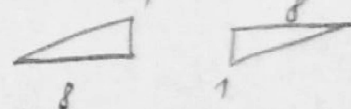
$$EI = 5,12 \cdot 10^4 \text{ kPa} \cdot \text{m}^4$$

$$\varphi_a = \frac{1}{EI} \left\{ \left(\frac{1}{2} \cdot 6 \cdot 9 \right) \cdot \left[\frac{2}{3} \cdot \frac{1}{4} + \frac{1}{3} \cdot 1 \right] + \right.$$



$$+ \left(\frac{2}{3} \cdot 6 \cdot 9 \right) \cdot \left[\frac{1}{2} \cdot \frac{1}{4} + \frac{1}{2} \cdot 1 \right] + \left(\frac{1}{2} \cdot 2 \cdot 9 \right) \cdot \left[\frac{2}{3} \cdot \frac{1}{4} \right] +$$

$$+ \left(\frac{1}{2} \cdot 8 \cdot (-4) \right) \cdot \left[\frac{1}{3} \cdot 1 \right] \Big\} = \frac{193}{6EI}$$



$$= 6,283 \cdot 10^{-4} \text{ rad}$$