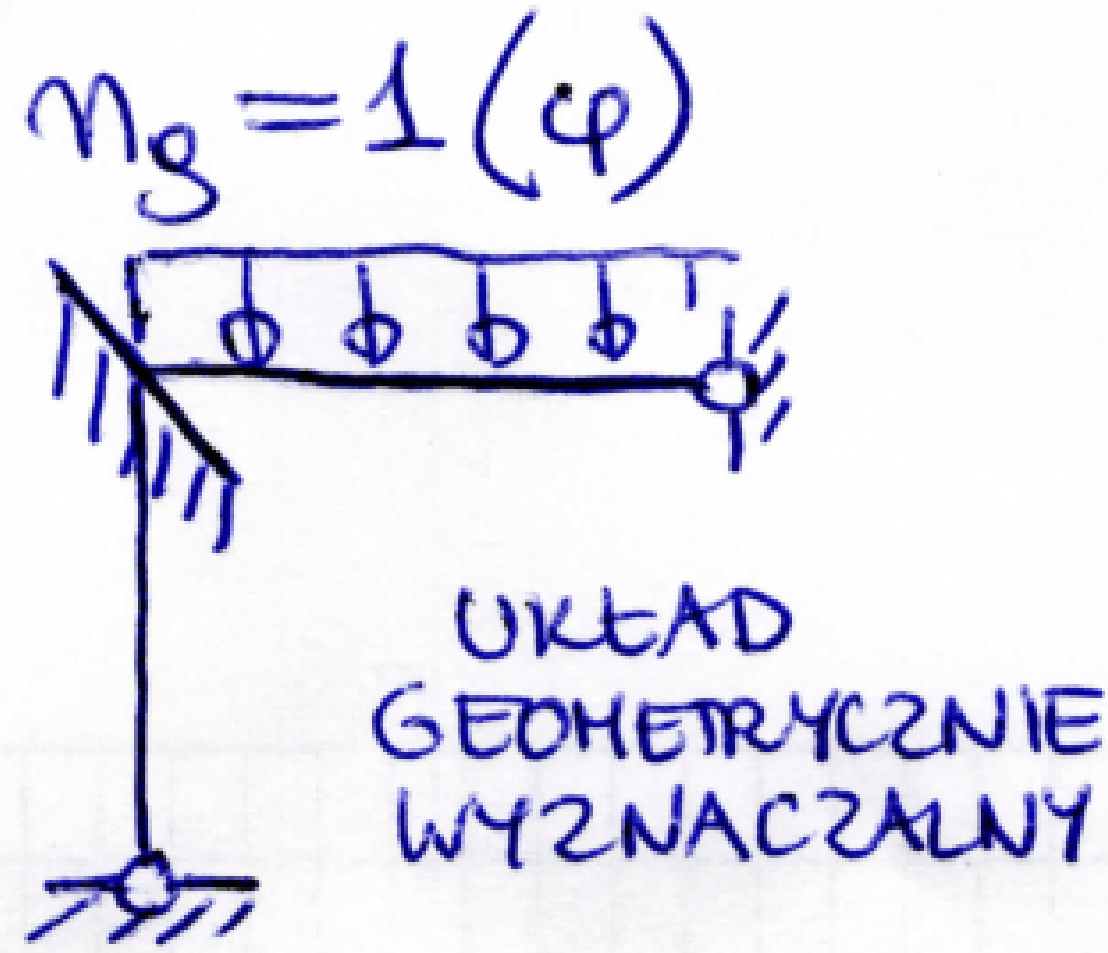
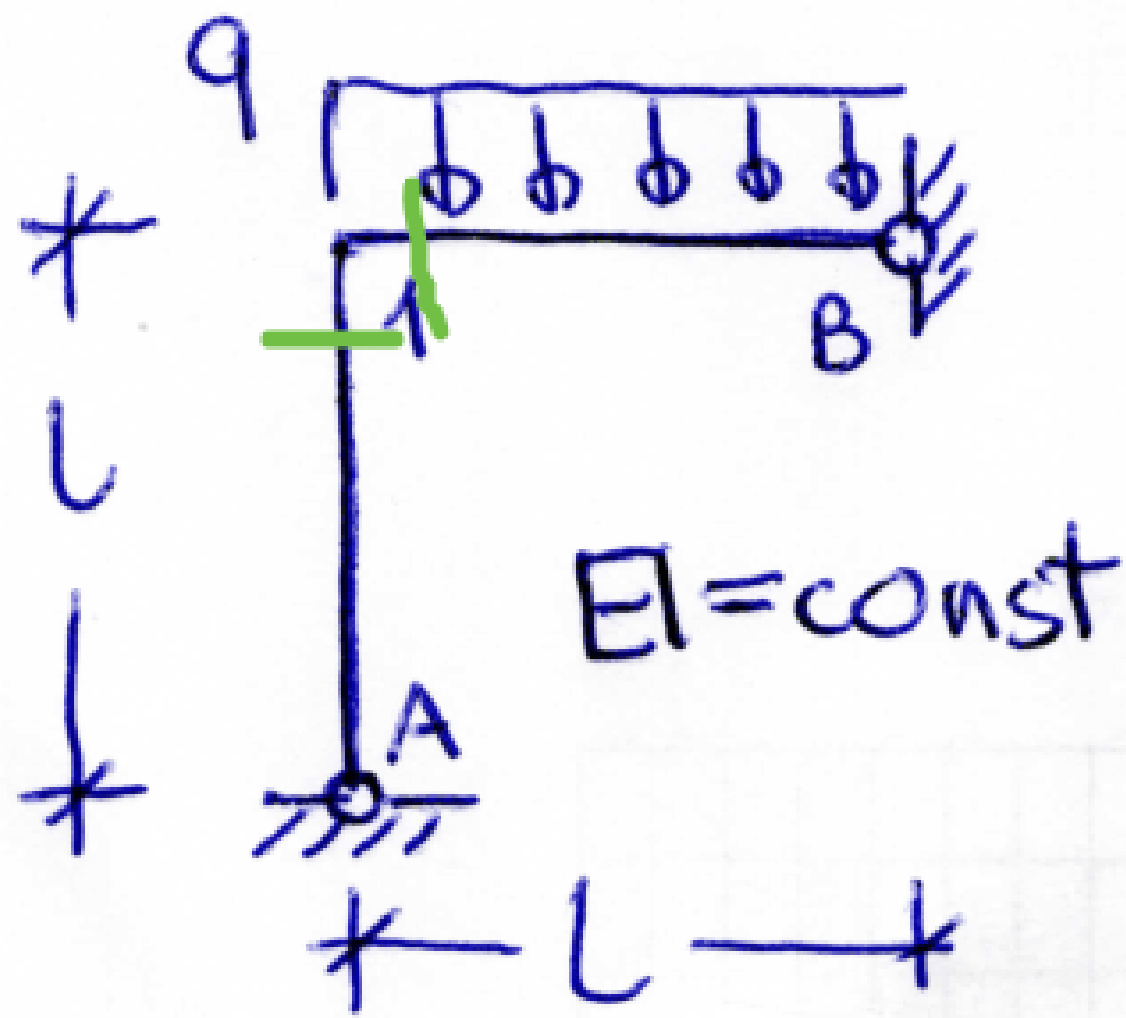
