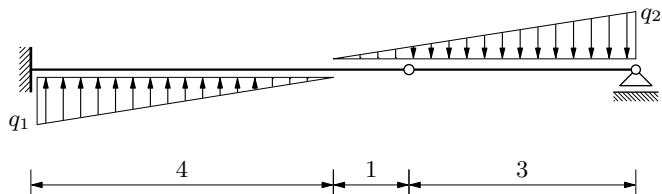


GS 2. — kolokvij (2023./2024.)

Zadatak A2.

Pomoću utjecajnih linija izračunajte vrijednosti momenta savijanja i poprečne sile u presjeku $x = 4$! (Ishodište je u lijevom ležaju).

$$q_1 = q_2 = 75 \text{ kN/m'}$$



moment savijanja:

$$Q_1 = \frac{1}{2} \cdot \frac{75}{4} \cdot 1$$

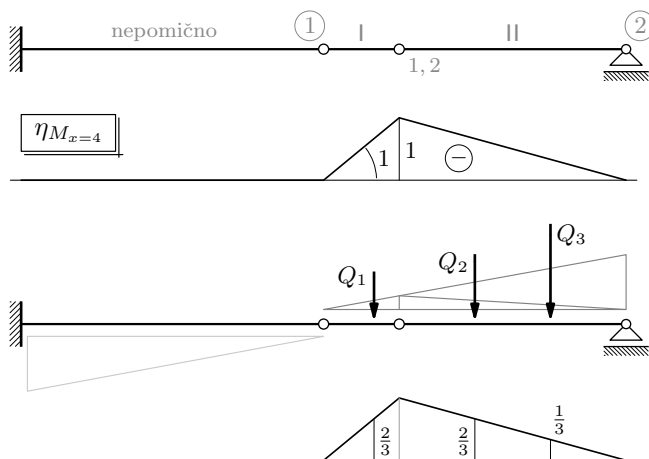
$$= 9,375 \text{ kN}$$

$$Q_2 = \frac{1}{2} \cdot \frac{75}{4} \cdot 3$$

$$= 28,125 \text{ kN}$$

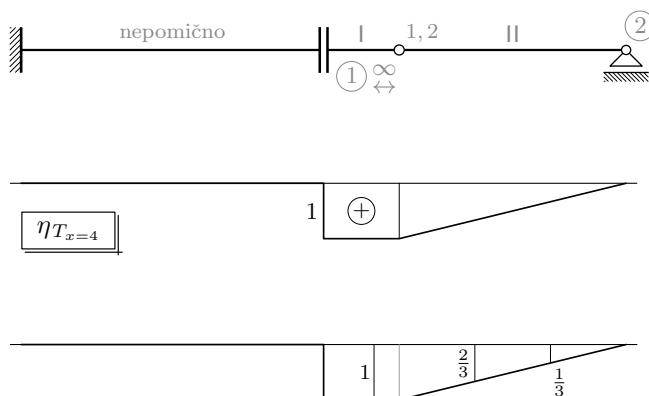
$$Q_3 = \frac{1}{2} \cdot 75 \cdot 3$$

$$= 112,5 \text{ kN}$$



$$M_{x=4} = 9,375 \cdot \left(-\frac{2}{3}\right) + 28,125 \cdot \left(-\frac{2}{3}\right) + 112,5 \cdot \left(-\frac{1}{3}\right) = -62,5 \text{ kNm}$$

poprečna sila:



$$T_{x=4} = 9,375 \cdot 1 + 28,125 \cdot \frac{2}{3} + 112,5 \cdot \frac{1}{3} = 65,625 \text{ kN}$$