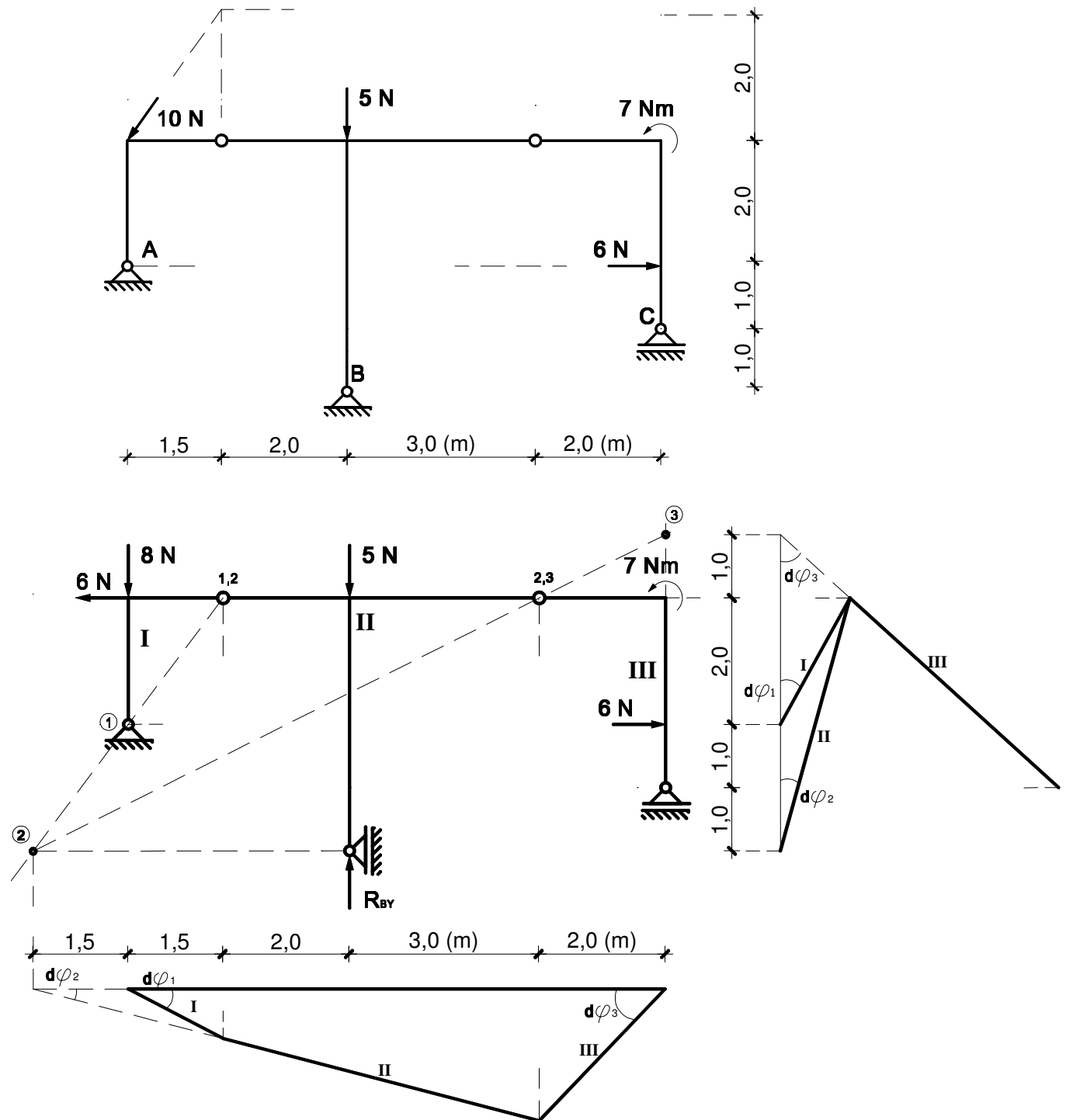


KINEMATIKA  
Mehanizmi u ravni

Prmjer 3.) VIRTUALNI RAD

Za sustav s opterećenjem prikazanim na slici treba pomoću plana pomaka i stavka virtualnog rada odrediti vertikalnu komponentu reakcije u zglobu B.  $R_{B,y}=?$



$$\delta\varphi_1 \cdot 1,5 = 3 \cdot \delta\varphi_2$$

$$\delta\varphi_1 = 2 \cdot \delta\varphi_2$$

$$\delta\varphi_2 \cdot 8 = 2 \cdot \delta\varphi_2$$

$$\delta\varphi_3 \cdot 1,5 = 4 \cdot \delta\varphi_2$$

$$\Sigma \delta A = 0$$

$$-R_{BY} \cdot 5 \cdot \delta\varphi_2 + 8 \cdot 0 - 6 \cdot \delta\varphi_3 \cdot 1 + 5 \cdot \delta\varphi_2 \cdot 5 + 3 \cdot \delta\varphi_3 \cdot 6 + 7 \cdot \delta\varphi_3$$

$$R_{BY} = \frac{1}{5} (-6 \cdot 4 + 25 + 18 \cdot 4 + 7 \cdot 4) = \frac{101}{5} = 20,2 N$$