

$$\frac{ql^2}{12} - \frac{3EI\psi}{l^2} - \frac{10EI\phi_B}{l} = 0 \quad *$$

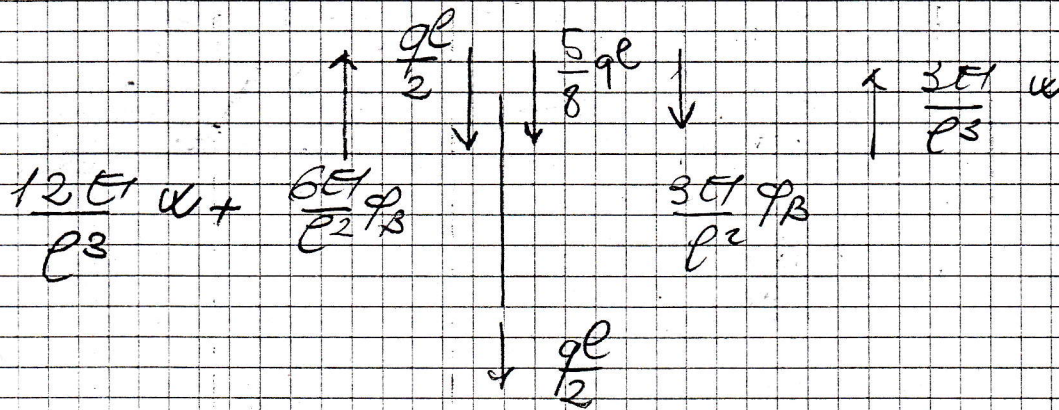
(2)

$$T_{BA}^0 = -\frac{ql}{2}$$

$$T_{BA} = \frac{6EI}{l^2}\phi_B + \frac{12EI}{l^3}\psi$$

$$T_{BC}^0 = -\frac{ql}{2}$$

$$T_{BC} = -\frac{3EI}{l^2}\phi_B + \frac{3EI}{l^3}\psi$$



$$\sum Y = \frac{13}{8}ql - \frac{12EI\psi}{l^3} - \frac{3EI\psi}{l^3} - \frac{6EI\phi_B}{l^2} + \frac{3EI\phi_B}{l^2} =$$

$$-\frac{13}{8}ql - \frac{15EI\psi}{l^3} - \frac{3EI\phi_B}{l^2} = 0 \quad *$$

$$\phi_B = \left(\frac{13}{8}ql - \frac{15EI\psi}{l^3} \right) \frac{l^2}{3EI} = \frac{13ql^3}{24EI} - \frac{5}{l}\psi$$

$$\frac{ql^2}{12} - \frac{3EI\psi}{l^2} - \frac{10EI}{l} \left(\frac{13ql^3}{24EI} - \frac{5}{l}\psi \right) =$$

$$= \frac{ql^2}{12} - \frac{3EI\psi}{l^2} - \frac{65ql^2}{12} + \frac{50EI\psi}{l^2} = -\frac{16}{12}ql^2 + \frac{47EI\psi}{l^2} = 0$$

$$\psi = \frac{16}{3}ql^2 \cdot \frac{l^2}{47EI} = \frac{16}{141} \frac{ql^4}{EI} = 0,1134 \frac{ql^4}{EI}$$

$$\phi_B = \frac{13ql^3}{24EI} - \frac{5}{l} \cdot 0,1134 \frac{ql^4}{EI} = -0,0257 \frac{ql^4}{EI}$$