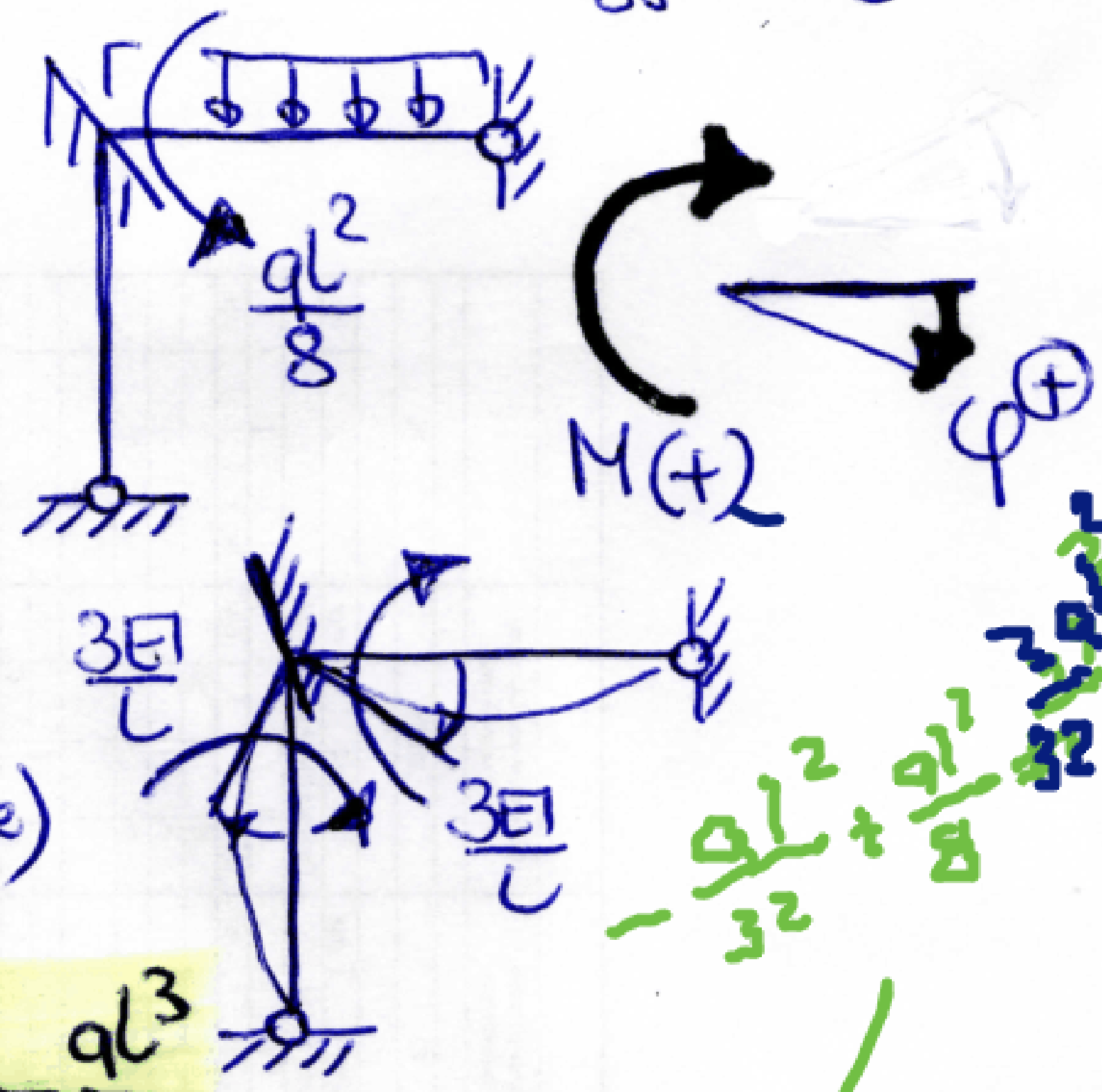


