

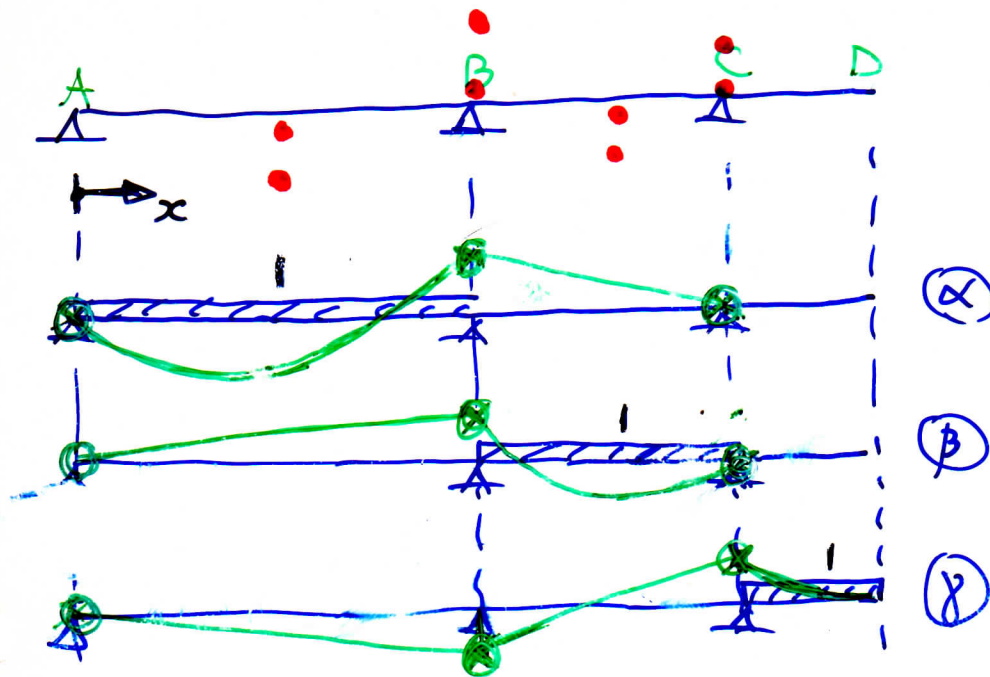
$$\gamma_g \cdot G_k + \gamma_q \cdot Q_{1k} + \gamma_q \cdot \sum_{i=2}^n \psi_i Q_{ik}$$

$$\textcircled{g} \text{ i.p.} = \dots$$

$$\Sigma \pi_k = \dots$$

$$g_k = \dots$$

$$q_k = \dots$$



Αποσπασμένα:

$$\min M_k = 1.35 g_k^{\alpha} M_B^{\alpha} + 1.35 g_k^{\beta} M_B^{\beta} + 1.00 g_k^{\gamma} M_B^{\gamma}$$

μόνιμα

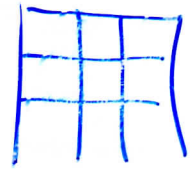
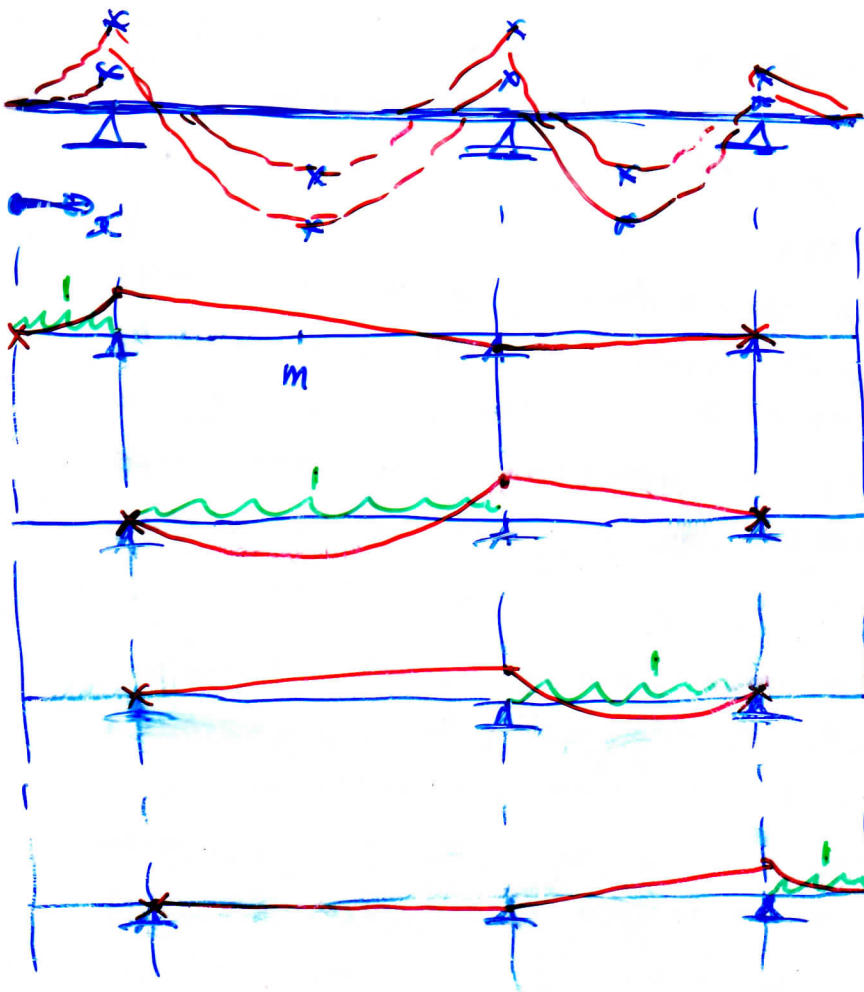
$$+ 1.50 g_k^{\alpha} M_B^{\alpha} + 1.50 g_k^{\beta} M_B^{\beta} + \textcircled{0} g_k^{\gamma} M_B^{\gamma}$$

