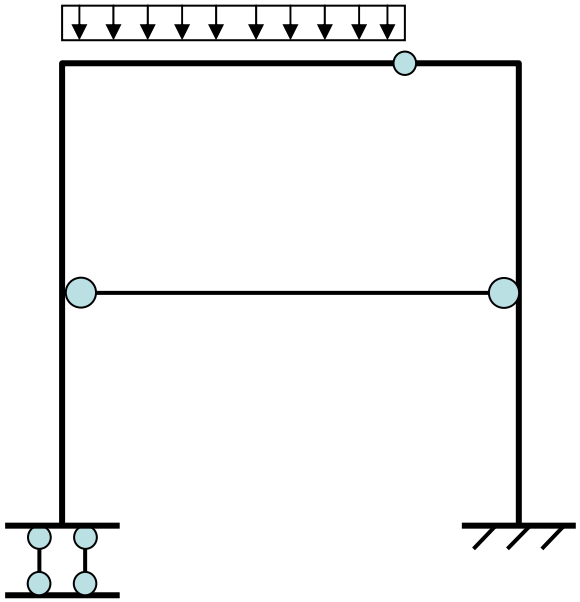
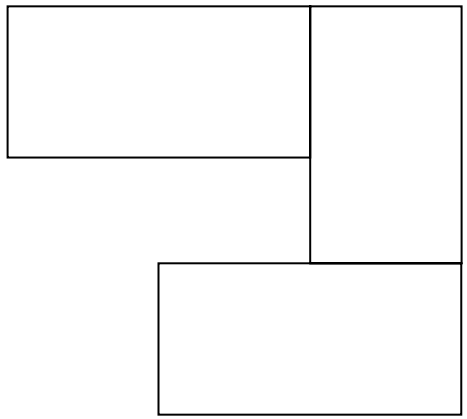
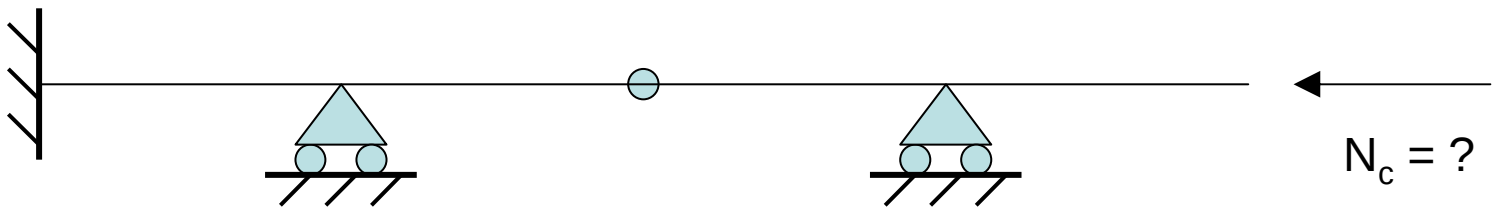
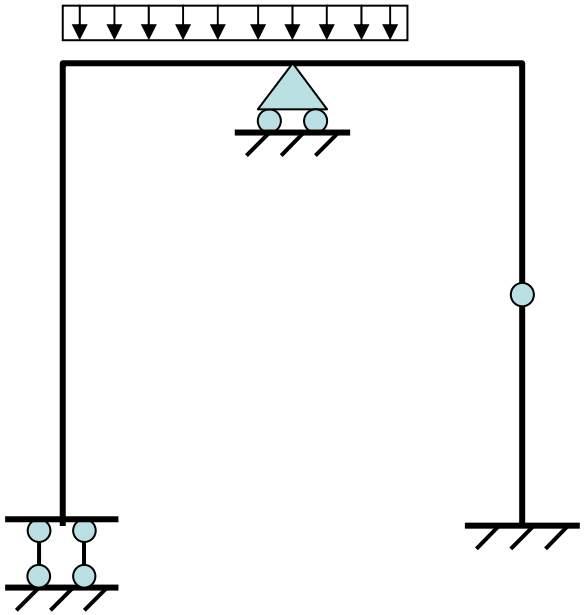
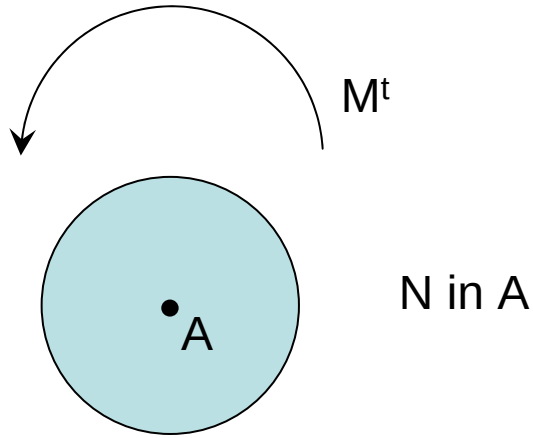


