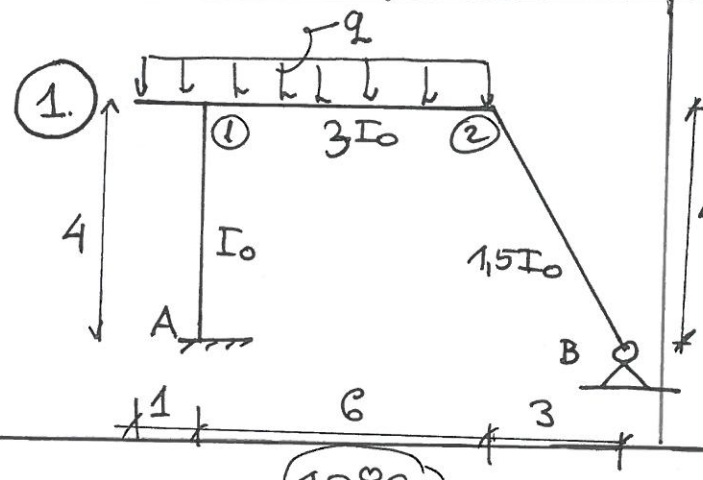
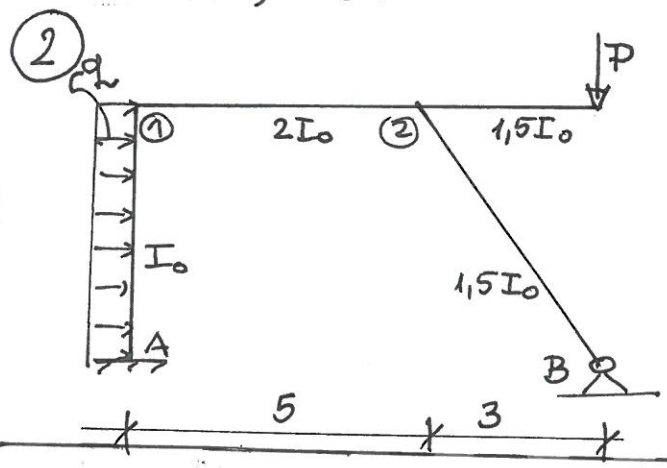
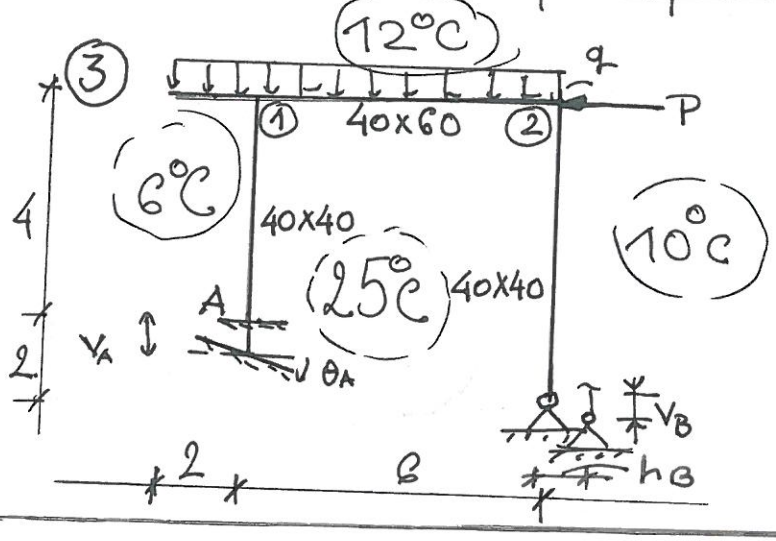
METODA FORȚELOR (EFORTURILOR)

Să se traseze diagramele de eforturi M, T și N, pt. următoarele structuri:







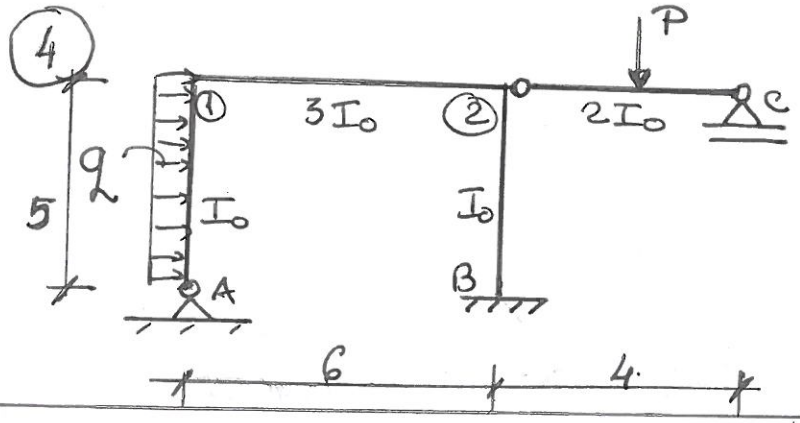
Pentru structura din figură să se traseze diagramele de eforturi pentru fiecare din cele trei cazuri de încărcare:

- Forțe exterioare M^f, T^f, N^f
- Variație de temperatură M^t, T^t, N^t; $\alpha^t = 10^{-5}\ grd^{-1}$
- Cedări de reazem M^r, T^r, N^r

