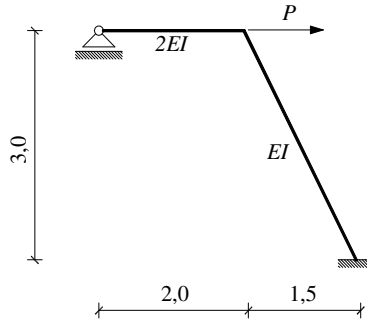


GS 2. - 1. kolokvij (A) – (2010./2011.)

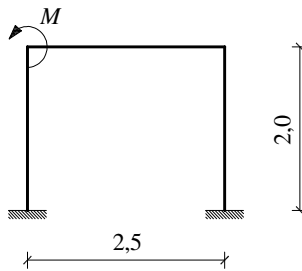
Z1. (30) Relaksacijskim postupcima odredite momentni dijagram za zadani sustav.



$$P = 200 \text{ kN}$$

$$EI = 120000 \text{ kNm}^2$$

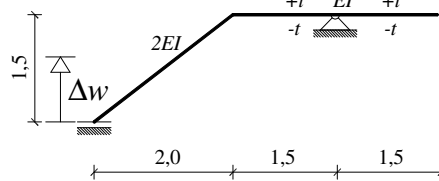
Z2. (40) Inženjerskom metodom pomaka, koristeći simetriju i antimetriju, odredite dijagram momenata savijanja.



$$M = 300 \text{ kNm}$$

$$EI = 110000 \text{ kNm}^2$$

Z3. (30) Inženjerskom metodom pomak odredite dijagram momenata savijanja, poprečnih i uzdužnih sila.



$$\pm t = 20^\circ \text{ C}$$

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

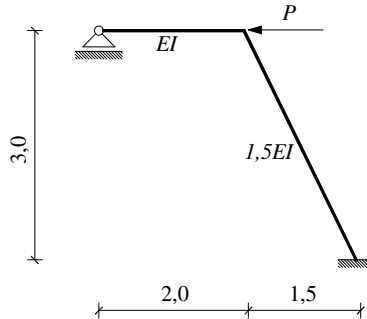
$$E = 3 \cdot 10^7 \text{ kN/m}^2$$

$$\frac{b}{h} = \frac{30}{40} [\text{cm}]$$

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

GS 2. - 1. kolokvij (B) – (2010./2011.)

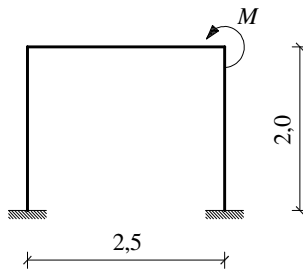
Z1. (30) Relaksacijskim postupcima odredite momentni dijagram za zadani sustav.



$$P = 240 \text{ kN}$$

$$EI = 124000 \text{ kNm}^2$$

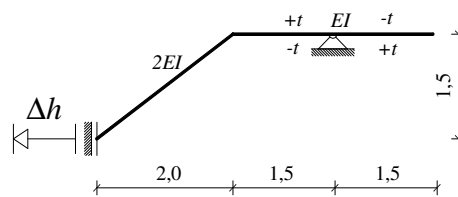
Z2. (40) Inženjerskom metodom pomaka, koristeći simetriju i antimetriju, odredite dijagram momenata savijanja.



$$M = 240 \text{ kNm}$$

$$EI = 100000 \text{ kNm}^2$$

Z3. (30) Inženjerskom metodom pomak odredite dijagram momenata savijanja, poprečnih i uzdužnih sila.



$$\pm t = 15^\circ \text{ C}$$

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

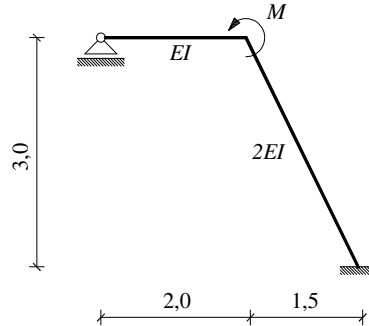
$$E = 3 \cdot 10^7 \text{ kN/m}^2$$

$$\frac{b}{h} = \frac{30}{45} [\text{cm}]$$

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

GS 2. - 1. kolokvij (C) – (2010./2011.)

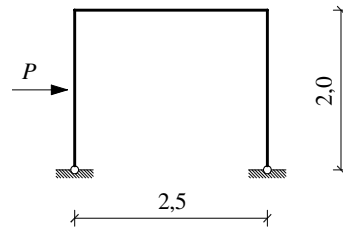
Z1. (35) Relaksacijskim postupcima odredite momentni dijagram za zadani sustav.



$$M = 100 \text{ kNm}$$

$$EI = 120000 \text{ kNm}^2$$

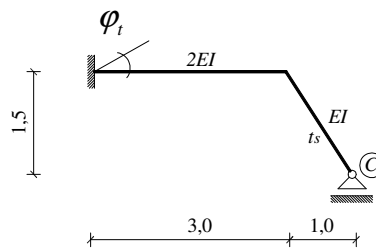
Z2. (40) Inženjerskom metodom pomaka, koristeći simetriju i antimetriju, odredite dijagram momenata savijanja.



$$P = 200 \text{ kN}$$

$$EI = 100000 \text{ kNm}^2$$

Z3. (25) Inženjerskom metodom pomaka odredite pomak točke C.



$$t_s = 20^\circ \text{C}$$

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

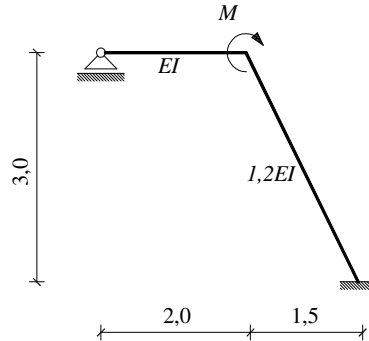
$$E = 3 \cdot 10^7 \text{ kN/m}^2$$

$$\frac{b}{h} = \frac{30}{45} [\text{cm}]$$

$$\varphi_t = 0,0003 \text{ rad}$$

GS 2. - 1. kolokvij (D) – (2010./2011.)

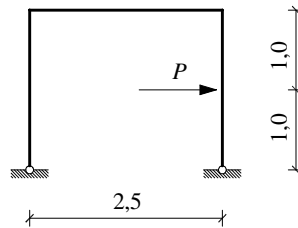
Z1. (35) Relaksacijskim postupcima odredite momentni dijagram za zadani sustav.



$$M = 170 \text{ kNm}$$

$$EI = 100700 \text{ kNm}^2$$

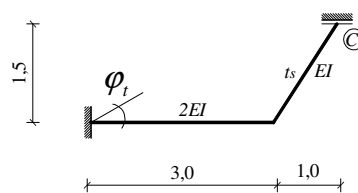
Z2. (40) Inženjerskom metodom pomaka, koristeći simetriju i antimetriju, odredite dijagram momenata savijanja.



$$P = 210 \text{ kN}$$

$$EI = 100200 \text{ kNm}^2$$

Z3. (25) Inženjerskom metodom pomaka odredite pomak točke C.



$$t_s = 15^\circ \text{ C}$$

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

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

$$\frac{b}{h} = \frac{30}{45} [\text{cm}]$$

$$\varphi_t = 0,0002 \text{ rad}$$