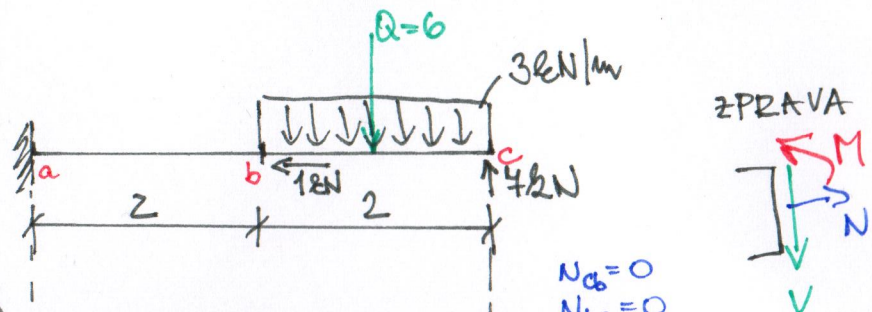


(A)

JMENO:



$$\begin{aligned} N_{ab} &= 0 \\ N_{bc} &= 0 \\ N_{ba} &= -1 \text{ kN} \\ N_{cb} &= -1 \text{ kN} \end{aligned}$$

$$\begin{aligned} V_{cb} &= -4 \text{ kN} \\ V_{bc} &= -4 + 6 = -1 \text{ kN} \\ V_{ba} &= -4 + 6 = -1 \text{ kN} \\ V_{ab} &= -4 + 6 = -1 \text{ kN} \end{aligned}$$

$$\begin{aligned} M_c &= 0 \\ M_b &= 4 \cdot 2 - 6 \cdot 1 = 8 \text{ kNm} \\ M_a &= 4 \cdot 4 - 6 \cdot 3 = 10 \text{ kNm} \\ M_{Q} &= 4 \cdot 1 = 4 \text{ kNm} \end{aligned}$$

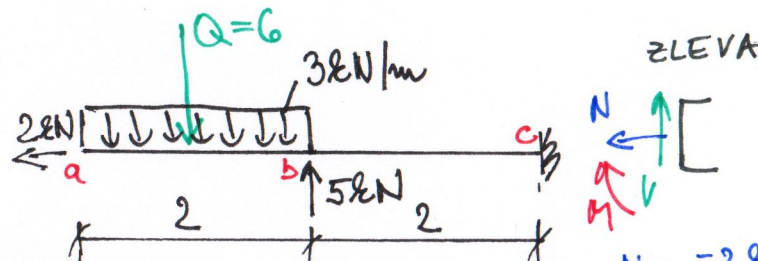
$M_{Q} = 4 \text{ kNm}$
pomocný tečnový polygon

$\frac{dM}{dx} = V \Rightarrow$ sklon tečen paraboly
- v bodě (b) je $V_b = -1$
- v bodě (c) je $V_c = -4$

$$\frac{d^2M}{dx^2} = -q = -3 \text{ (v úseku paraboly)} \Rightarrow \text{konkávní} \Rightarrow \text{M}$$

(B)

JMENO:



$$\begin{aligned} N_{ab} &= 2 \text{ kN} \\ N_{cb} &= 2 \text{ kN} \end{aligned}$$

$$\begin{aligned} V_{ab} &= 0 \\ V_{ba} &= -6 \text{ kN} \\ V_{bc} &= 6 + 5 = -1 \text{ kN} \\ V_{cb} &= -6 + 5 = -1 \text{ kN} \end{aligned}$$

$$\begin{aligned} M_b &= 0 \\ M_b &= 6 \cdot 1 = -6 \text{ kNm} \\ M_c &= 6 \cdot 3 + 5 \cdot 2 = -8 \text{ kNm} \end{aligned}$$

$M_Q = 0 \text{ kNm}$
pomocný tečnový polygon

$\frac{dM}{dx} = V \Rightarrow$ sklon tečny funkce momentu
- v bodě (a) je $V_a = 0$ (vodorovná tečna)
- v bodě (b) je $V_b = -6$

$$\frac{d^2M}{dx^2} = -q = -3 \text{ (v úseku paraboly)} \Rightarrow \text{konkávní} \Rightarrow \text{M}$$