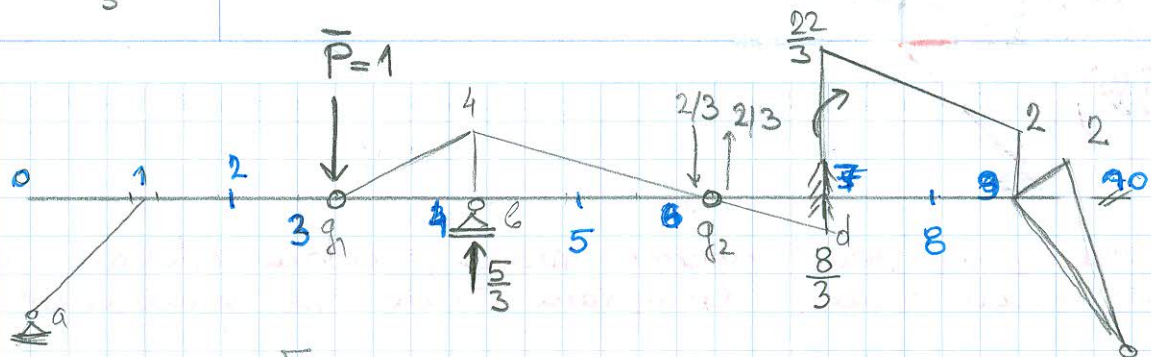
$\Sigma M^{l}_{g_2} = 0 \quad 1 \cdot 10 - V_b \cdot 6 = 0 \quad V_b = \frac{10}{6} = \frac{5}{3} \quad \Sigma V \Rightarrow V_c$

$\Sigma M^{d}_{g_2} = 0 \quad 15 \cdot \frac{2}{3} - M_d = 0 \quad M_d = 10$

(M̄)



$$\delta_{g_1} = \frac{1}{EI_c} \cdot \int M\bar{M} ds = \frac{1}{EI_c} \cdot \left[-\frac{4}{3} \cdot 4 \cdot 80 - \frac{6}{3} \cdot 4 \cdot 80 - \frac{6}{3} \cdot 4 \cdot 90 - \frac{4}{3} \cdot \frac{8}{3} \cdot 293{,}3^\circ \right.$$

$$\left. - \frac{8}{6} \left(896{,}6^\circ \left(2 \cdot \frac{22}{3} + 2 \cdot \right) + 310 \left(\frac{22}{3} + 2 \cdot 2 \right) \right) - \frac{5}{3} \cdot 2 \cdot 400 \right] = \frac{1}{EI_c} (-28\,773{,}33184)$$

b) PRAVIM FIKTIVNI NOSAČ

Zasto uzimam φ_7 - ? od (M̄) jer je to vertikalno pomeranje

$V_0 \neq 0$, $\varphi_0 \neq 0$, $M_0 \neq 0$, $T_0 \neq 0$

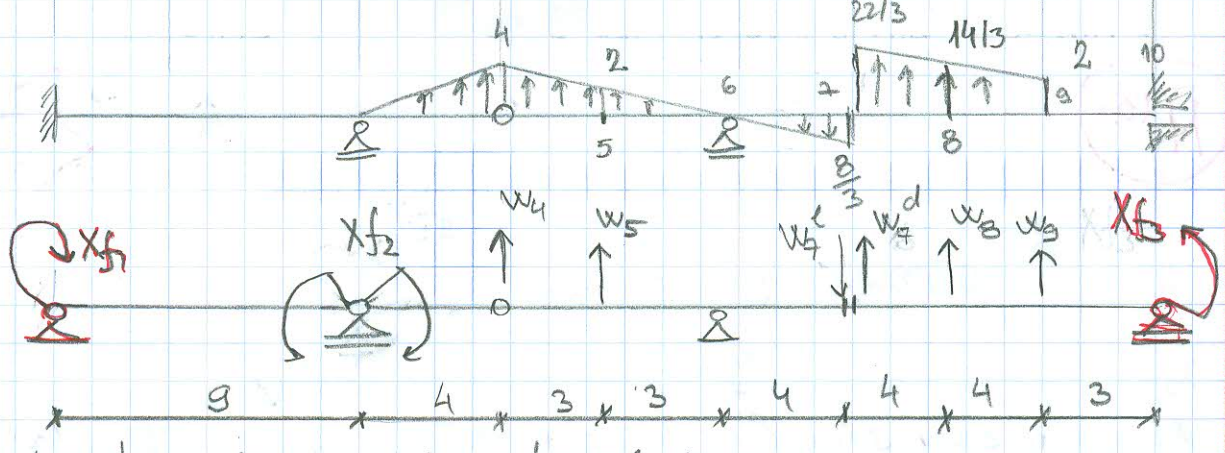
$V^{l}_3 = V^{d}_3 \neq 0$, $\varphi^{l}_3 \neq \varphi^{d}_3 \neq 0$, $M^{l}_3 = M^{d}_3 \neq 0$, $T^{l}_3 \neq T^{d}_3 \neq 0$

$l \neq d \neq 0$

$V_4 = 0$, $\varphi_4 \neq 0$, $M_4 = 0$, $T_4 \neq 0$

$V_{6l} = V_{6d} \neq 0$, $\varphi_{6l} \neq \varphi_{6d} \neq 0$, $M_{6l} = M_{6d} \neq 0$, $T_{6l} \neq T_{6d} \neq 0$

$z_5 = 4$
$z_k = 2$
$z_0 = 5$
$z_k = 2$
$k = 5$
$n = 13 - 2 \cdot 5 = 3$



$$W_4 = \frac{x_{m}}{6}\left(p^{d}_{m-1} + 2p^{l}_{m} \right) + \frac{\lambda_{m+1}}{6}\left(2p^{d}_{m} + p^{l}_{m+1} \right)$$

$$= \frac{4}{6}(0 + 2 \cdot 4) + \frac{3}{6}(2 \cdot 4 + 2) = 32/6 + 30/6 = 62/6 = 31/3 = 10{,}3^\circ$$

$$W_5 = \frac{3}{6}(4 + 2 \cdot 2) + \frac{3}{6}(2 \cdot 2 + 0) = 24/6 + 12/6 = 6$$

$$W^{l}_7 = \frac{4}{6}(0 + 2 \cdot 8/3) = 3{,}5^\circ$$

$$W^{d}_7 = \frac{4}{6}\left(2 \cdot \frac{22}{3} + \frac{14}{3} \right) = 12{,}8^\circ$$

$$W_8 = \frac{4}{6}\left(\frac{22}{3} + \frac{14}{3} \cdot 2 \right) + \frac{4}{6}\left(\frac{14}{3} \cdot 2 + 2 \right) = 18{,}6^\circ$$

$$W_9 = \frac{4}{6}\left(\frac{14}{3} + 2 \cdot 2 \right) = 5{,}7^\circ$$

Uzela sam od M dijagr. da pravim fiktivni nosač dan je traženo vertikalno pomeranje celog nosača, ali pošto je TRAŽENO od g_1 onda uzimam dij. M̄