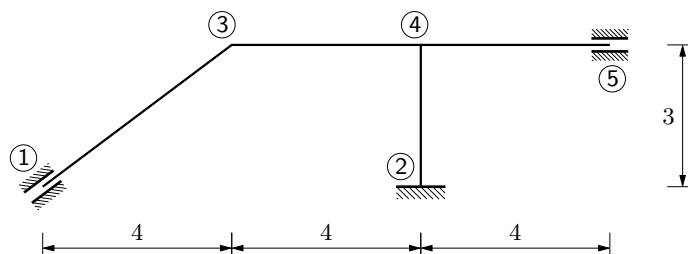


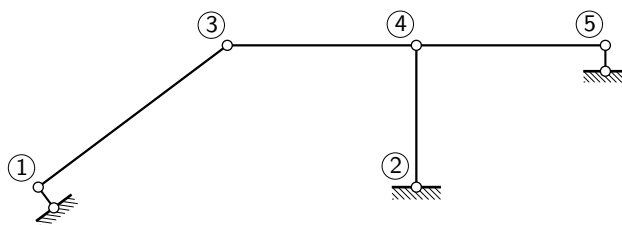
## GS 2. — kolokvij (2023./2024.)

### Zadatak B1.

Nabrojite nepoznanice za proračun prikazanoga sistema inženjerskom metodom pomakā! Za neovisne translacijske pomake skicirajte plan(ove) pomakā ili dijagram(e) projekcija pomakā!



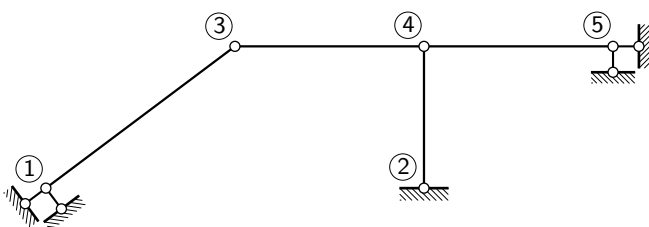
zglobna shema:



slobodni čvorovi: 1, 3, 4, 5

$$s_{\min} = 4 \cdot 2 - 6 = 2$$

dodavanje spojeva čvorova s podlogom (kinematička analiza zglobne sheme):



[ čvor 2 – ležajni (nepomičan) ]

