

$$1 = \frac{368}{348}$$

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$$M_p [ql^2]$$

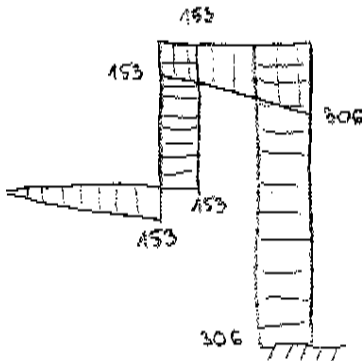
$$\begin{aligned} \delta_{11} &= \frac{1}{EY} \left[\frac{1}{2} \cdot l \cdot l \cdot \left(\frac{2}{3}l\right) + l \cdot l \cdot (l) + l \cdot l \cdot \left(\frac{3}{2}l\right) + \frac{1}{2} \cdot l \cdot l \cdot \left(\frac{5}{3}l\right) + 2l \cdot 2l \cdot (2l) \right] = \frac{35}{3} \frac{l^3}{EY} \\ \delta_{12} &= \frac{1}{EY} \left[\frac{1}{2} \cdot l \cdot l \cdot (-l) + l \cdot l \cdot \left(-\frac{3}{2}l\right) + \frac{1}{2} \cdot l \cdot 2l \cdot (-2l) + \frac{1}{2} \cdot l \cdot 2l \cdot 2l \right] = -2 \frac{l^3}{EY} \\ \delta_{21} &= \frac{1}{EY} \left[l \cdot l \cdot \left(-\frac{1}{2}l\right) + l \cdot l \cdot (-l) + \frac{1}{2} \cdot l \cdot l \cdot (-l) + 2l \cdot l \cdot \left(-\frac{1}{2}l\right) + 2l \cdot l \cdot \frac{1}{2}l \right] = -2 \frac{l^3}{EY} \\ \delta_{22} &= \frac{1}{EY} \left[\frac{1}{2} \cdot l \cdot l \cdot \left(\frac{2}{3}l\right) + l \cdot l \cdot (l) + \frac{1}{2} \cdot l \cdot l \cdot \left(\frac{2}{3}l\right) \cdot 2 \right] = 2 \frac{l^3}{EY} \\ \Delta_{1P} &= \frac{1}{EY} \left[\frac{1}{3} \cdot ql^2 \cdot l \cdot \left(-\frac{7}{4}l\right) + ql^2 \cdot 2l \cdot (-2l) \right] = -\frac{55}{12} \frac{ql^4}{EY} \\ \Delta_{2P} &= \frac{1}{EY} \left[\frac{1}{3} \cdot ql^2 \cdot l \cdot (l) + ql^2 \cdot l \cdot \left(\frac{1}{2}l\right) + ql^2 \cdot l \cdot \left(-\frac{1}{2}l\right) \right] = \frac{1}{3} \frac{ql^4}{EY} \end{aligned}$$

$$\begin{cases} \delta_{11} \cdot x_1 + \delta_{12} \cdot x_2 + \Delta_{1P} = 0 \\ \delta_{21} \cdot x_1 + \delta_{22} \cdot x_2 + \Delta_{2P} = 0 \end{cases}$$

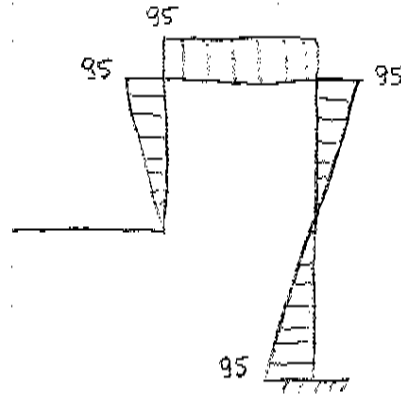
$$\begin{cases} \frac{35}{3} \frac{l^3}{EJ} \cdot X_1 - 2 \frac{l^3}{EJ} \cdot X_2 - \frac{55}{12} \frac{ql^4}{EJ} = 0 \\ -2 \frac{l^3}{EJ} \cdot X_1 + 2 \frac{l^3}{EJ} \cdot X_2 + \frac{1}{3} \frac{ql^4}{EJ} = 0 \end{cases}$$

