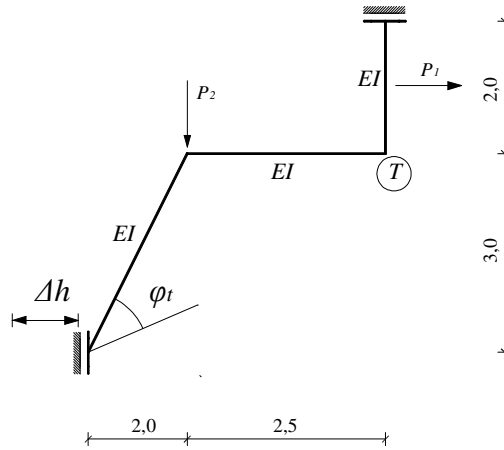


GS 1. – Popravni kolokvij (2.) I. (2007./2008.)

1. Odredite horizontalan pomak točke T.



$$E = 3 \cdot 10^7 \text{ kN/m}^2$$

$$b/h = 30/65 \text{ cm}$$

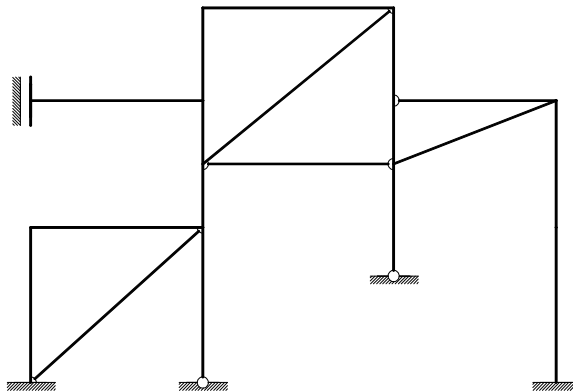
$$P_2 = 185 \text{ kN}$$

$$P_1 = 255 \text{ kN}$$

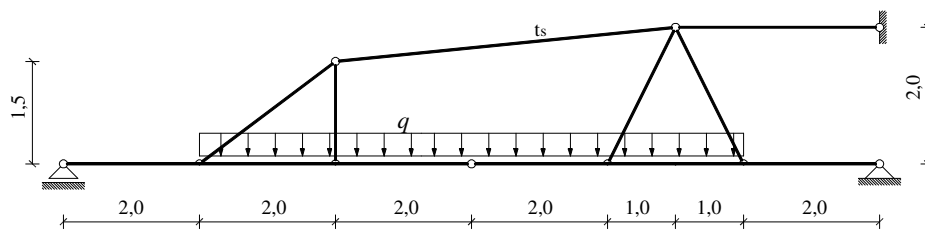
$$\Delta h = 2.5 \text{ cm}$$

$$\Delta \varphi = 0,008$$

1. Odredite stupanj statičke neodređenosti.



3. Nacrtajte M i T dijagrame. Kolika je sila u štapu na koji djeluje temperatura t_s ?



$$\alpha_t = 10^{-5} \text{ K}^{-1}$$

$$I_g = 60000 \text{ cm}^4$$

$$q = 45 \text{ kN/m}$$

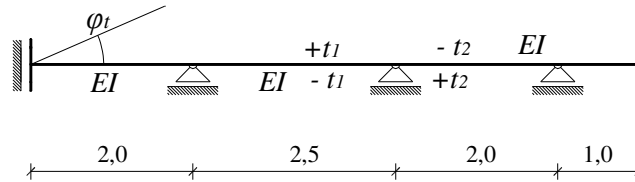
$$t_s = 23^\circ \text{ C}$$

$$E = 3 \cdot 10^7 \text{ kN/m}^2$$

$$A_s = 100 \text{ cm}^2$$

GS 1. – Popravni kolokvij (2.) II. (2007./2008.)

1. Nacrtajte M dijagram.



$$E = 3 \cdot 10^7 \text{ kN/m}^2$$

$$b/h = 35/60 \text{ cm}$$

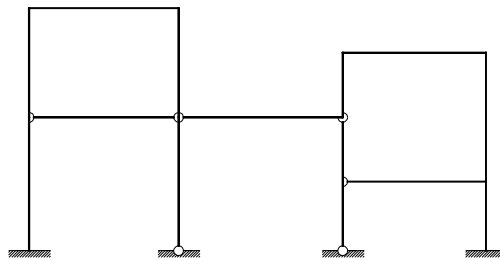
$$\pm t_1 = 12^\circ \text{ C}$$

$$\pm t_2 = 22^\circ \text{ C}$$

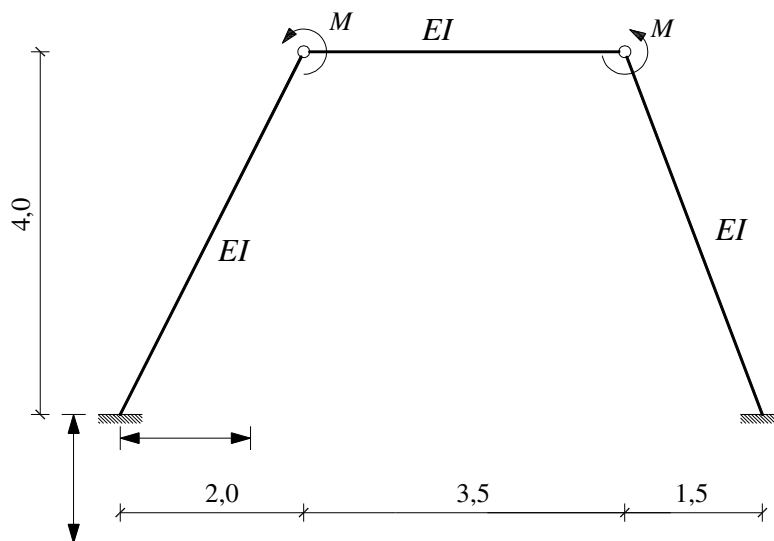
$$\Delta \varphi = 0,002$$

$$\alpha_t = 10^{-5} \text{ K}^{-1}$$

2. Odredite stupanj statičke neodređenosti.



3. Nacrtajte M , T i N dijagrame.



$$M = 260 \text{ kNm}$$

$$EI = 150\,000 \text{ kNm}^2$$

$$\Delta v = 2 \text{ cm}$$

$$\Delta h = 1 \text{ cm}$$