Rigidezza torsionale

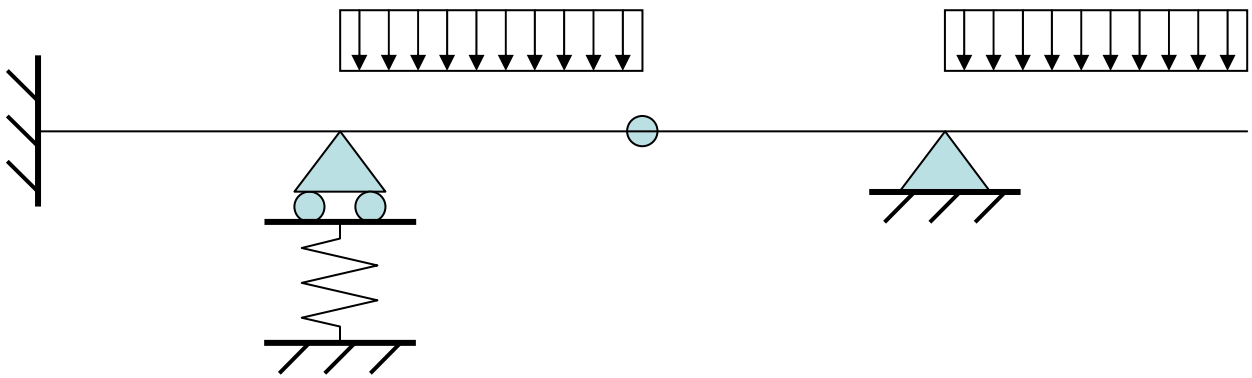


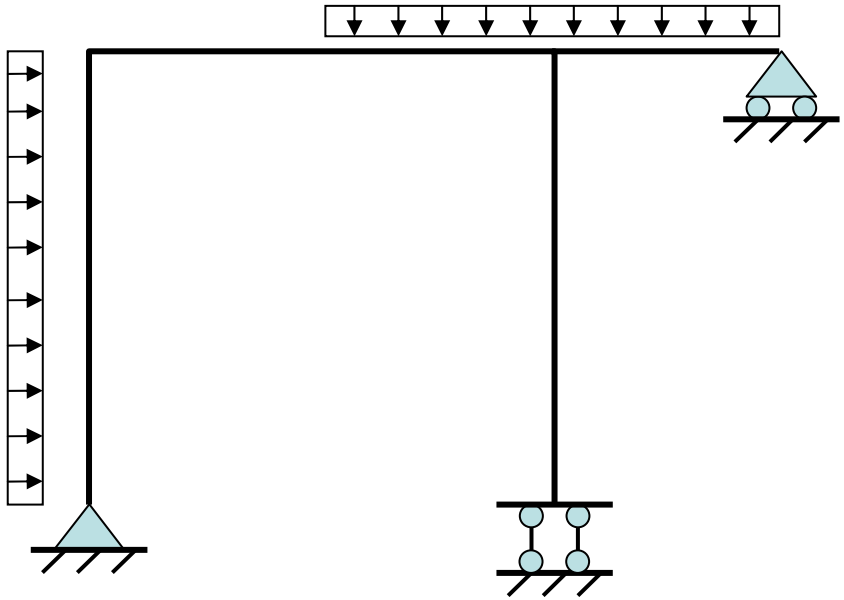


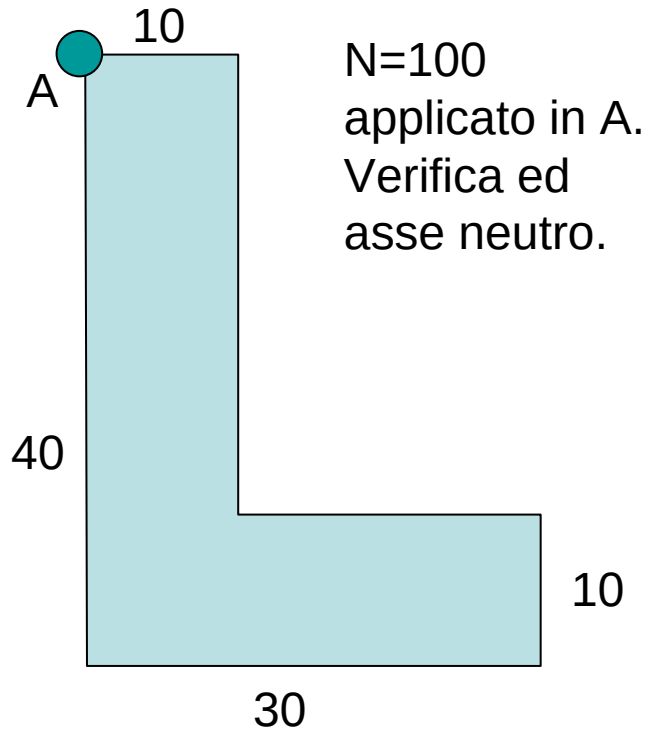




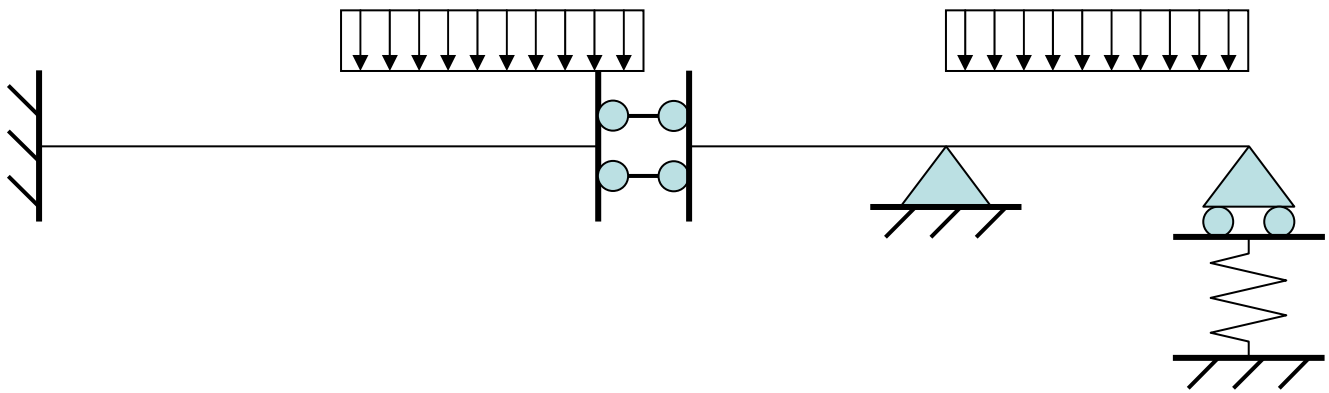
Verifica per torsione e sforzo normale

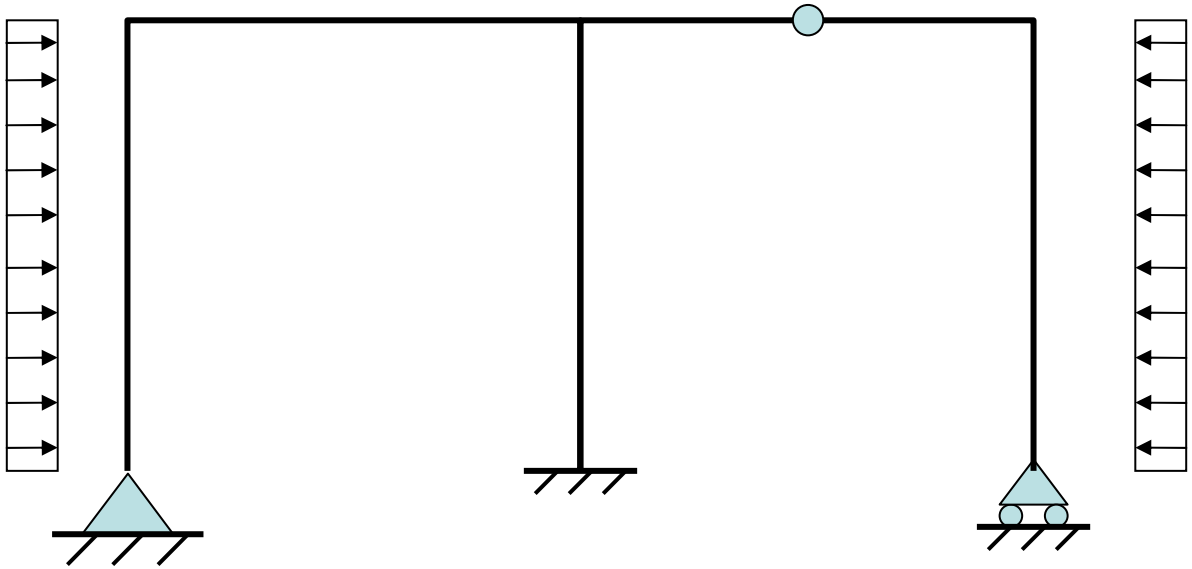


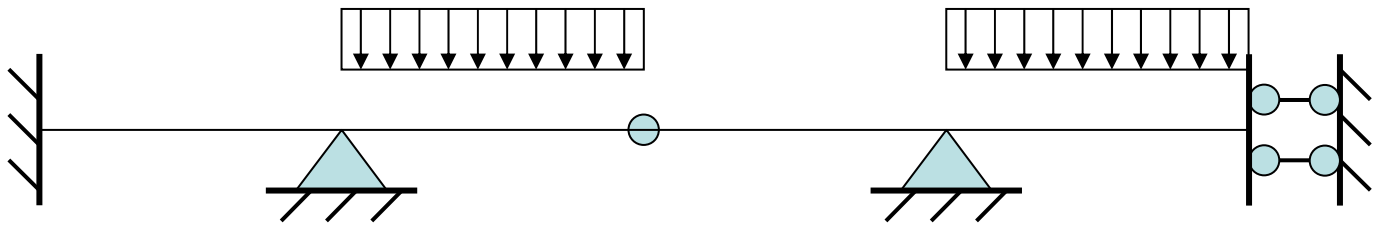


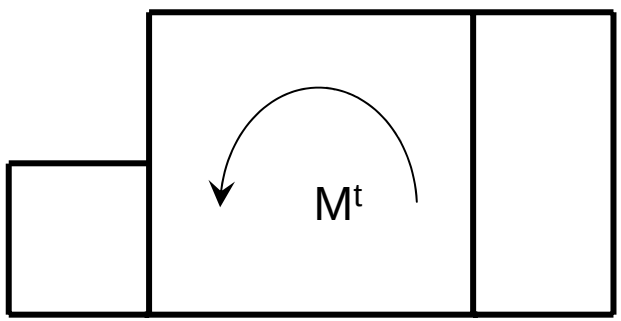


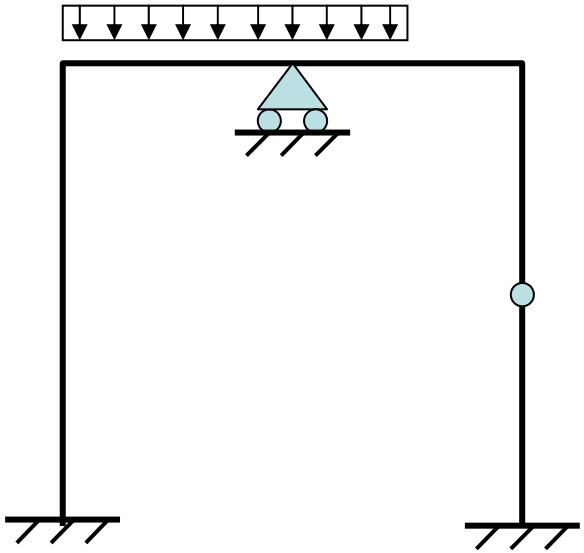
N=100
applicato in A.
Verifica ed
asse neutro.

