

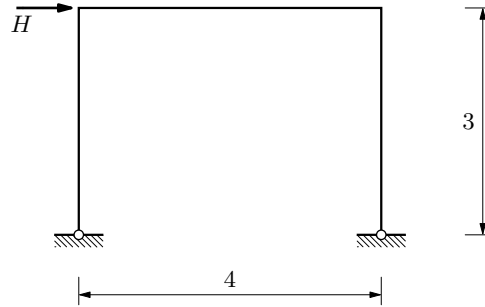
GS 2. — 7. ožujka 2024.

Zadatak 4.

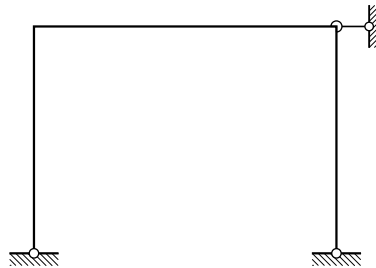
Postupkom Wernera i Csonke nacrtajte momentni dijagram!

$$EI = 162000 \text{ kNm}^2$$

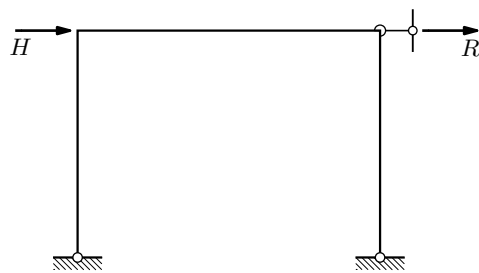
$$H = 125 \text{ kN}$$



sistem sa spriječenim neovisnim translacijskim pomakom:



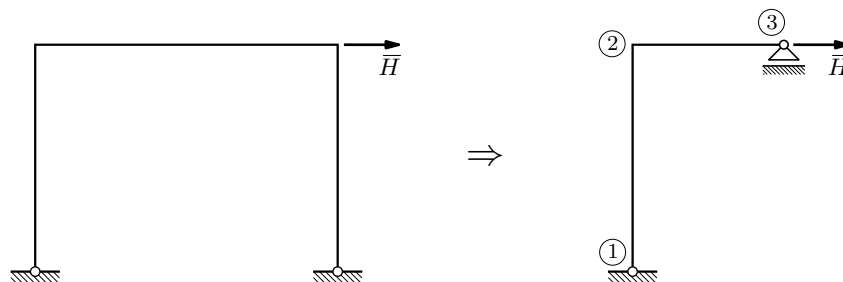
sila H djeluje u čvoru \Rightarrow nije potreban (prvi) Crossov postupak
reakcija u zamišljenom spoju:



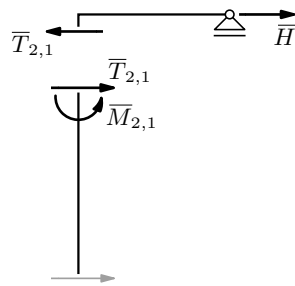
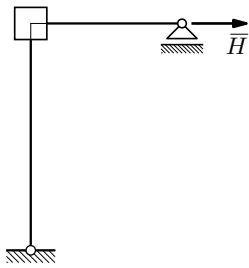
$$R = -H = 125 \text{ kN}$$

postupak Wernera i Csonke:

poluokvir:



moment upetosti:



$$\bar{H} = -R = H = 125 \text{ kN}$$

$$-\bar{T}_{2,1} + H = 0$$

$$\bar{T}_{2,1} = H = 125 \text{ kN}$$

$$-3 \cdot \bar{T}_{2,1} + \bar{M}_{2,1} = 0$$

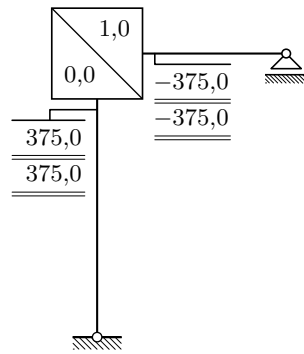
$$\bar{M}_{2,1} = 3 \cdot \bar{T}_{2,1} = 375 \text{ kNm}$$

razdjelni koeficijenti:

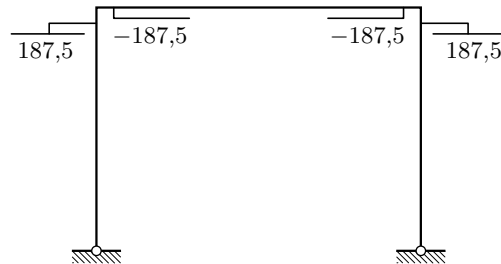
$$\mu_{2,1}^W = 0 \text{ pa je } \mu_{2,3}^W = 1$$

[pitanje za usmeni dio ispita: zašto je $\mu_{2,1}^W = 0$?]

„raspodjela” momenata:



povratak na izvorni okvir:



čvorovi su u ravnoteži \Rightarrow nije potrebno uravnoteženje Crossovim postupkom

dijagram momenata savijanja:

