

$$V_{210}^{(A)} = -V_a^{(A)} - \frac{M(2)_{10}}{4} = -(+1) - \frac{0}{4} = -1 \quad \frac{5}{4} H^{(A)} = \frac{5}{4} \cdot 8 = 10$$

$$V_{210}^{(B)} = -V_a^{(B)} - \frac{M(2)_{10}}{4} = -(-1) + 0 = 1 \quad \frac{5}{4} H^{(B)} = \frac{5}{4} (-8) = -10$$

$$O_4 = \dots \quad \sum M(3) = 0 \quad M(3)_{10} - U_4 \cos 34^\circ \cdot h_3 - H \cdot y(3) = 0$$

$$U_4 = \frac{1}{\cos 34^\circ} \left( \frac{M(3)_{10}}{h_3} - H \cdot \frac{y(3)}{h_3} \right)$$

$$\tan 34^\circ = \frac{15}{12} = \frac{3}{24} = \frac{1}{8} \quad \cos 34^\circ = \frac{8}{\sqrt{65}}$$

$$h_3 = 4,5$$

$$y(3) = 9 + 4 \cdot \tan 34^\circ = 9 + \frac{4}{8} = 9,5$$

$$U_4 = \frac{\sqrt{65}}{8} \cdot \frac{M(3)_{10}}{4,5} - \frac{\sqrt{65}}{8} \cdot \frac{9,5}{4,5} H =$$

$$= \frac{\sqrt{65}}{36} M(3)_{10} - \frac{9,5\sqrt{65}}{36} H$$

$$U_{4,10}^{(A)} = \frac{\sqrt{65}}{36} M(3)_{10} = 0,8958 \quad - \frac{9,5\sqrt{65}}{36} H^{(A)} = -17,5578$$

$$U_{4,10}^{(B)} = \frac{\sqrt{65}}{36} M(3)_{10} = 7,1665 \quad - \frac{9,5\sqrt{65}}{36} H^{(B)} = 17,5578$$

$$D(9) = \dots \quad \sum M(9) = 0$$

$$M_{9,10} + D_9 \cos 89^\circ \cdot h_9 + O_9 \cos 29^\circ h_9 - H \cdot y_9 = 0$$

$$D_9 = \frac{1}{\cos 89^\circ} \left( -\frac{M_{9,10}}{h_9} - O_9 \cos 29^\circ + H \frac{y_9}{h_9} \right)$$

$$\tan 29^\circ = \frac{3}{20}$$

$$O_9 = \dots \quad \sum M(8) = 0$$

$$M_{8,10} + O_9 \cos 29^\circ \cdot h_8 - H \cdot y_8 = 0$$

$$\tan 38^\circ = \frac{6}{12} = \frac{1}{2}$$

$$O_9 = \frac{1}{\cos 29^\circ} \left( -\frac{M_{8,10}}{h_8} + H \frac{y_8}{h_8} \right)$$

$$D_9 = \frac{1}{\cos 89^\circ} \left( -\frac{M_{9,10}}{h_9} + \frac{M_{8,10}}{h_8} - H \frac{y_8}{h_8} + H \frac{y_9}{h_9} \right)$$

$$h_8 = 3 - 4 \cdot \frac{3}{20} + 4 \cdot \frac{1}{2} = 4,4$$

$$\tan 89^\circ = \frac{(h_9 - 4 \cdot \frac{1}{2})}{4} = \frac{19}{20}$$

$$h_9 = 3 - 8 \cdot \frac{3}{20} + 8 \cdot \frac{1}{2} = 5,8$$

$$\cos 89^\circ = \frac{20}{\sqrt{761}}$$