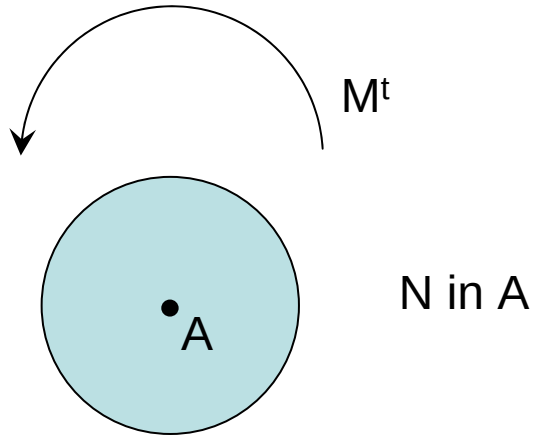




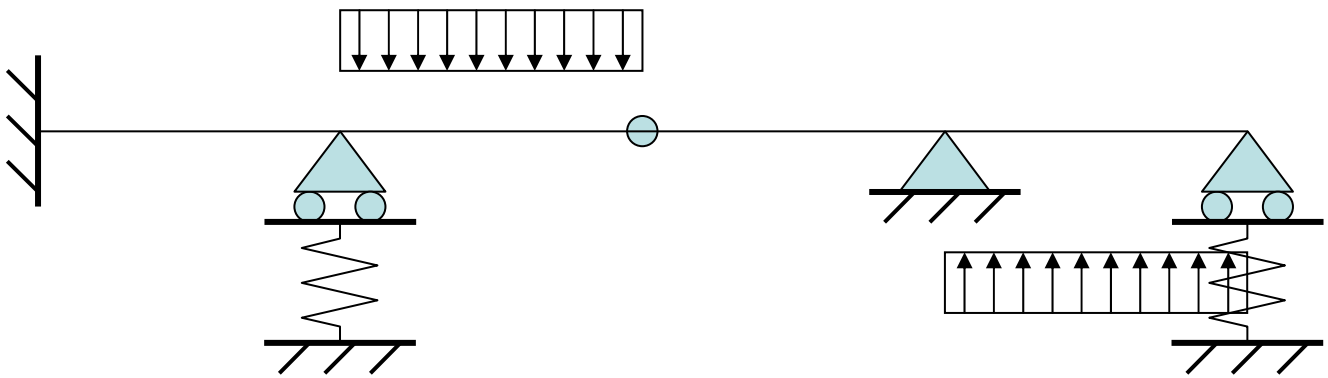


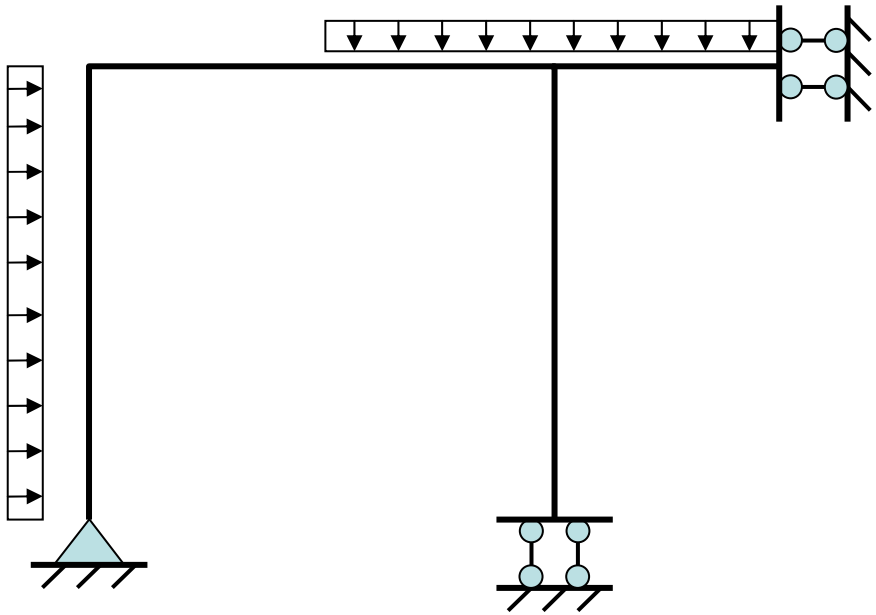

M^t

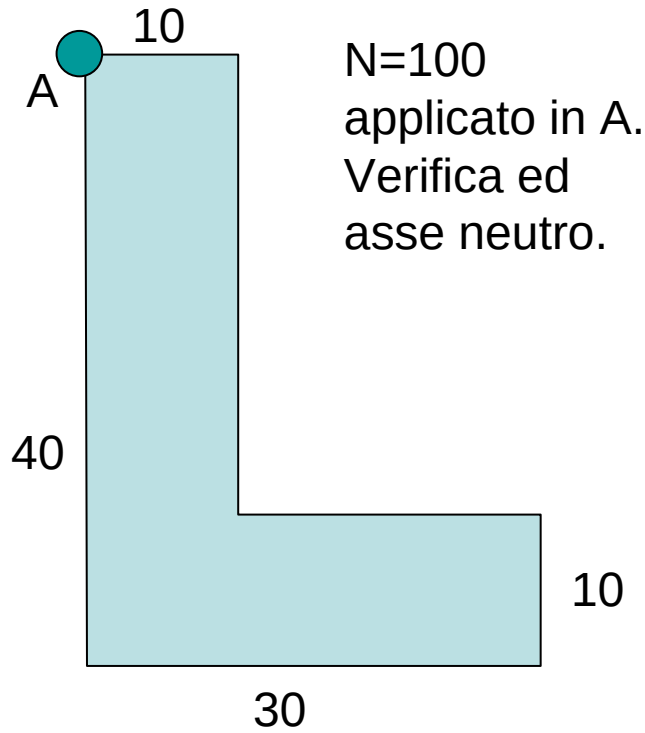




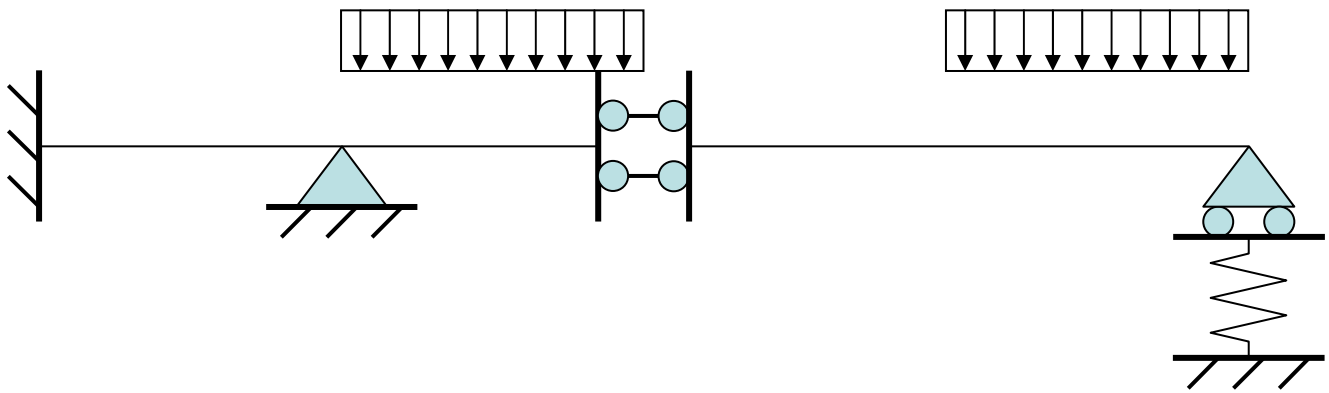
Verifica per torsione e sforzo normale

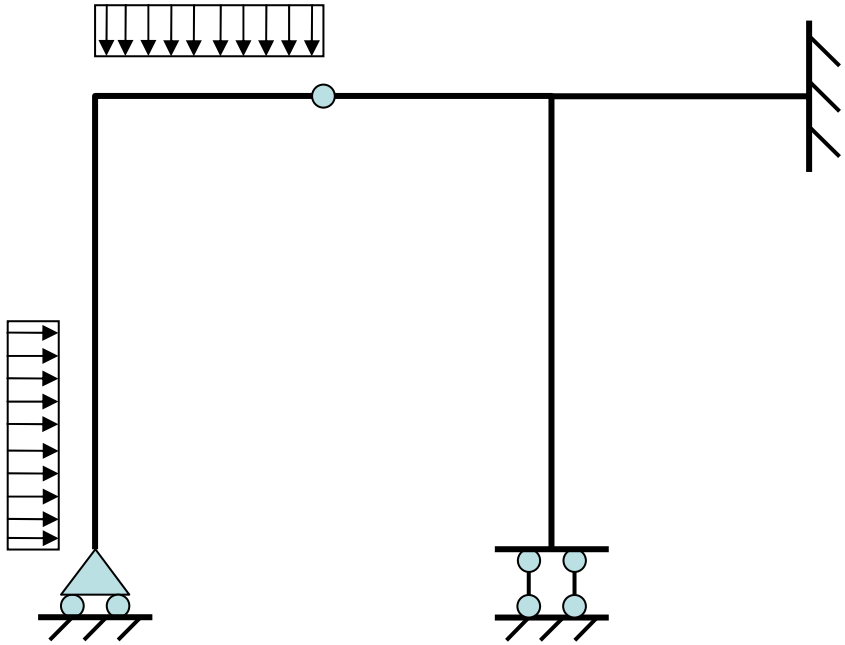


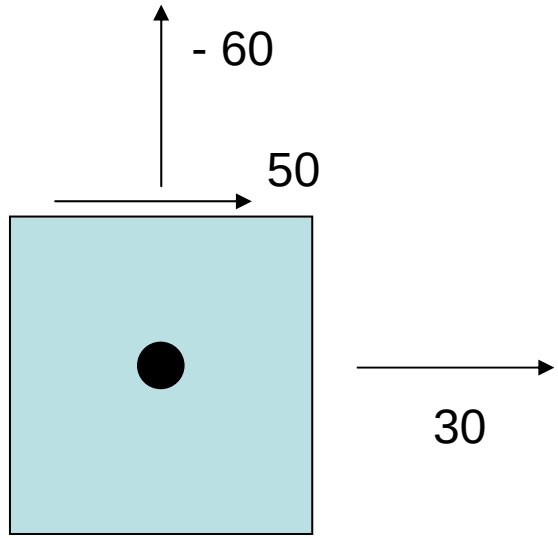




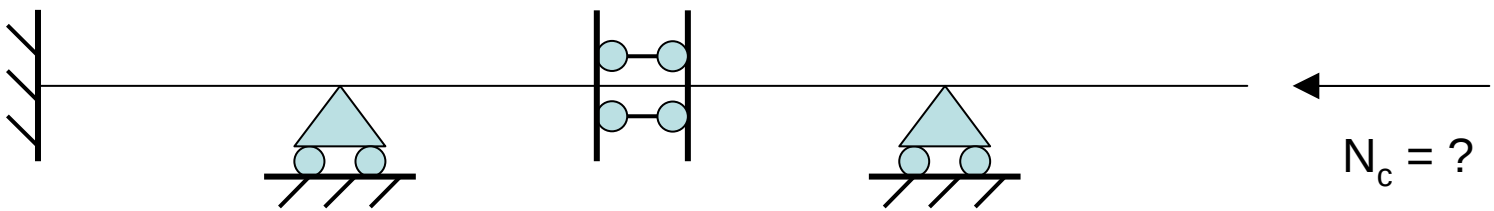
N=100
applicato in A.
Verifica ed
asse neutro.

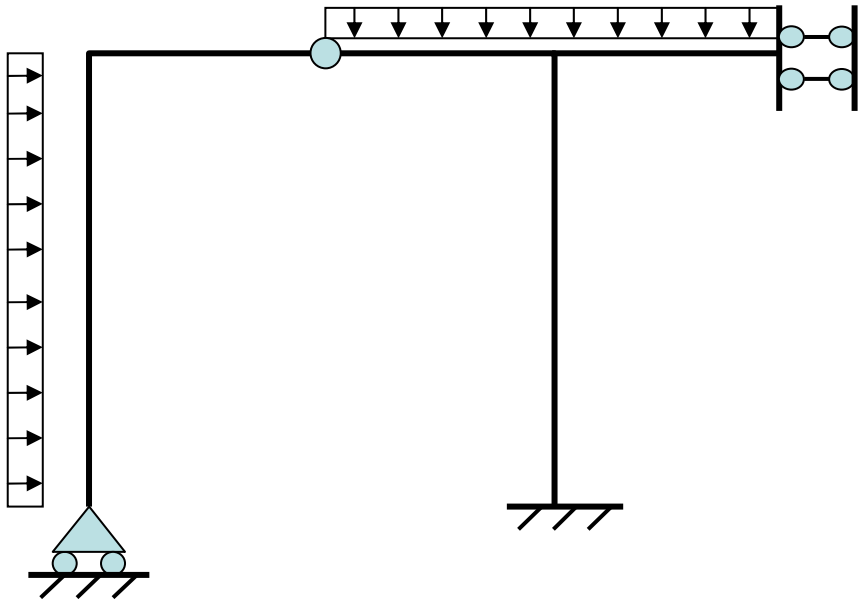


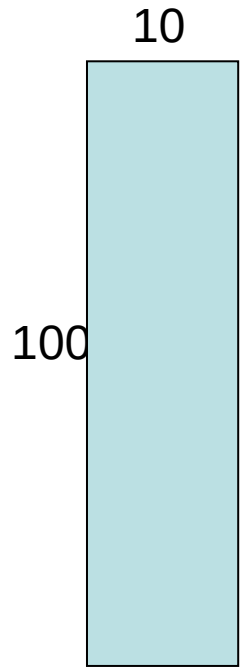




Eseguire la verifica secondo Tresca e secondo Mises dello stato di tensione [MPa] nel punto materiale rappresentato.

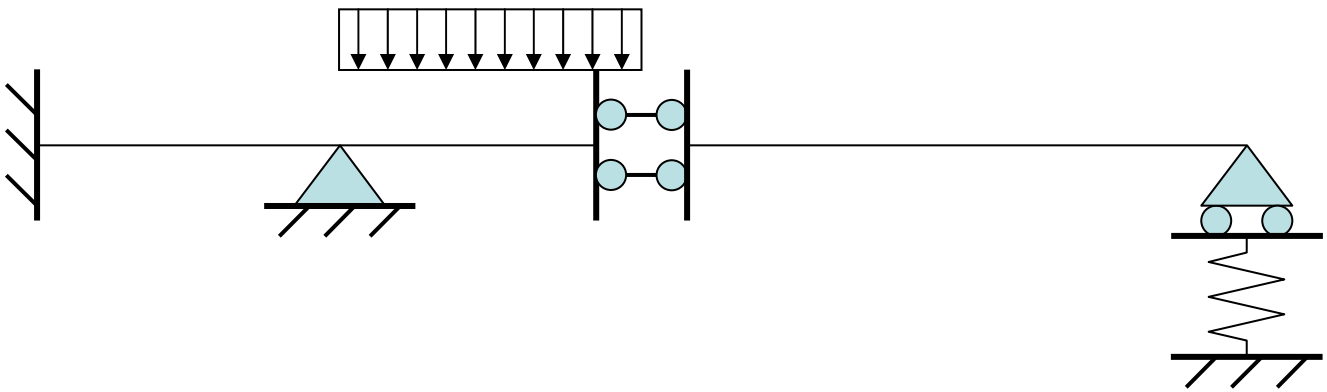


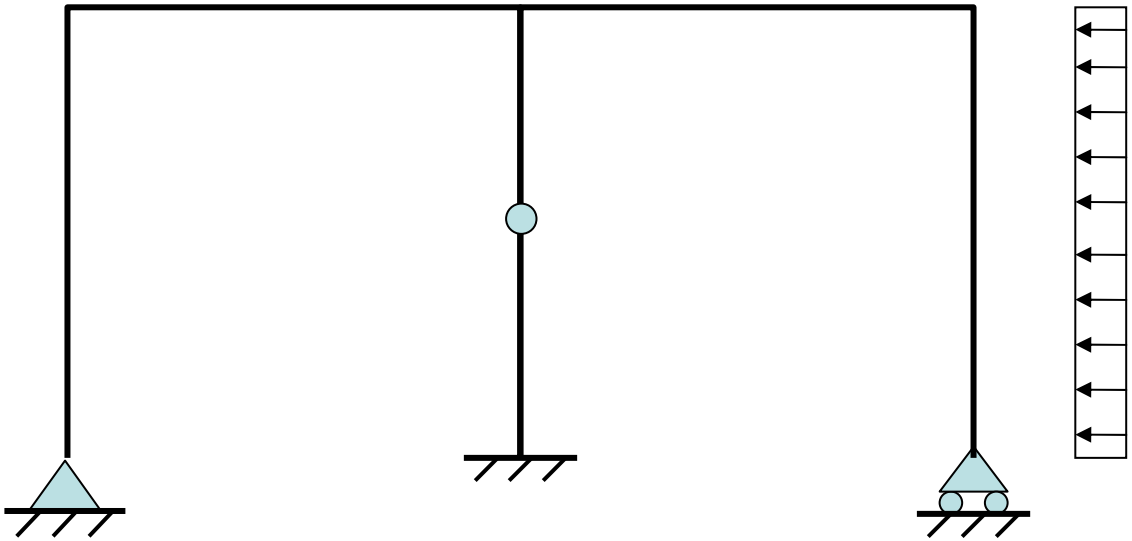


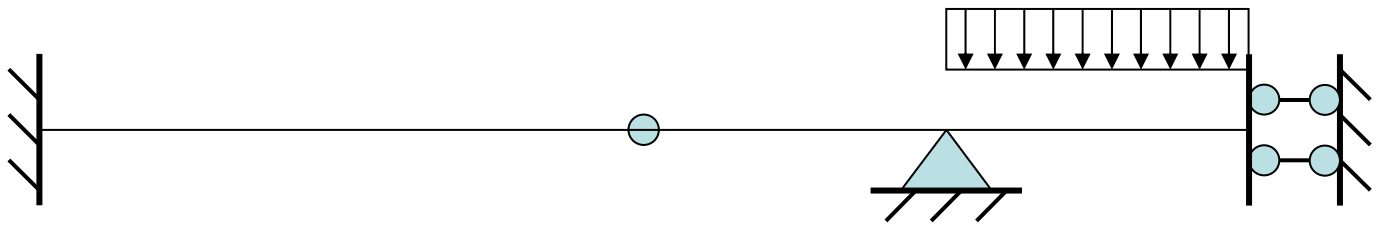


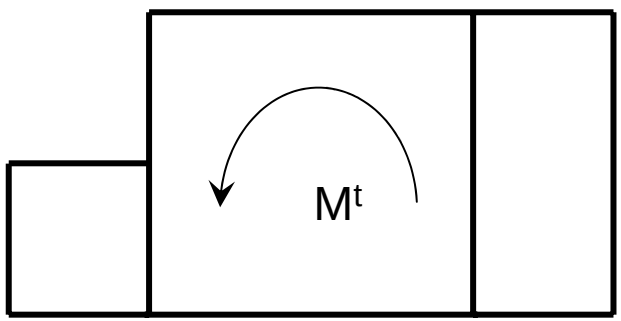
N=100 kN
M^f=30 kN*m

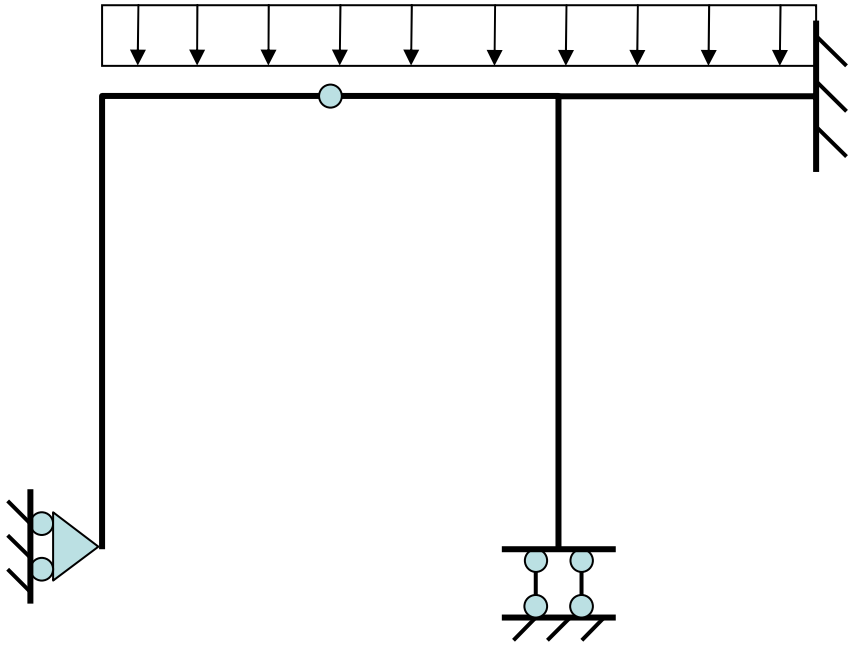
(dimensioni in mm)
Verifica Tresca

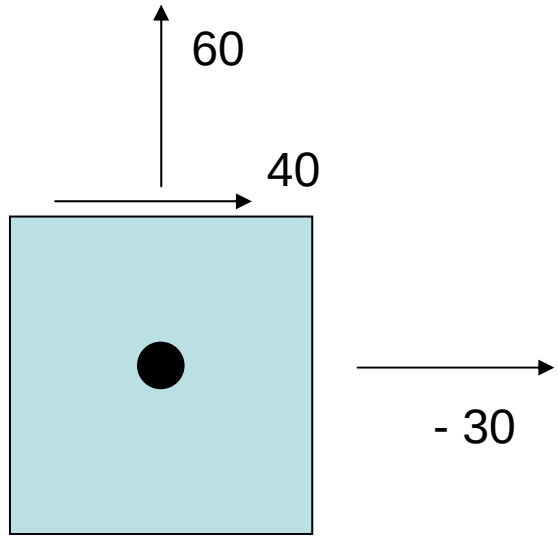




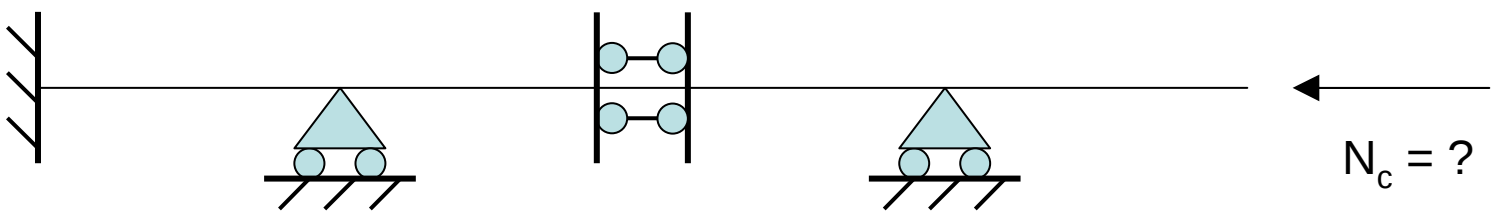


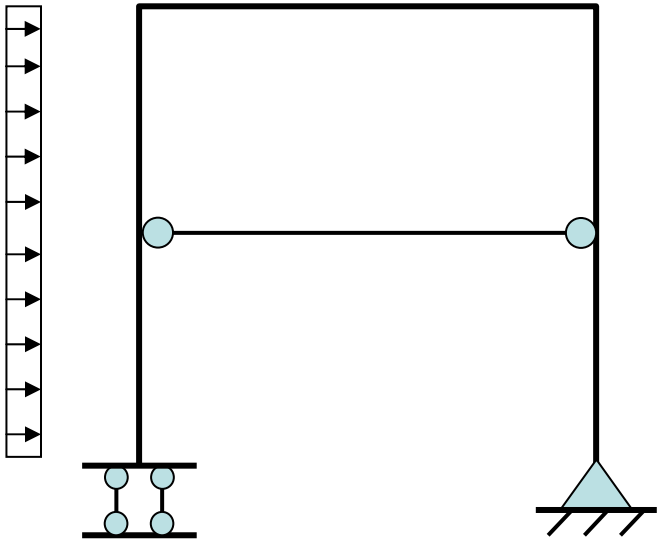

M^t



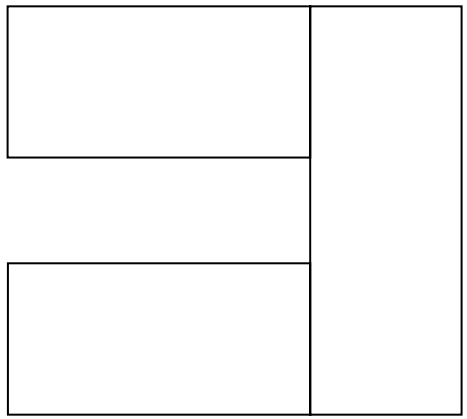


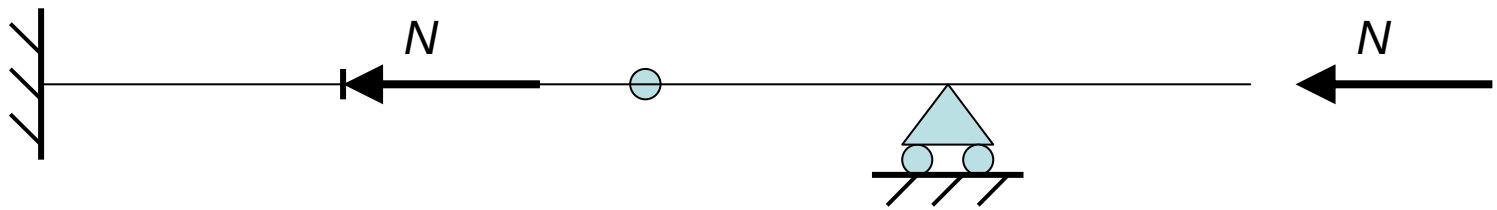
Dato lo stato di tensione [MPa] nel punto materiale rappresentato, determinare la dilatazione massima, assumendo:
E=300000 MPa , n=0.15.



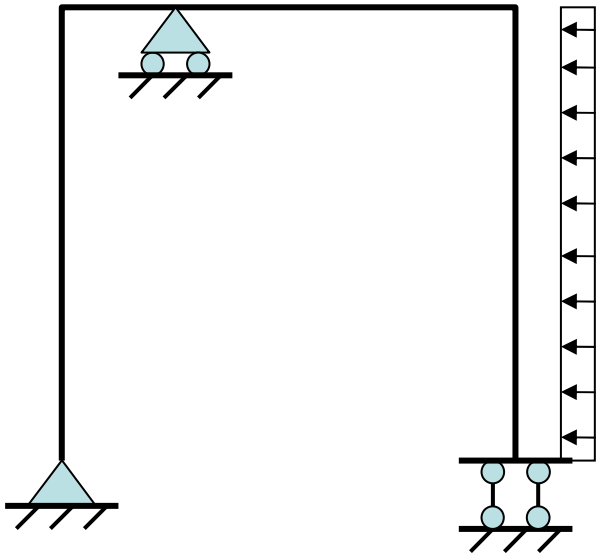


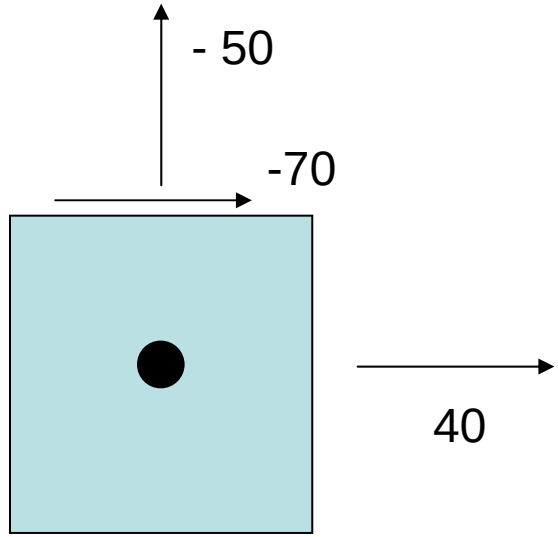
Rigidezza torsionale



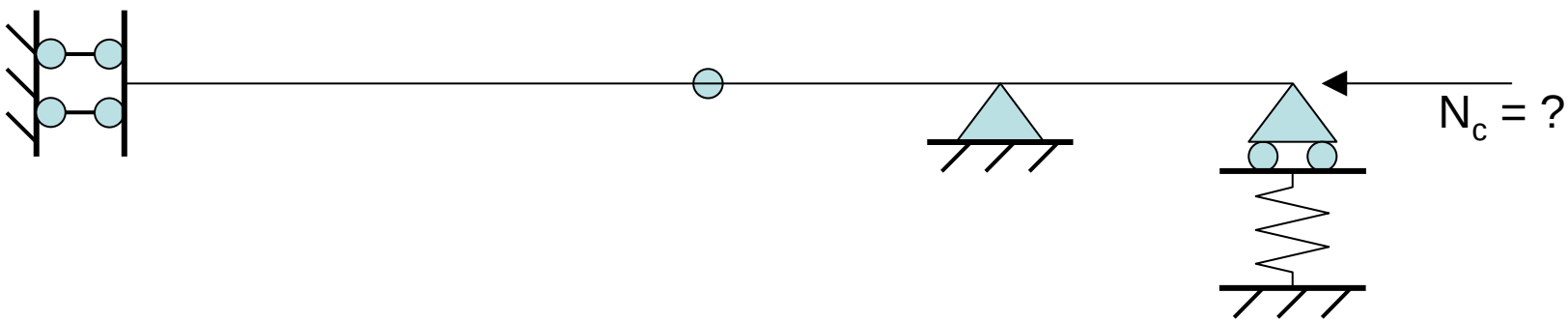


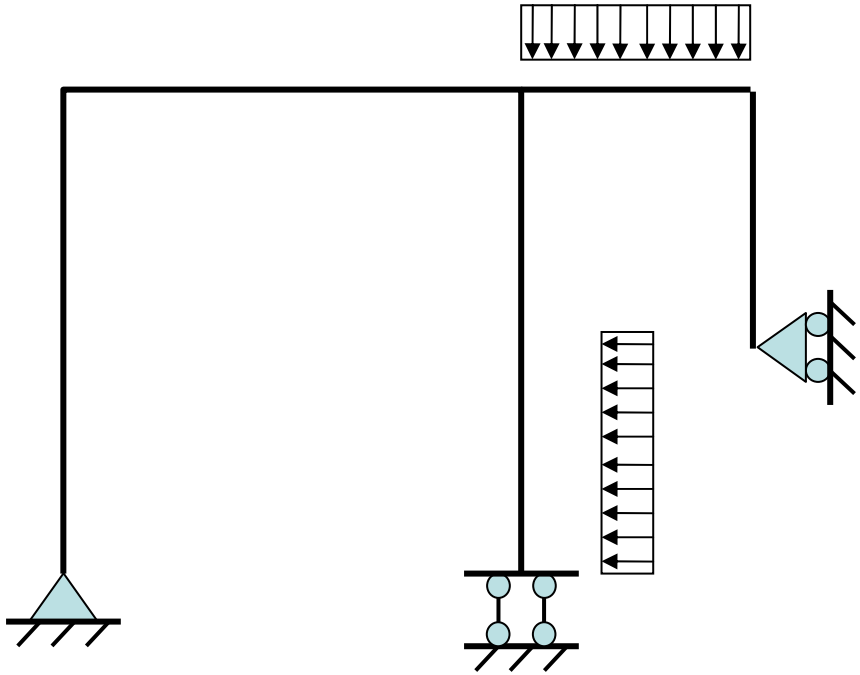
N_c = ?

