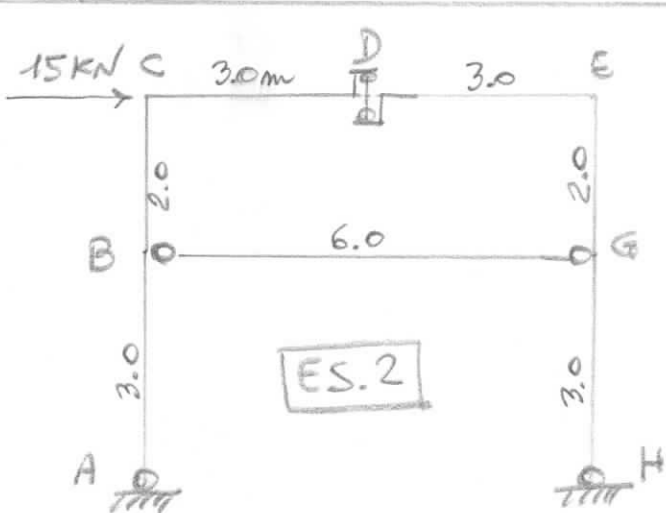


ES.1

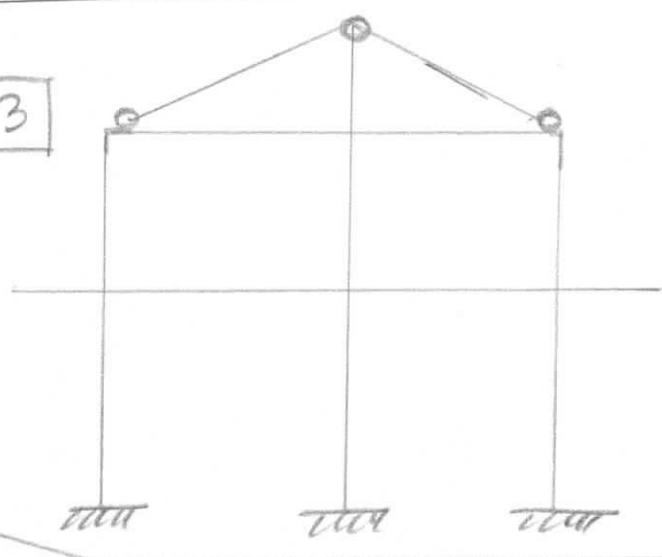
- R.V. ext (A, B, G) e int. (C, D)
- Diagrammi T, M quotati
- Posizione di  $M_{max}$  e valore  $M_{max}$  in AB
- N in CD



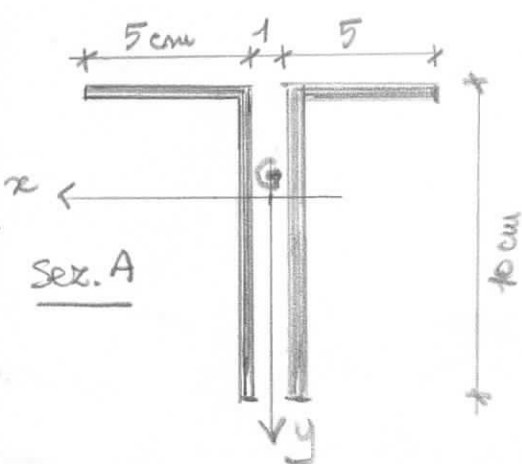
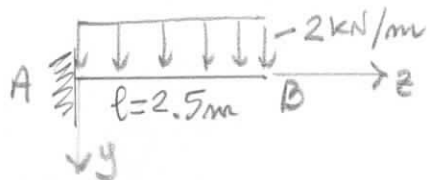
ES.2

- R.V. ext (A, H)
- R.V. int. (B, D, G)
- Diagrammi N, T, M quotati

ES.3



- Ricostruire le strutture
- Renderle isostatiche senza eliminare tratti



Ogni  $\Gamma$  è  $50 \times 100 \times 8$  con  $A = 11.5 \text{ cm}^2$   
 $I_z = 116 \text{ cm}^4$  e  $\bar{y}_G = 3.59 \text{ cm}$

ES.4

- Determinare  $M_x$  su manovella AB
- Diagramme  $\sigma_z$  in A
- Valori di  $\sigma_z^{max}$  e  $\sigma_z^{min}$