

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

$$\delta_{12} = \frac{1}{EJ} \left[2l l \cdot \frac{1}{2} l \right] = 1 \frac{l^3}{EJ}$$

$$\delta_{21} = \frac{1}{EJ} \left[\frac{1}{2} l l \cdot 2l \right] = 1 \frac{l^3}{EJ}$$

$$\delta_{22} = \frac{1}{EJ} \left[\frac{1}{2} 2l \cdot 2l \cdot \frac{2}{3} 2l + \frac{1}{2} 2l \cdot 2l \cdot \frac{2}{3} 2l + 2l l \cdot 2l \right] = \frac{28}{3} \frac{l^3}{EJ}$$

$$\Delta_{1P} = \frac{1}{EJ} \left[\frac{1}{2} 2ql^2 l \cdot \frac{2}{3} l \right] = \frac{2}{3} \frac{ql^4}{EJ}$$

$$\Delta_{2P} = \frac{1}{EJ} \left[\frac{2}{3} 2ql^2 2l \left(-\frac{5}{8} 2l \right) \right] = -\frac{10}{3} \frac{ql^4}{EJ}$$

$$\begin{cases} \frac{2}{3} x_1 + x_2 + \frac{2}{3} = 0 / \\ x_1 + \frac{28}{3} x_2 - \frac{10}{3} = 0 / \cdot \left(-\frac{2}{3}\right) \\ \frac{2}{3} x_1 + x_2 + \frac{2}{3} = 0 \\ -\frac{2}{3} x_1 - \frac{56}{9} x_2 + \frac{20}{3} = 0 \end{cases}$$

$$\left(\frac{2}{3} - \frac{56}{9}\right) x_2 + \frac{20}{9} + \frac{2}{3} = 0$$

$$-\frac{47}{9} x_2 + \frac{26}{9} = 0$$

$$\frac{47}{9} x_2 = \frac{26}{9}$$

$$x_2 = \frac{26}{9} \cdot \frac{9}{47} = \frac{26}{47}$$

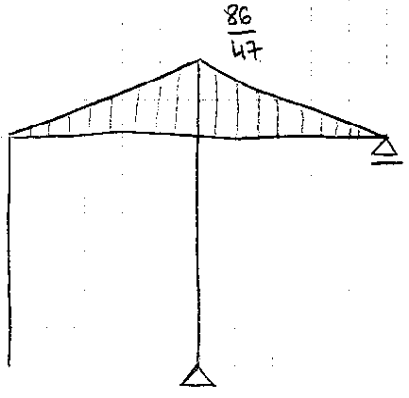
$$\frac{2}{3} x_1 + \frac{26}{47} + \frac{2}{3} = 0$$

$$\frac{2}{3} x_1 = -\frac{78}{141} - \frac{94}{141}$$

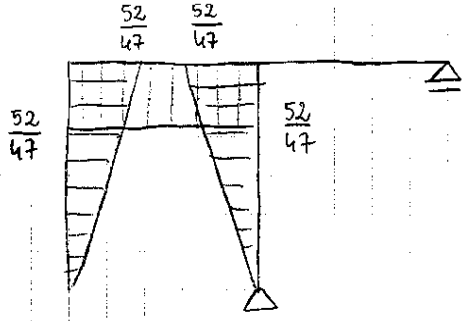
$$\frac{2}{3} x_1 = -\frac{172}{141}$$

$$x_1 = -\frac{172}{141} \cdot \frac{3}{2} = -\frac{86}{47} ql$$

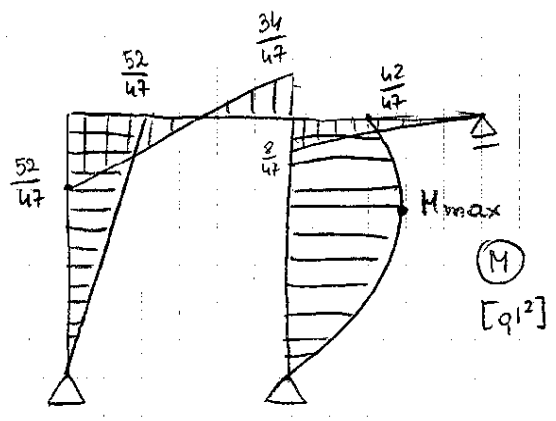
$$x_2 = \frac{26}{47} ql$$



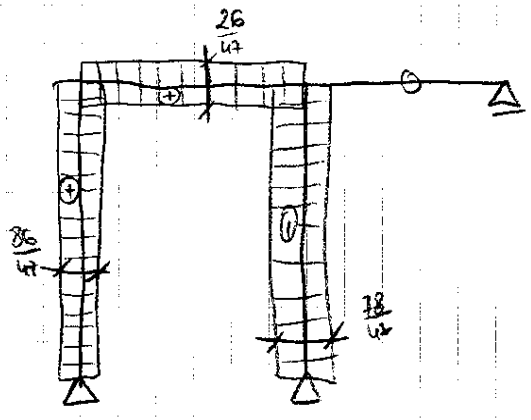
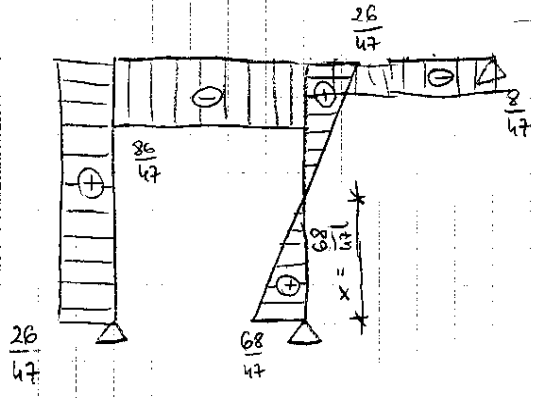
$M_1 x_1$
[ql²]



$M_2 x_2$
[ql²]



M
[ql²]



N
[ql²]

$$x_0 = \frac{T_0}{q}$$

$$M_{max} = M_0 + P_0 \cdot x_0 + q \cdot x_0 \cdot \frac{x_0}{2}$$

$$M_{max} = \frac{68}{47} ql \cdot \frac{68}{47} l - q \cdot \frac{68}{47} l \cdot \frac{1}{2} \cdot \frac{68}{47} l =$$

$$= \frac{2312}{2209} ql^2 \approx 1,05 ql^2$$