$V_A = 1cm$, $\theta_A = 0{,}5^0$

$V_B = 1{,}5cm$, $h_B = 0{,}5cm$

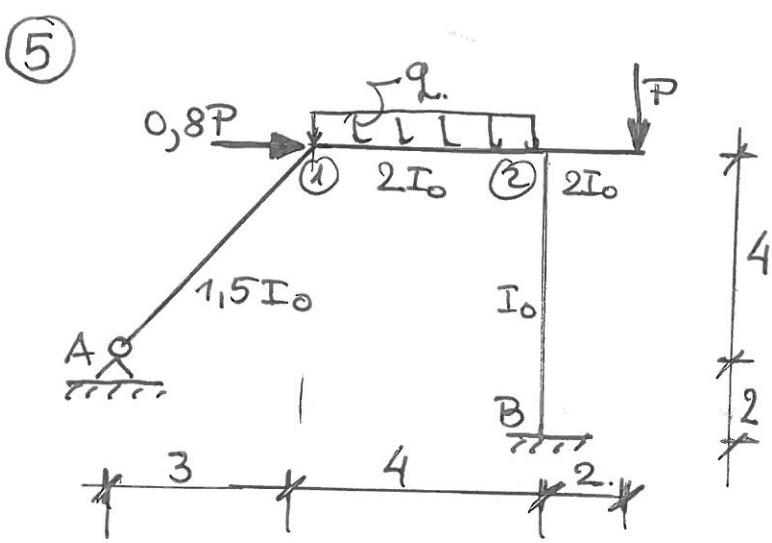
$E = 2 \cdot 10^7\ kN/m^2$

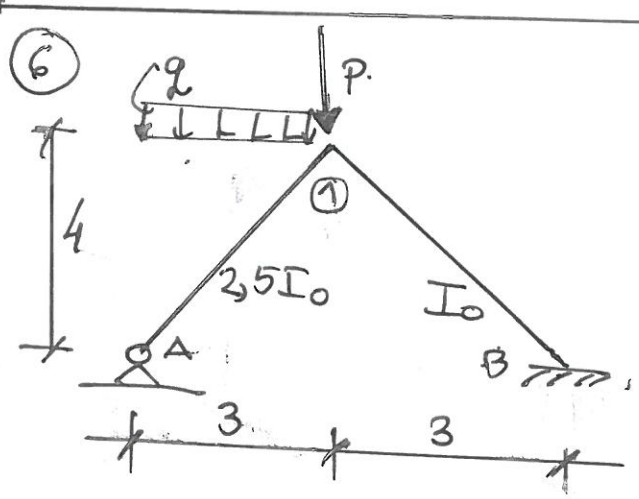


$P = 20 + 0{,}5n\ kN$

$q = 8 + 0{,}5n\ kN/m.$

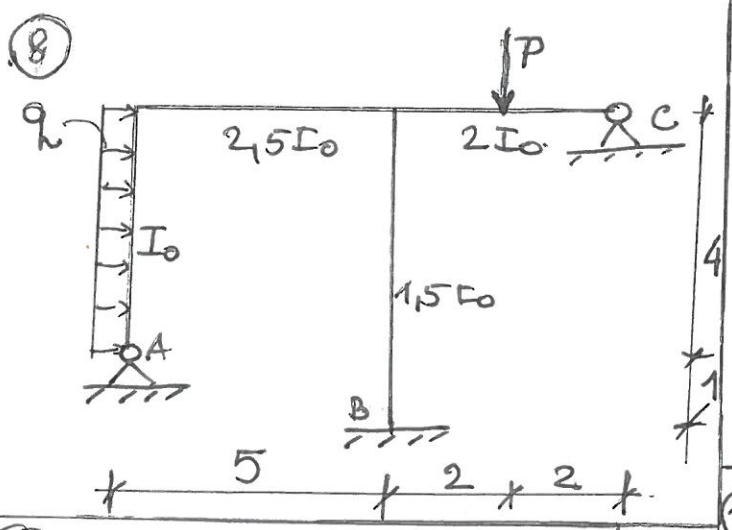
* n este nr. de ordine din grupă



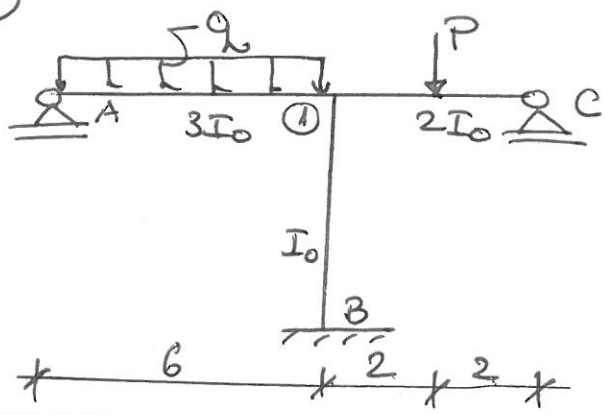


METODA DEPLASĂRILOR

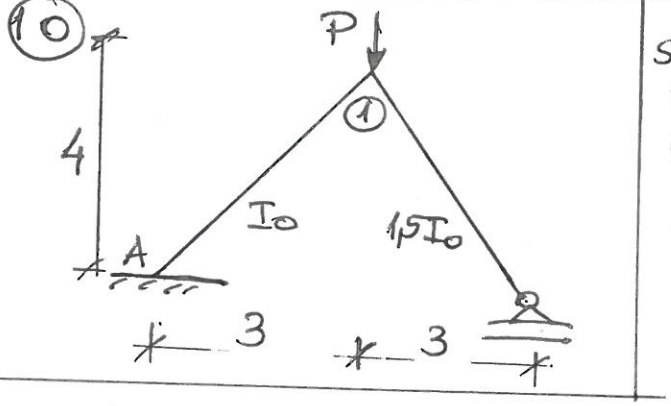
(8)



(9)



(10)

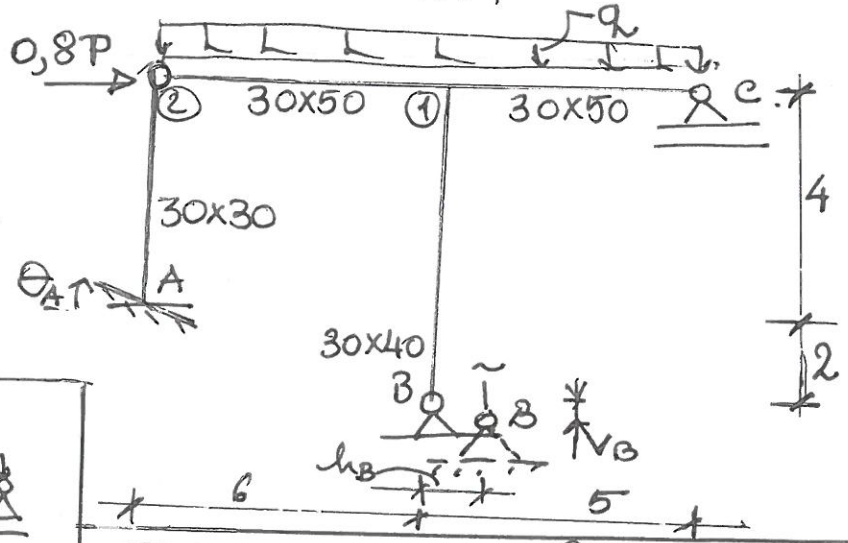


$\alpha^t = 10^{-5}\,grad^{-1}$ $\quad \theta = 1°$

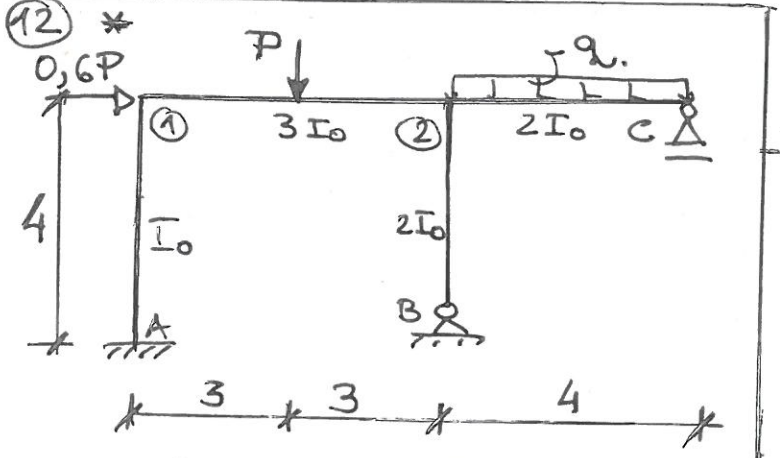
$E = 2 \cdot 10^7\ KN/m^2$ $\quad v_B = 1\,cm$

$h_B = 0{,}5\,cm$

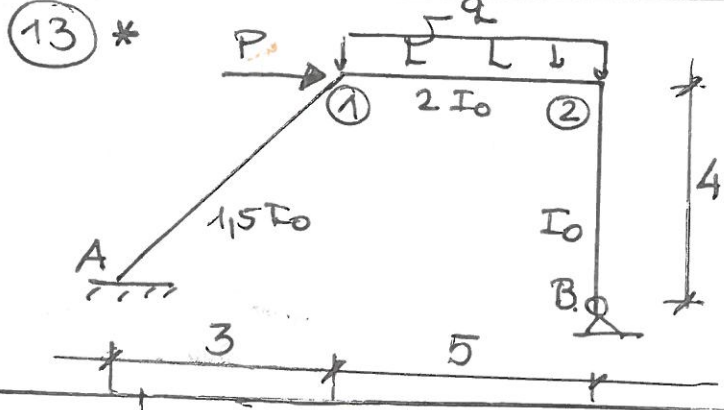
(11) Pentru structura din fig., să se haseze diagr. M, T, N aferente fiecărei încărcări, utilizând M.D. (clasic sau iterativ)



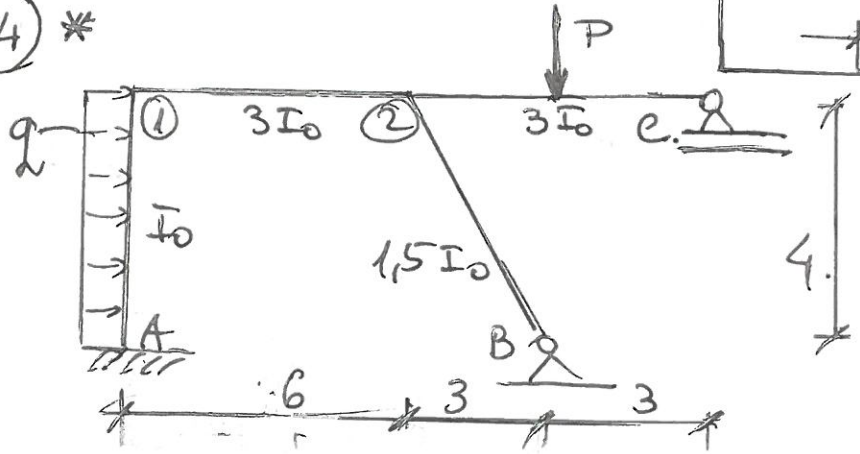
(12) *



(13) *



(14) *



Structurile marcate cu * se vor calcula cu M.D. iterativ în două etape.