METODA PRZEMIESZCZEŃ

CW. 8/2



stan $\varphi = 0$ - moment wyjściowy



sumaryczne momenty przywęzłowe:

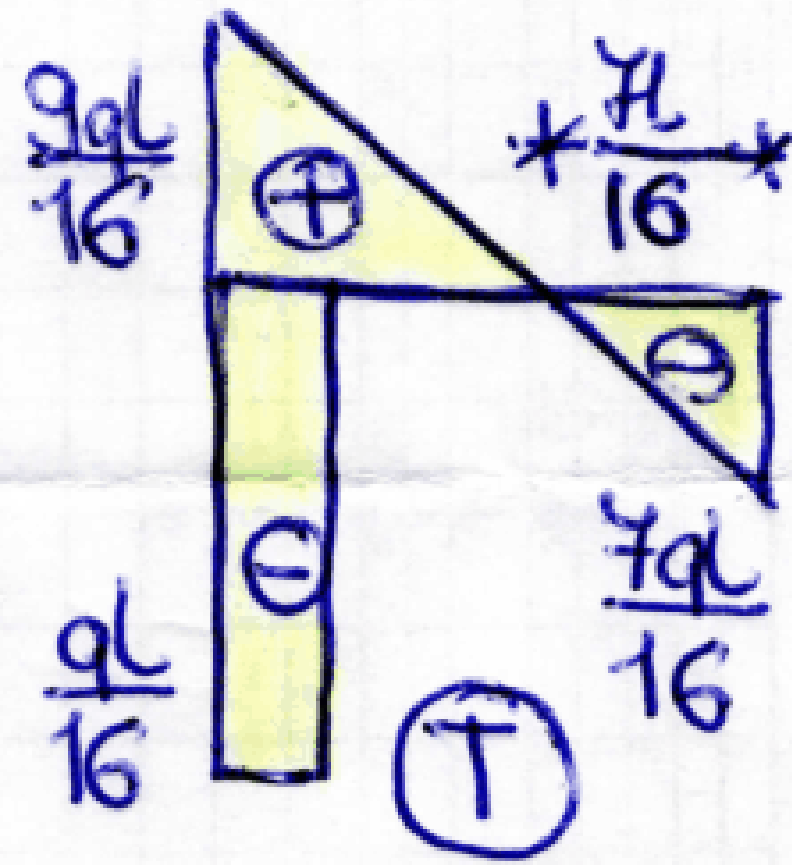
