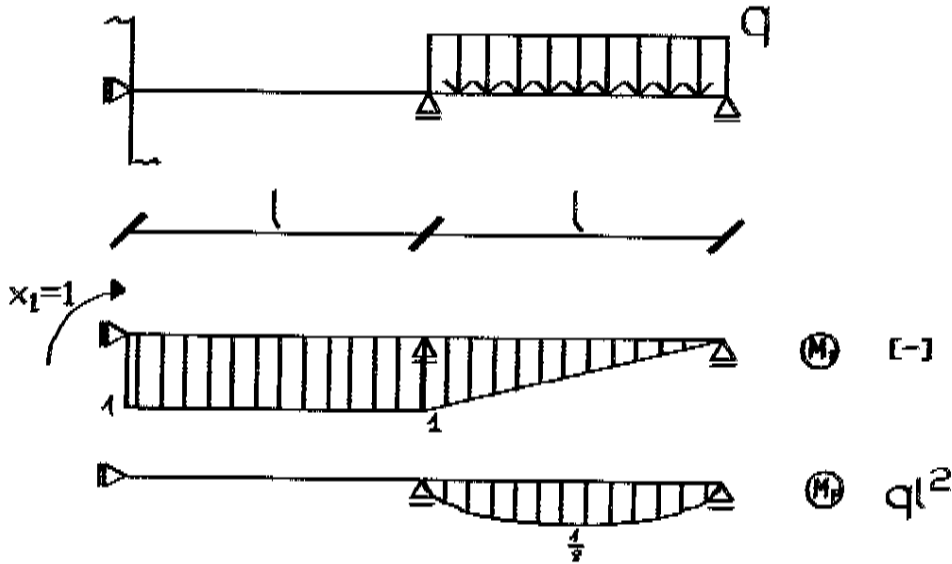
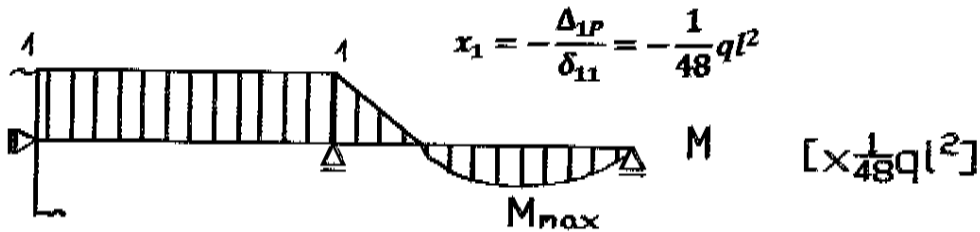


$$\kappa = \frac{3EJ}{2l}$$

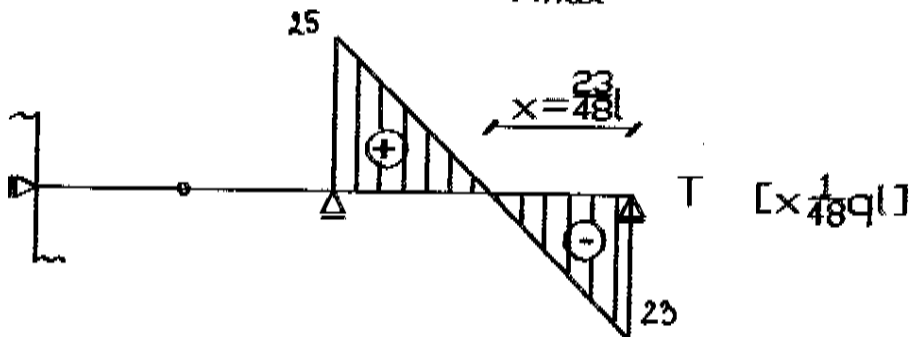


$$\delta_{11} = \frac{1}{EJ} \left[1 \cdot l \cdot 1 + \frac{1}{2} \cdot 1 \cdot l \cdot \frac{2}{3} \right] + \frac{1}{\frac{3}{8}} \cdot 1 \cdot 1 = 2 \frac{l}{EJ}$$

$$\Delta_{1P} = \frac{1}{EJ} \left[\frac{2}{3} \cdot \frac{1}{8} q l^2 \cdot l \cdot \frac{1}{2} \right] + \frac{1}{\frac{3}{8}} \cdot 1 \cdot 0 = \frac{1}{24} \frac{q l^3}{EJ}$$



$$x_1 = -\frac{\Delta_{1P}}{\delta_{11}} = -\frac{1}{48} q l^2$$



$$x = \frac{T_0}{q} = \frac{\frac{23}{48} q l}{q} = \frac{23}{48} l$$

$$M_{MAX} = \frac{23}{48} q l \cdot \frac{23}{48} l - q \cdot \frac{23}{48} l \cdot \frac{1}{2} \cdot \frac{23}{48} l = \frac{529}{4608} q l^2$$