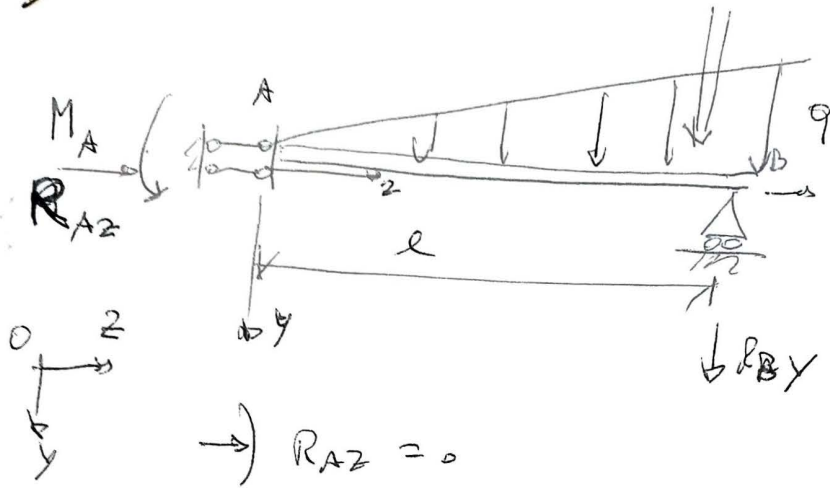


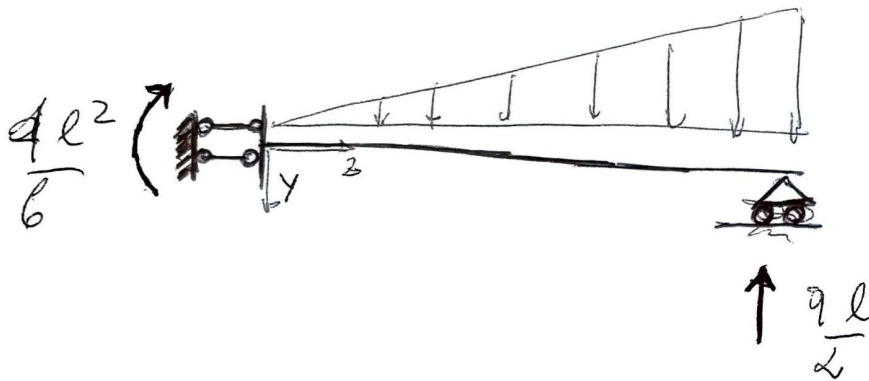
9/05/20



$$q(z) = q \left(\frac{z}{l} \right)$$

$$\downarrow) R_{By} + \frac{q l}{2} = 0 \Rightarrow R_{By} = -\frac{q l}{2}$$

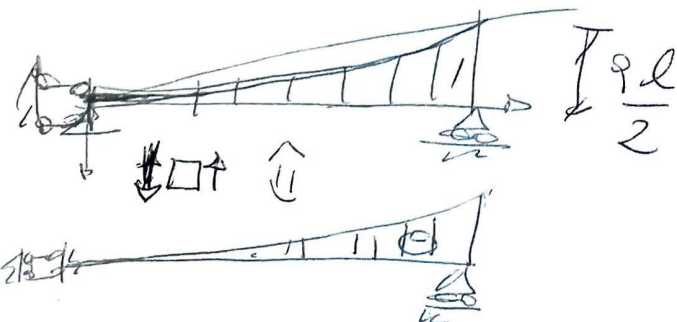
$$\text{B}^*) M_A + \frac{q l}{2} \frac{l}{3} = 0 \Rightarrow M_A = -\frac{q l^2}{6}$$



$$\frac{dT(z)}{dz} + q(z) = 0 \Rightarrow \frac{dT(z)}{dz} + q \left(\frac{z}{l} \right) = 0$$

$$\int_z^l \frac{dT(\xi)}{d\xi} d\xi + \int_z^l q \left(\frac{\xi}{l} \right) d\xi = 0$$

$$T(l) - T(z) + \frac{q}{l} \left(\frac{\xi^2}{2} \right) \Big|_z^l = 0 \Rightarrow T(z) = T(l) + \frac{q}{2l} (l^2 - z^2) = -\frac{q l}{2} + \frac{q l}{2} - \frac{q z^2}{2l} = -\frac{q z^2}{2l}$$

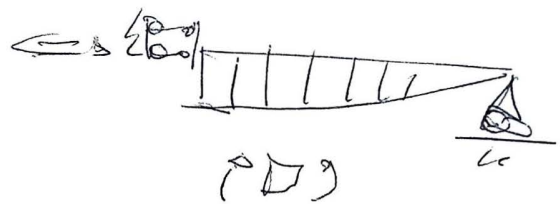
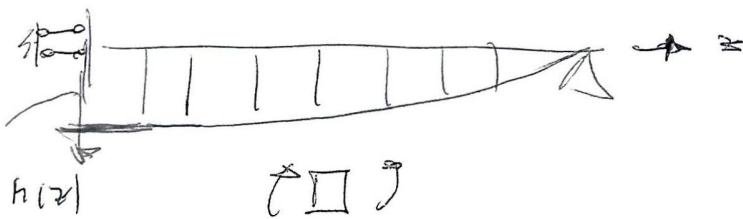
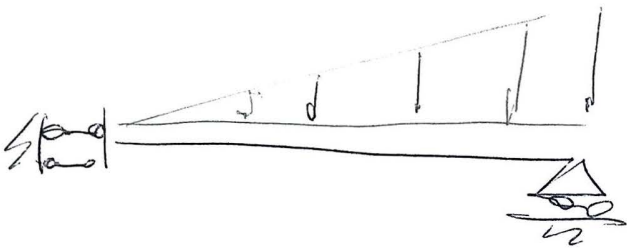


$$\frac{dM(x)}{dx} - T(x) = 0$$

$$\int_z^l \frac{dM(x)}{dx} dx - \int_z^l T(x) dx = 0$$

$$M(l) - M(z) + \frac{q}{2l} \left[\frac{x^3}{3} \right]_z^l = 0 \Rightarrow$$

$$\Rightarrow M(z) = M(l) + \frac{q}{6l} (l^3 - z^3) = + \frac{q}{6l} (l^3 - z^3)$$



$q l^2$