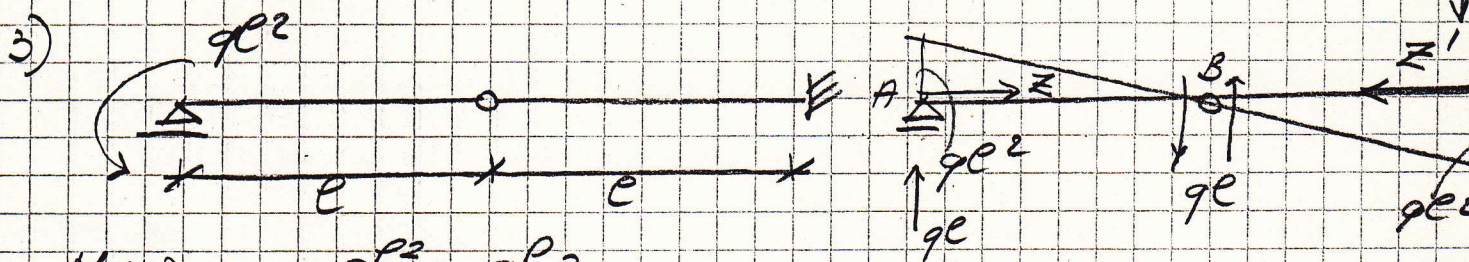


$$\Rightarrow N_1 = -2403 \quad N_4 = 4668 \quad N_7 = 4668$$

$$N_2 = -2403 \quad N_5 = -3398$$

$$N_3 = 4668 \quad N_6 = -2407$$



$$M(z) = -ql^2 + qlz$$

$$EI \sigma'' = -M(z) = ql^2 - qlz$$

$$EI \sigma' = ql^2 z - \frac{qlz^2}{2} + C_1$$

$$EI \sigma = \frac{ql^2 z^2}{2} - \frac{qlz^3}{6} + C_1 z + C_2$$

$$M(z') = ql^2 - qlz'$$

$$EI \sigma'' = -M(z') = -ql^2 + qlz'$$

$$EI \sigma' = -ql^2 z' + \frac{qlz'^2}{2} + C_3$$

$$EI \sigma = -\frac{ql^2 z'^2}{2} + \frac{qlz'^3}{6} + C_3 z' + C_4$$

$$z=0 \quad \sigma=0 \Rightarrow C_2=0$$

$$z'=0 \quad \sigma=0 \Rightarrow C_4=0$$

$$z'=0 \quad \frac{d\sigma}{dz'} = 0 \Rightarrow C_3=0$$

$$z=z'=l \quad \sigma^s = \sigma^o$$

$$\frac{ql^4}{2EI} - \frac{ql^4}{6EI} + C_1 l = -\frac{ql^4}{2EI} + \frac{ql^4}{6EI}$$