čvor 5 nepomičan

→ čvor 4 nepomičan

čvorovi 1 i 4 nepomični

→ čvor 3 nepomičan

$$\Rightarrow s = s_{\min} = 2$$

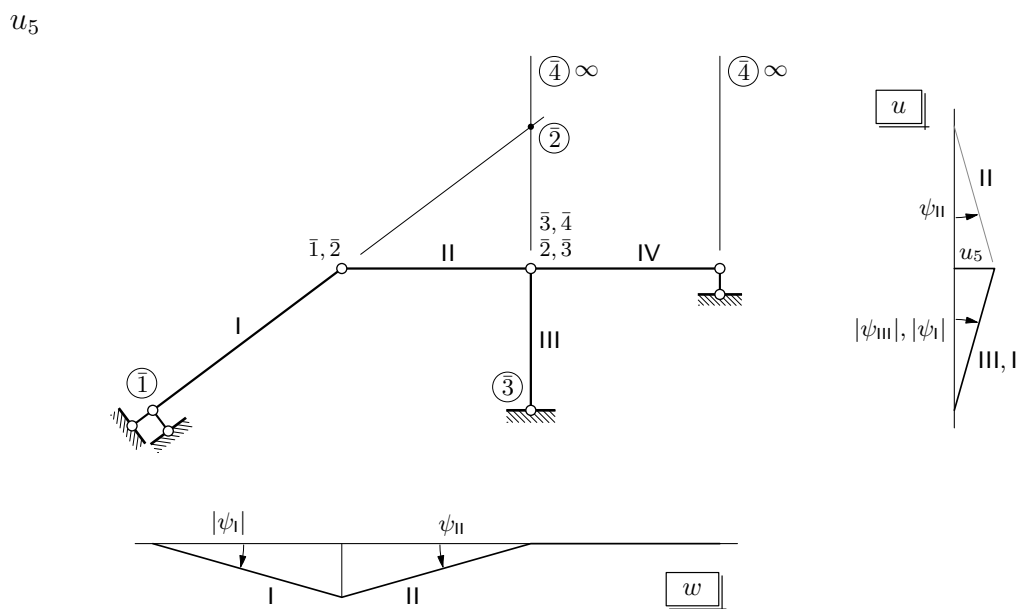
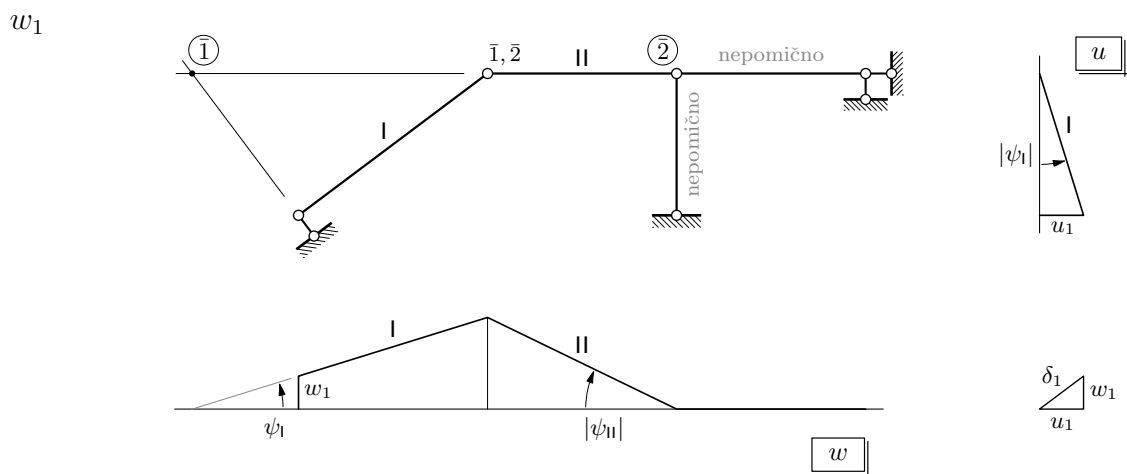
nepoznanice:

$\varphi_3$ ,  $\varphi_4$ ,  $u_5$  i  $\delta_1$  (po kosom pravcu) ili  $u_1$  (horizontalna komponenta)

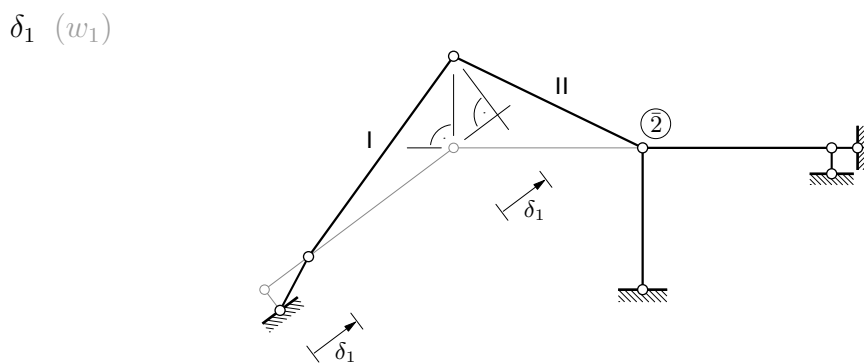
ili  $w_1$  (vertikalna komponenta)

(1 i 5 su „vodeći” čvorovi neovisnih pomaka; pomiču se, naravno, i drugi čvorovi)

dijagrami projekcija pomakā:



planovi pomakā:



$u_5$