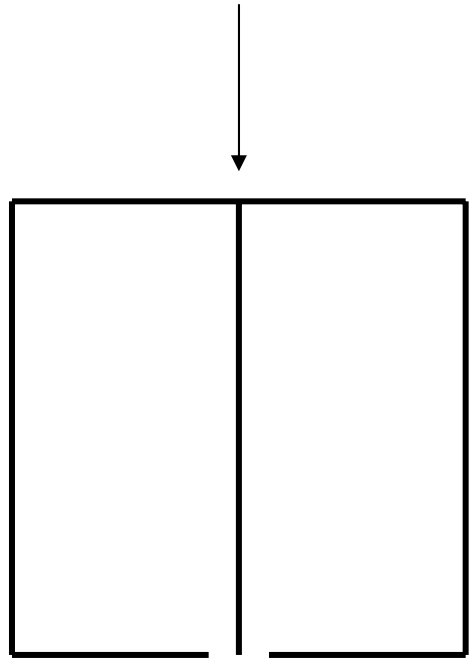


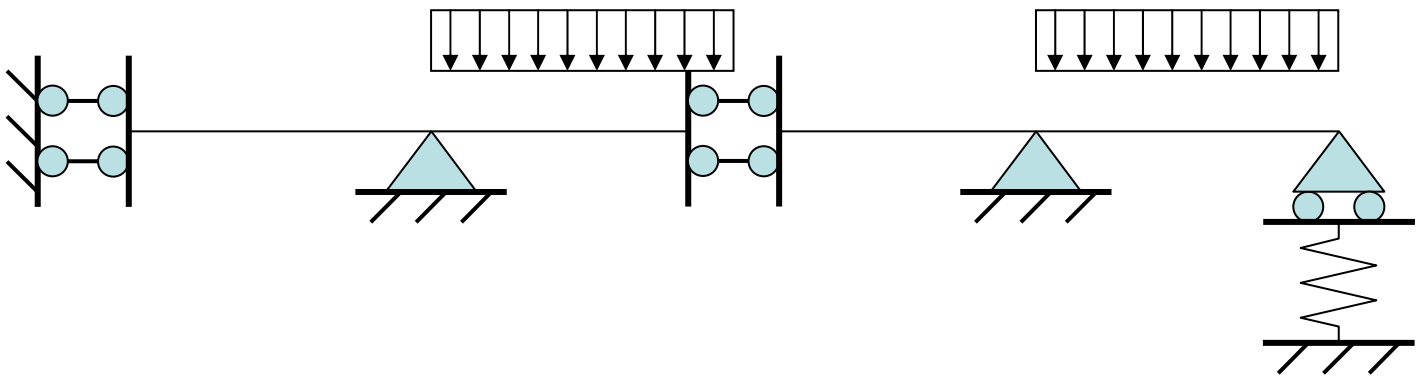


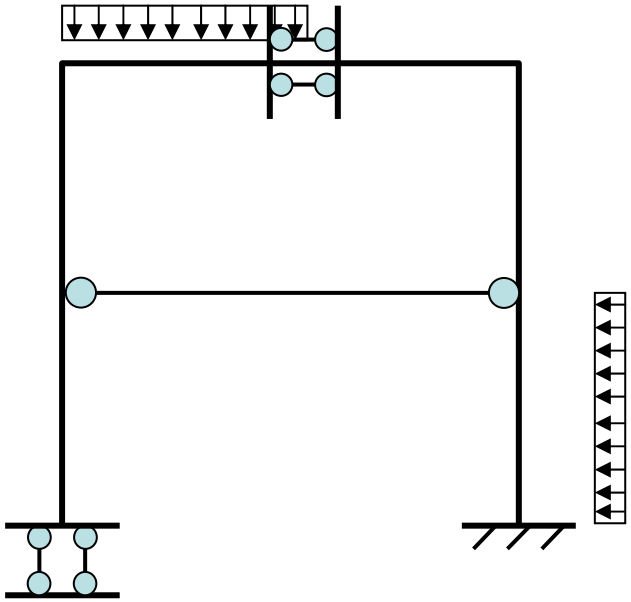
Dato lo stato di tensione [MPa] nel punto materiale rappresentato, determinare le tensioni e le direzioni principali.



