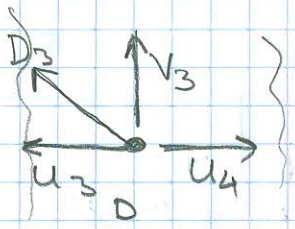
$V_a = 150\,kN \quad V_b = 50\,kN \quad H = 80\,kN$

1) $V_3 = \dots$ $\quad \Sigma V = 0$



$$V_3 + D_3 \cdot \frac{\sqrt{2}}{2} = 0 \rightarrow \boxed{V_3 = -\frac{\sqrt{2}}{2} D_3}$$

$D_3 = \dots \Leftarrow \Sigma M_2 = 0$

$\Sigma M_2 = 0$ $\quad \curvearrowleft M_{2,0} - H \cdot y_2 + O_3 \cdot h_2 + D_3 \cdot h_2 \cdot \cos\gamma_3 = 0$

$$\boxed{D_3 = \frac{1}{\cos\gamma_3}\left(-\frac{M_{2,0}}{h_2} + H\frac{y_2}{h_2} - O_3\right)}$$

$O_3 \Leftarrow \Sigma M_3 = 0$

$\Sigma M_3 = 0$ $\quad \curvearrowleft M_{3,0} - H \cdot y_3 + O_3 \cdot h_3 = 0$

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

NEPOZNATE:

$\gamma_3 = 45° \quad \cos 45 = \frac{\sqrt{2}}{2}$; $\quad h_2 = h_3 = 5$; $\quad y_2 = 5 + 5\,tg\alpha_0 = 5 + \frac{5}{8} = \frac{45}{8}$

$y_3 = 5 + 10 \cdot tg\alpha_0 = \frac{50}{8} = \frac{25}{4}$

$$V_3 = -\frac{\sqrt{2}}{2} \cdot \frac{2}{\sqrt{2}}\left(-\frac{M_{2,0}}{5} + H \cdot \frac{45}{8} \cdot \frac{1}{5} + \frac{M_{3,0}}{5} - H \cdot \frac{50}{8} \cdot \frac{1}{5}\right)$$

$$V_3 = -\frac{1}{5}\left(M_{3,0} - M_{2,0}\right) + \left(\frac{10}{8}H - \frac{9}{8}H\right)$$

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