

① $V_3 = ?$

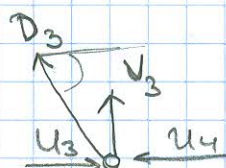
PRVI NAČIN:

$$T_{(2)} + V_3 = 0$$

$$T_{(2),0} - H \cdot \operatorname{tg} \alpha_0 + V_3 = 0$$

$$V_3 = -T_{(2),0} + H \cdot \operatorname{tg} \alpha_0$$

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$$V_3 + D_3 \cdot \sin 45 = 0$$

$$V_3 = -D_3 \cdot \frac{1}{\sqrt{2}}$$

$$\operatorname{tg} 45 = 1$$

$$\sin 45 = \frac{1}{\sqrt{2}}$$

$$D_3 = - \sum M_2 \Rightarrow M_{2,0} + D_3 \cdot h_2 \cdot \cos 45 + O_3 \cdot h_2 - H y_2 = 0$$

$$D_3 = \frac{1}{\cos 45} \left(-\frac{M_{2,0}}{h_2} + O_3 \frac{h_2}{h_2} + H \frac{y_2}{h_2} \right) \quad y_2 = 5 + \frac{1}{8} \cdot 5 = 5,625$$

$$= \frac{1}{\cos 45} \left(-\frac{M_{2,0}}{h_2} - O_3 + H \frac{y_2}{h_2} \right) \quad \cos 45 = \frac{1}{\sqrt{2}}$$

$$O_3 = - \sum M_3 \Rightarrow M_{3,0} + O_3 \cdot h_3 - H \cdot y_3 = 0$$

$$h_3 = 5$$

$$O_3 = -\frac{M_{3,0}}{h_3} + H \frac{y_3}{h_3}$$

$$y_3 = 5 + 10 \cdot \frac{1}{8} = 6,25$$

$$D_3 = \frac{1}{\cos 45} \left(-\frac{M_{2,0}}{h_2} + \frac{M_{3,0}}{h_3} - H \frac{y_3}{h_3} + H \frac{y_2}{h_2} \right)$$

$$= \sqrt{2} \left(-\frac{M_{2,0}}{h_2} + \frac{M_{3,0}}{h_3} + H \left(\frac{y_2}{h_2} - \frac{y_3}{h_3} \right) \right)$$

$$V_3 = \frac{M_{2,0}}{h_2} - \frac{M_{3,0}}{h_3} + H \left(\frac{y_3}{h_3} - \frac{y_2}{h_2} \right)$$

$$V_3 = \frac{1}{5} (M_{2,0} - M_{3,0}) + H \left(\frac{25}{4} - \frac{45}{8} \right) \cdot \frac{1}{5}$$

$$\boxed{V_3 = \frac{1}{5} (M_{2,0} - M_{3,0}) + \frac{1}{8} H}$$

$$V_3 = \frac{1}{5} (625 - 1000) + \frac{1}{8} \cdot 80 = -65$$