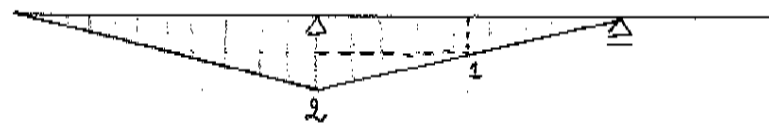
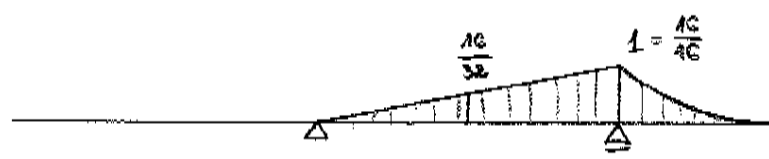


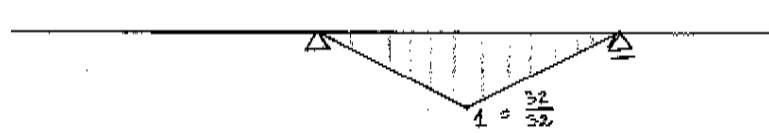
$$n_3 = 1$$



$$M_1 [l]$$



$$M_{p2} [ql^2]$$



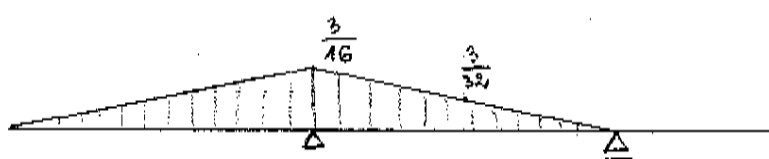
$$M_{p3} [ql^2]$$

$$\sum M_1 = \frac{1}{EJ} \left[\frac{1}{2} \cdot 2l \cdot 2l \cdot \left(\frac{4}{3}l\right) \cdot 2 \right] = \frac{16}{3} \frac{l^3}{EJ}$$

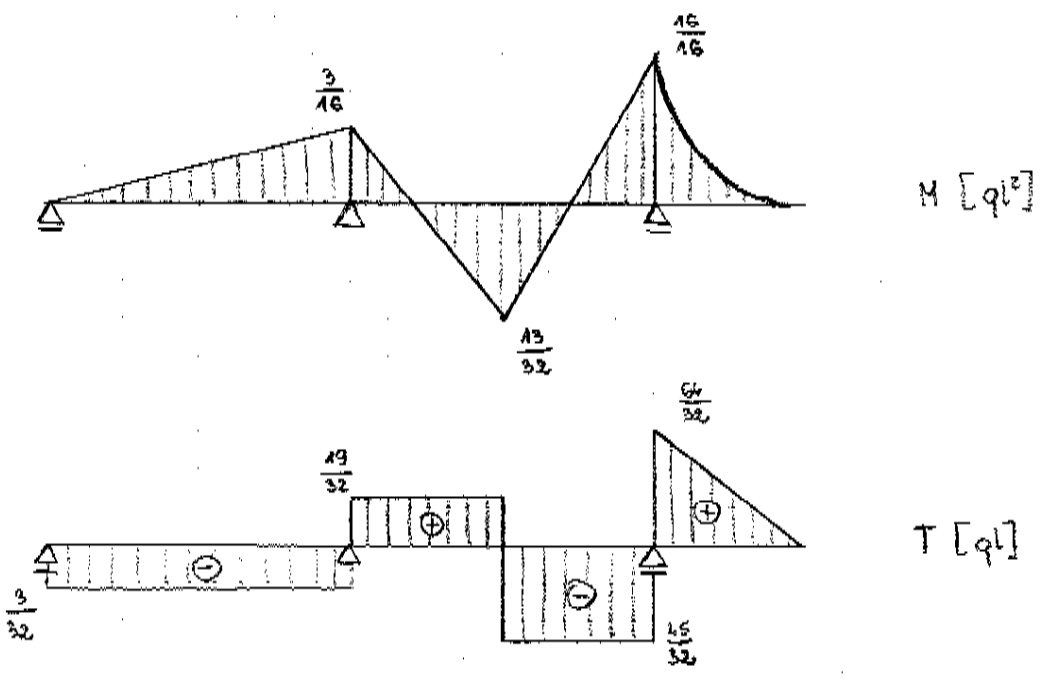
$$\Delta_{1P} = \frac{1}{EJ} \left[\frac{1}{2} \cdot ql^2 \cdot 2l \cdot \left(-\frac{1}{3} \cdot 2l\right) + \frac{1}{2} \cdot ql^2 \cdot l \cdot \left(\frac{2}{3} \cdot l\right) + \frac{1}{2} \cdot ql^2 \cdot l \cdot \left(\frac{5}{3}l\right) \right] = \frac{1}{2} \frac{ql^4}{EJ}$$

$$\sum M_1 \cdot x_1 + \Delta_{1P} = 0$$

$$x_1 = -\frac{\Delta_{1P}}{\sum M_1} = -\frac{\frac{1}{2} \frac{ql^4}{EJ}}{\frac{16}{3} \frac{l^3}{EJ}} = -\frac{3}{32} ql$$



$$M_1 \cdot x_1 [ql^2]$$



$$\begin{array}{cc}
 \downarrow \frac{13}{32} ql & \uparrow \frac{13}{32} ql \\
 \uparrow ql = \frac{32}{32} & \uparrow ql = \frac{32}{32} \\
 \hline
 \uparrow \frac{19}{32} ql & \uparrow \frac{45}{32} ql
 \end{array}$$