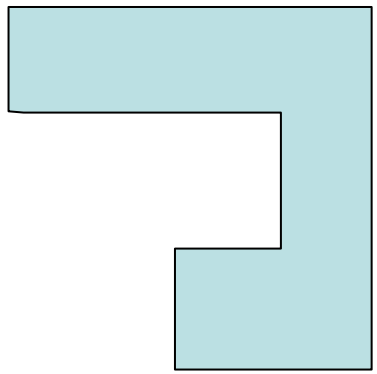


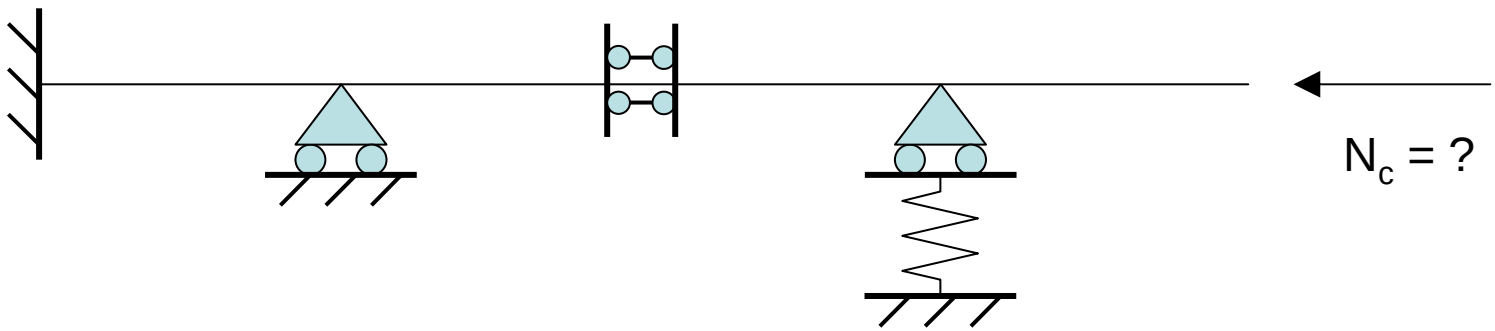


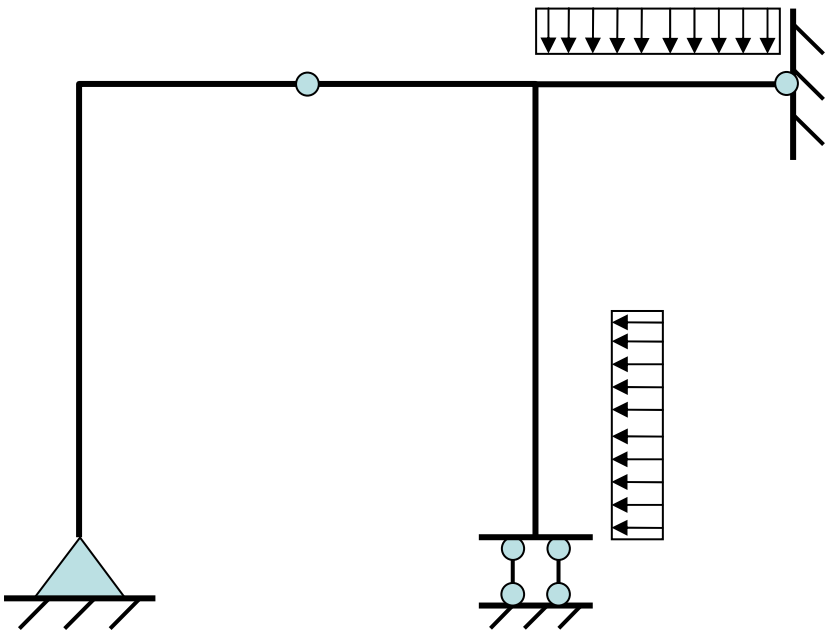


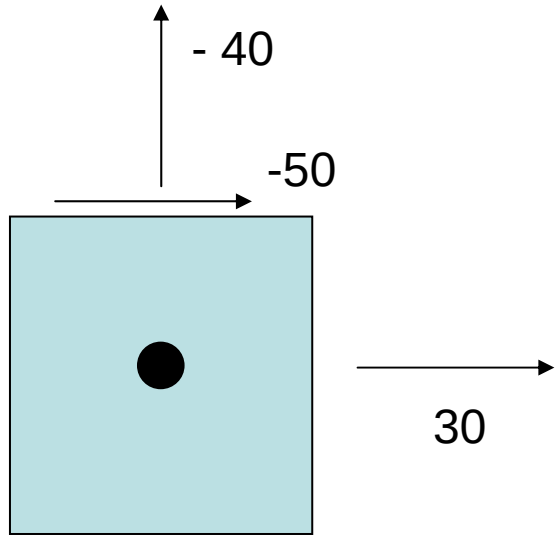


Rigidezza torsionale

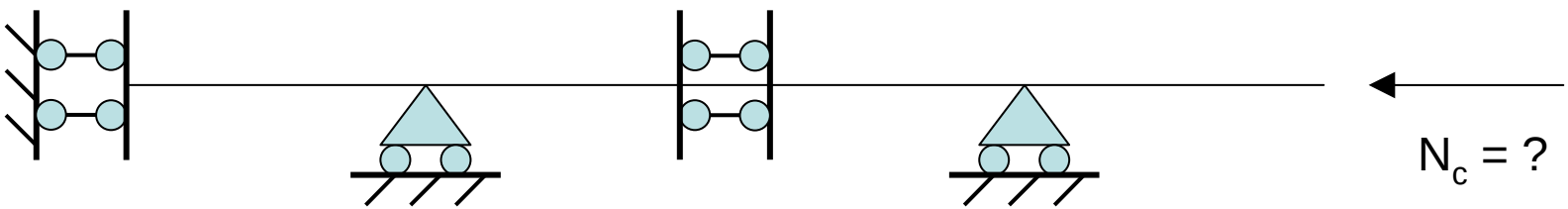


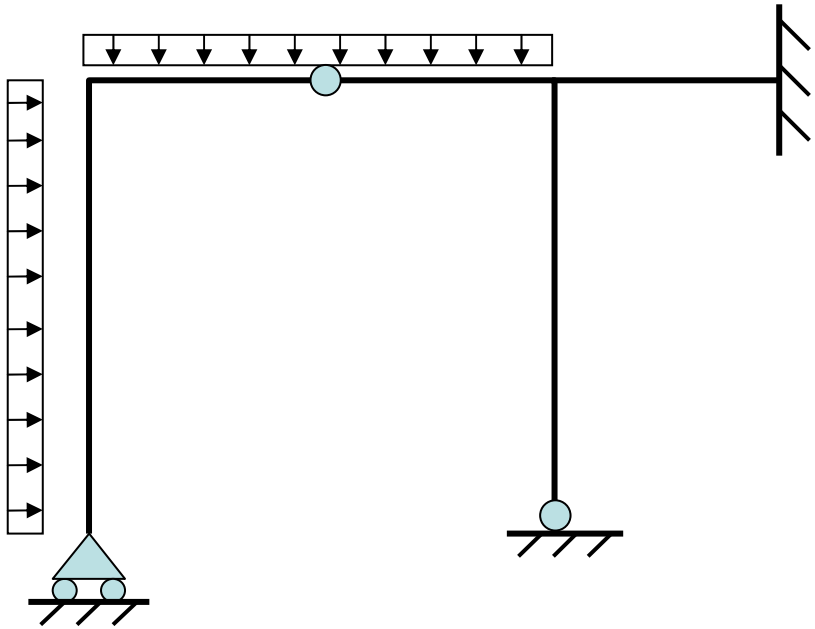


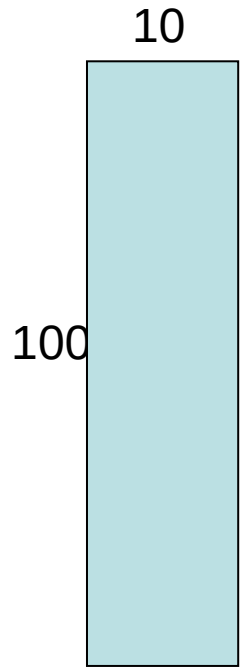




Eseguire la verifica secondo Tresca e dello stato di tensione [MPa] nel punto materiale rappresentato.