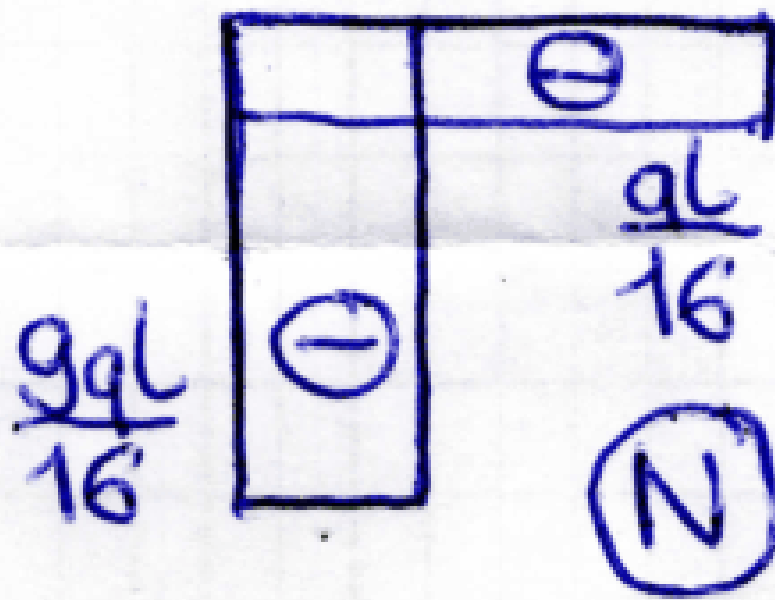
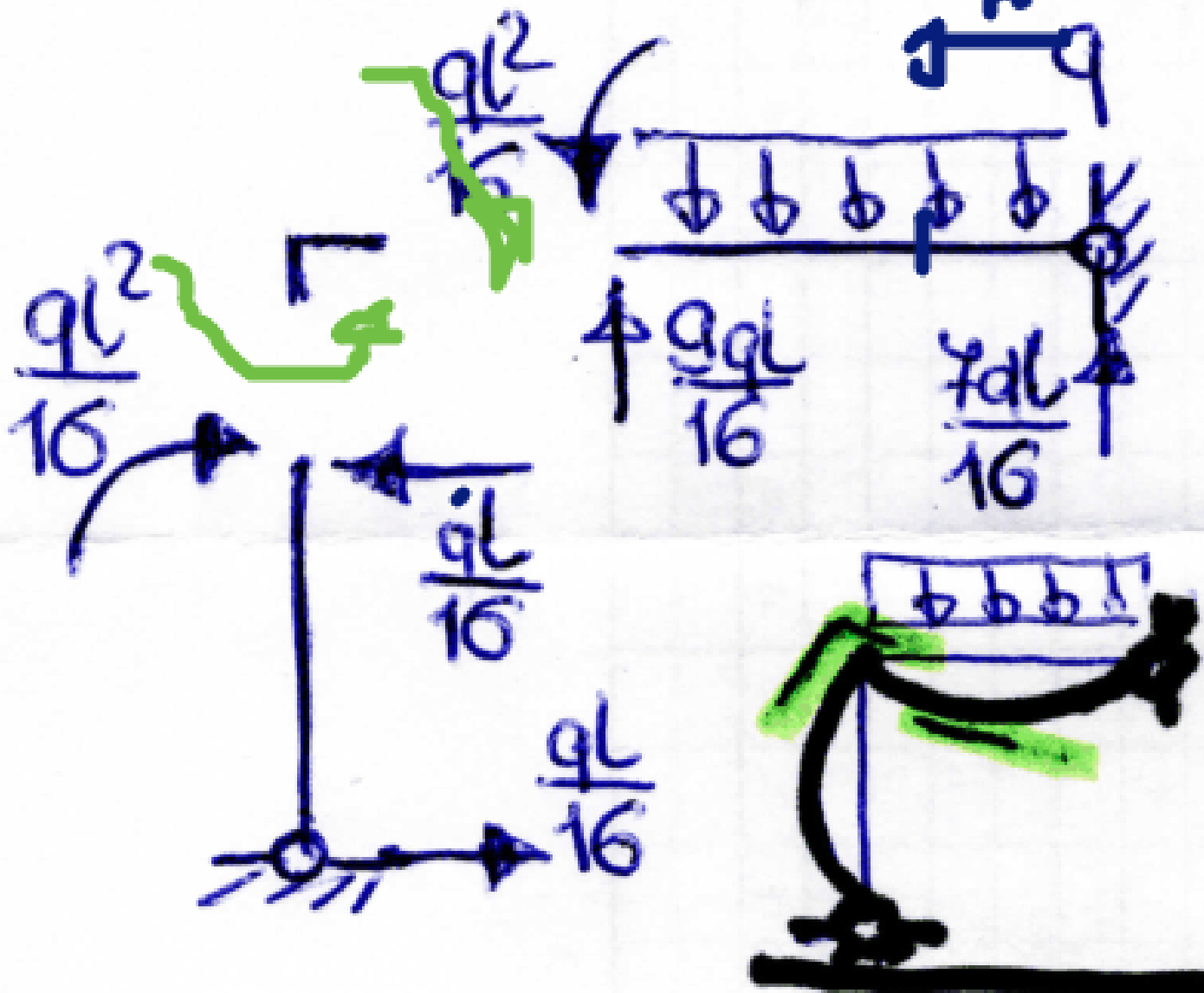
$$M_{1A} = \frac{3EI}{L} \varphi$$