$$X_1 = \frac{51}{116} ql = \frac{153}{348} ql$$

$$X_2 = \frac{95}{348} ql$$

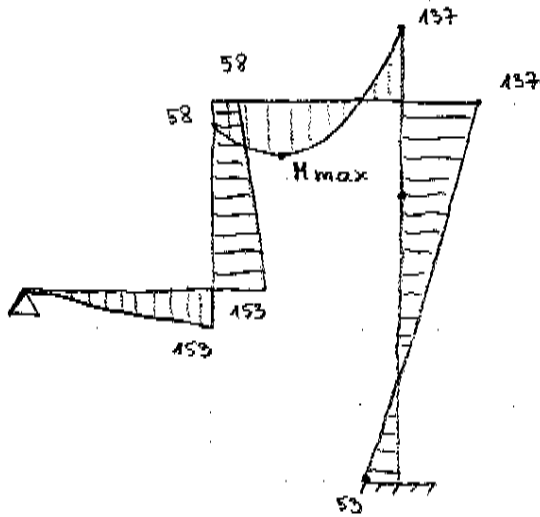


$$M_1 \cdot X_1 [ql^2] \cdot \frac{1}{348}$$

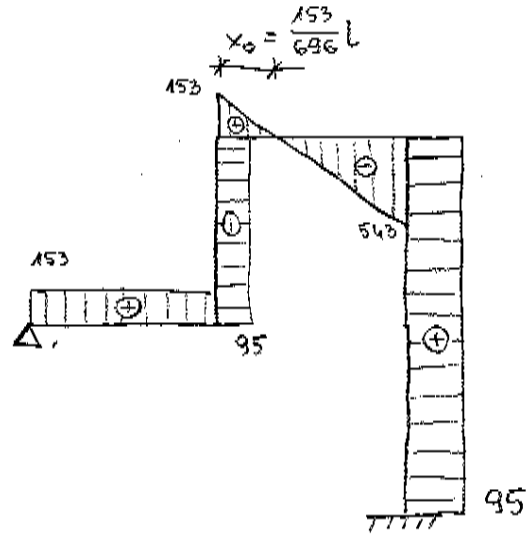


$$M_2 \cdot X_2 [ql^2] \cdot \frac{1}{348}$$

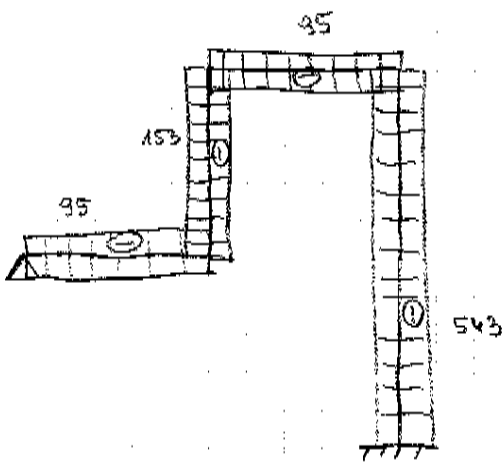
$$M = M_1 \cdot X_1 + M_2 \cdot X_2 + M_p$$



$$M [ql^2] \cdot \frac{1}{348}$$



$$T [ql] \cdot \frac{1}{348}$$



$$N [ql] \cdot \frac{1}{348}$$

$$\begin{array}{r} \downarrow \frac{195}{348} \\ \uparrow \frac{348}{348} \\ \hline \uparrow \frac{153}{348} \end{array} \quad \begin{array}{r} \uparrow \frac{195}{348} \\ \uparrow \frac{348}{348} \\ \hline \uparrow \frac{543}{348} \end{array}$$

$$X_0 = \frac{T_0}{q} = \frac{153}{348} ql \cdot \frac{1}{2q} = \frac{153}{696} l$$

$$\begin{aligned} M_{max} &= M_0 + T_0 \cdot X_0 - 2q \cdot X_0 \cdot \frac{X_0}{2} = \\ &= \frac{58}{348} ql^2 + \frac{153}{348} ql \cdot \frac{153}{696} l - 2q \cdot \frac{153}{696} l \cdot \frac{153}{696} l = \end{aligned}$$

(2)