$$x M_B = 1.00$$

$$1.00$$

$$1.35$$

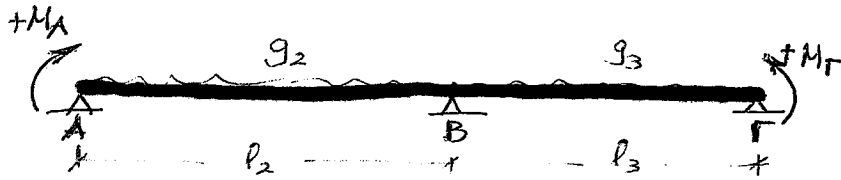
Αρ. Σημ.	x [m]	g = ... q = ...			M _{max}	M _{min}
		M ^α	M ^β	M ^γ		
1	0.0	...	...	...		
	0.20	...	...	...		
	0.40	...	...	...		
	...	...	...	...		
2	3.00	...	...	...		



$$\max M = 1.0 M_{g1} + 1.35 M_{g2} + 1.0 M_{g3} + 1.35 M_{g4} + 0.0 M_{q1} + 1.50 M_{q2} + 0 M_{q3} + 1.50 M_{q4}$$

$$\min M = 1.35 \quad 1.00 \quad 1.35 \quad 1.00 \\ 1.50 \quad 0 \quad 1.50 \quad 0$$

x	①	②	③	④	$\max M$	$\min M$
0	*	*	*	x		
0.2						
0.4						
0						
0.2						



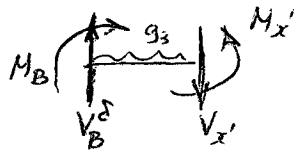
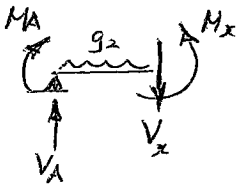
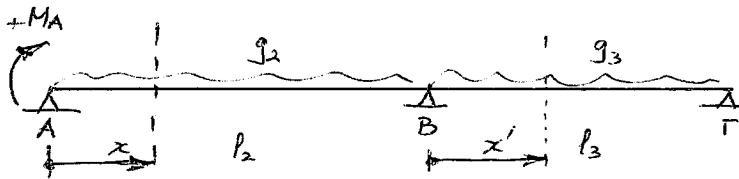
$$M_B = - \frac{(g_2 l_2^3 + g_3 l_3^3)}{8(l_2 + l_3)} - \frac{M_A \cdot l_2}{2(l_2 + l_3)} - \frac{M_\Gamma \cdot l_3}{2(l_2 + l_3)}$$

$$V_A = \frac{g_2 l_2}{2} + \left(\frac{-M_A + M_B}{l_2} \right)$$

$$V_B^x = -\frac{g_2 l_2}{2} + \left(\frac{M_A - M_B}{l_2} \right)$$

$$V_B^s = \frac{g_3 l_3}{2} + \left(\frac{-M_B + M_\Gamma}{l_3} \right)$$

$$V_\Gamma = -\frac{g_3 l_3}{2} + \left(\frac{M_B - M_\Gamma}{l_3} \right)$$



$$M_x = M_A + V_A \cdot x - \frac{g_2 x^2}{2}$$

$$M_{x'} = M_B + V_B^s \cdot x' - \frac{g_3 x'^2}{2}$$