$$M_{1B} = -\frac{ql^2}{8} + \frac{3EI}{L} \varphi$$

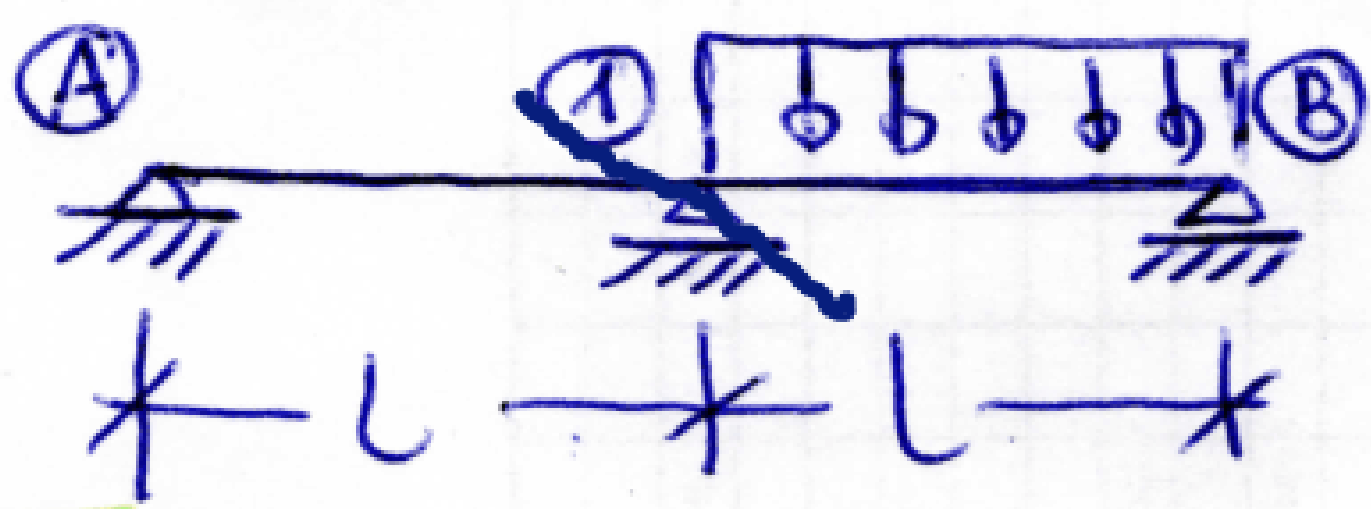
stan $\varphi = 1$ (wymuszenie)

równanie równowagi: $\sum M_1 = M_{1A} + M_{1B} = 0 \Rightarrow \varphi = \frac{ql^3}{48EI}$

wartości momentów przywęzłowych: $M_{1A} = \frac{ql^2}{16}$, $M_{1B} = -\frac{ql^2}{8} + \frac{ql^2}{16} = -\frac{ql^2}{16}$



$EI = const$



$n_g = 1 (\varphi)$. Sumaryczne momenty przywęzłowe:

$$M_{1A} = \frac{3EI}{L} \varphi, \quad M_{1B} = -\frac{ql^2}{8} + \frac{3EI}{L} \varphi$$

Równanie równowagi: $\sum M_1 = M_{1A} + M_{1B} = 0 \Rightarrow \varphi = \frac{ql^3}{48EI}$

wartości momentów przywęzłowych: $M_{1A} = \frac{ql^2}{16}$, $M_{1B} = -\frac{ql^2}{8} + \frac{ql^2}{16} = -\frac{ql^2}{16}$