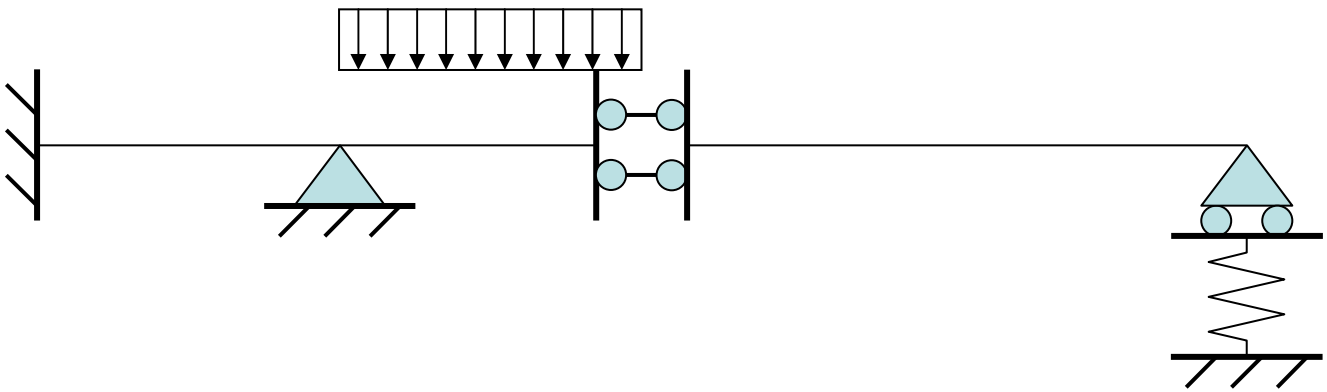


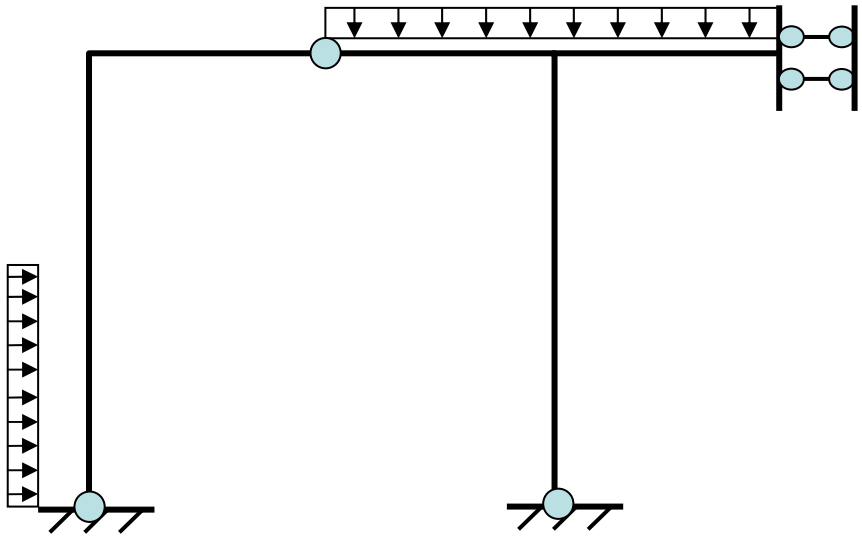


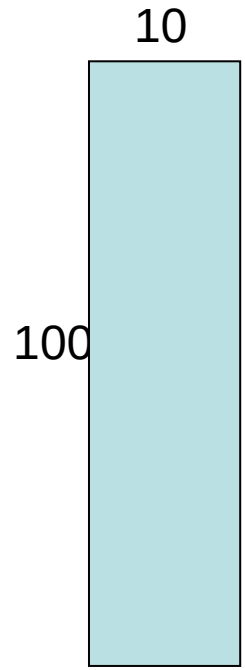


N=80 kN
Mf=20 kN/m

(dimensioni in mm)
Verifica Tresca

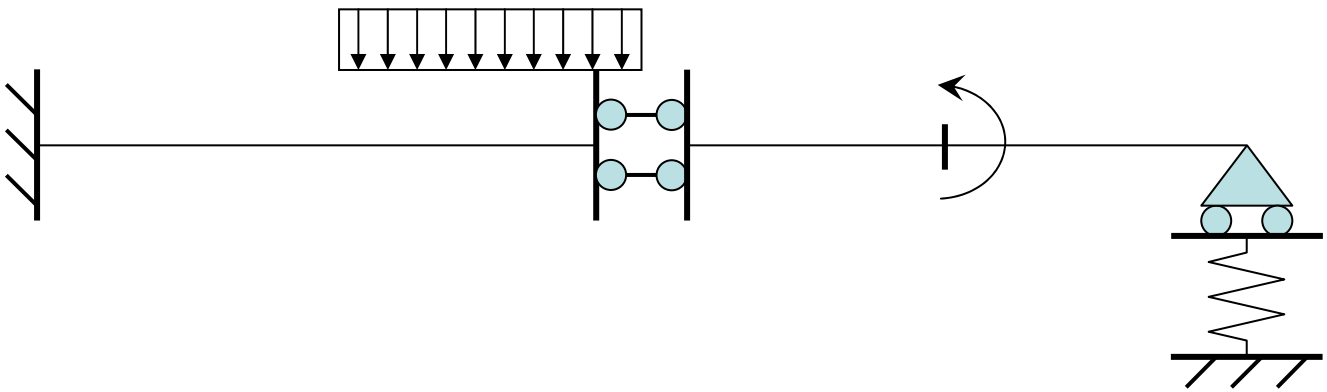


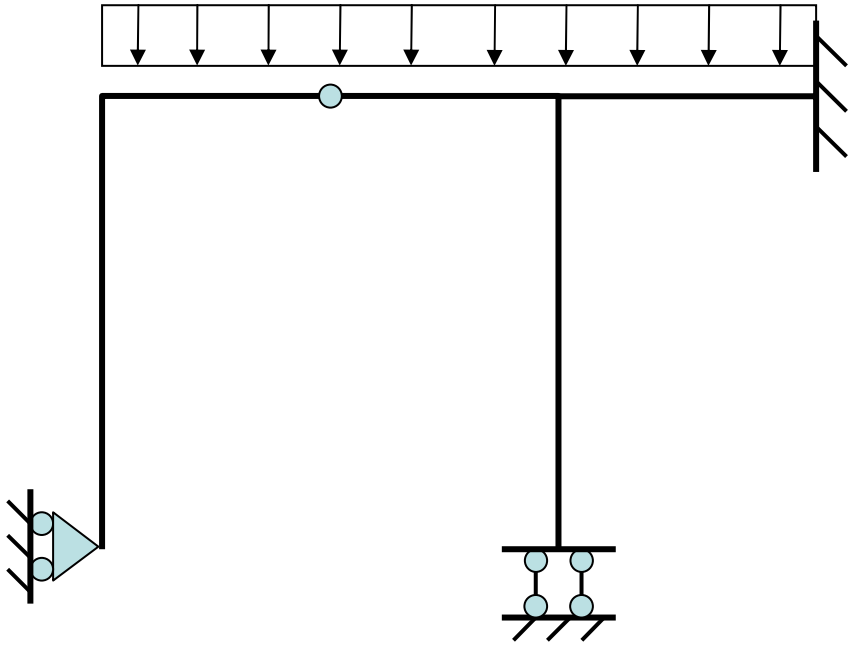


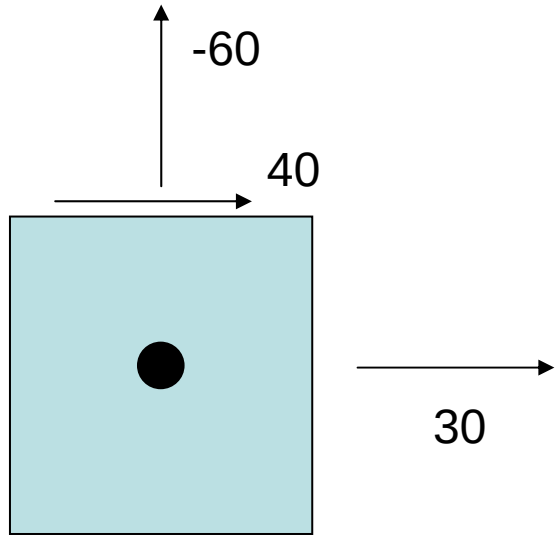


N=100 kN
Mt=30 kN/m

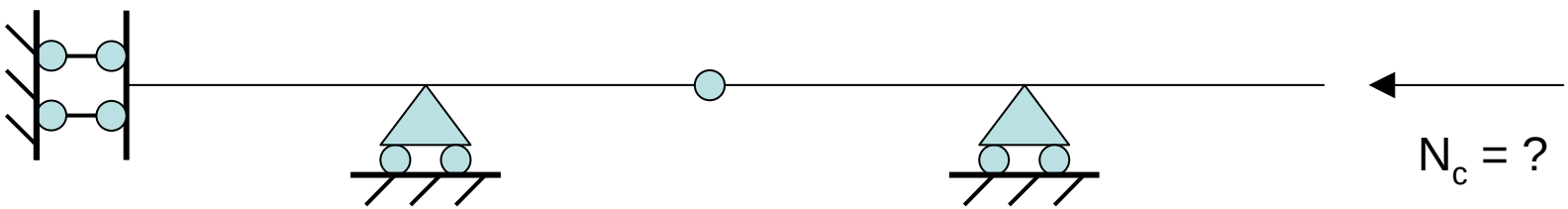
(dimensioni in mm)
Verifica Tresca

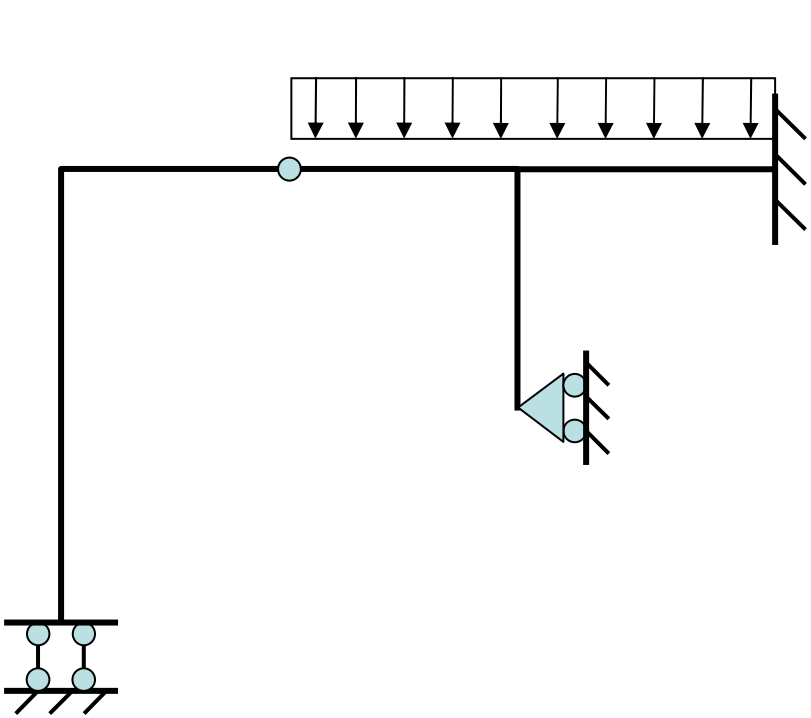


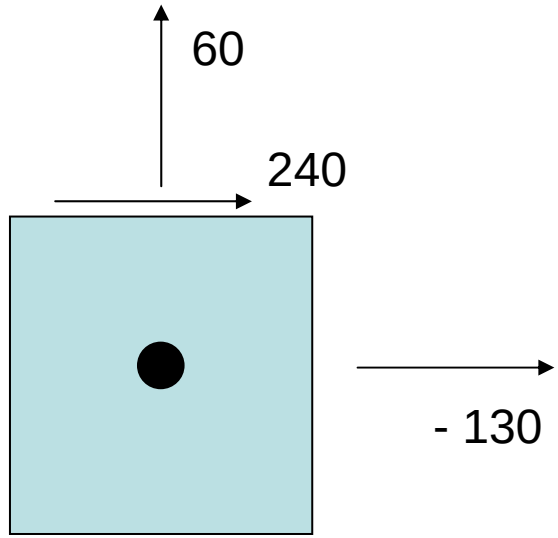




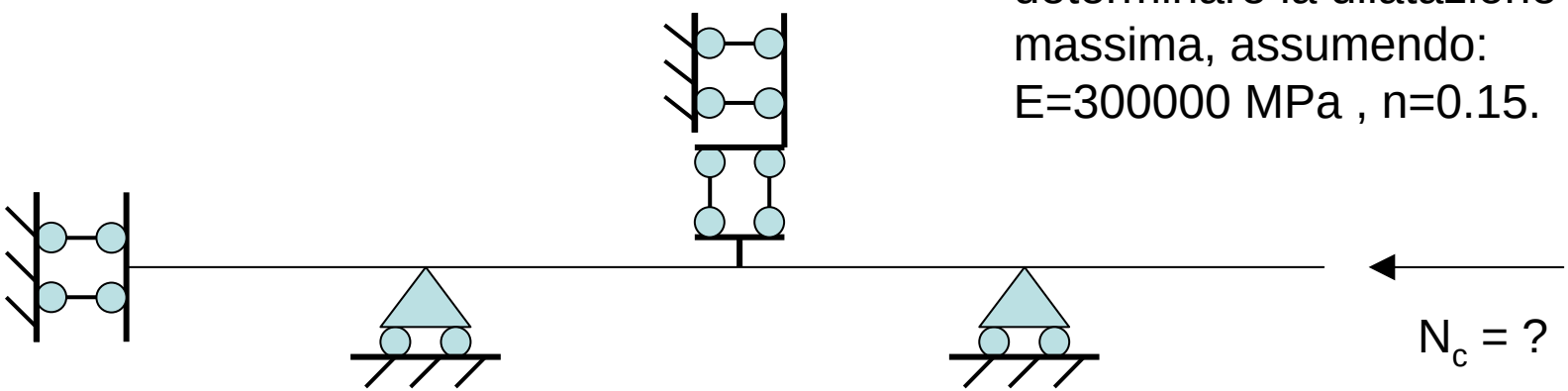
Dato lo stato di tensione [MPa] nel punto materiale rappresentato, determinare la dilatazione massima, assumendo: E=300000 MPa , n=0.15.

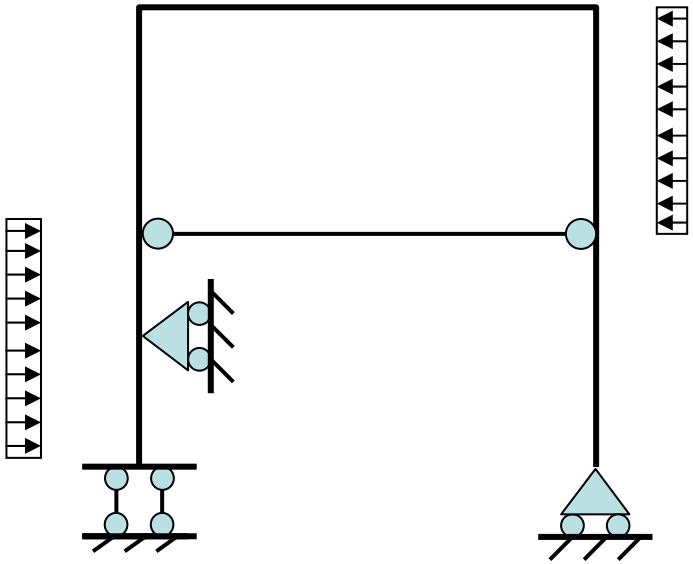




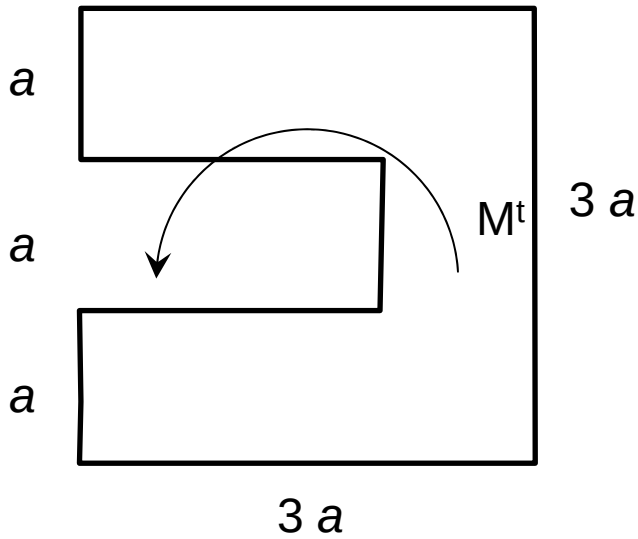


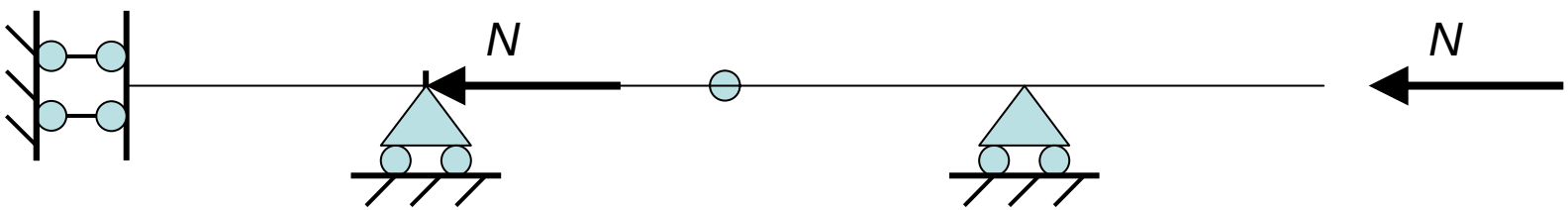
Dato lo stato di tensione [MPa] nel punto materiale rappresentato, determinare la dilatazione massima, assumendo: E=300000 MPa , n=0.15.



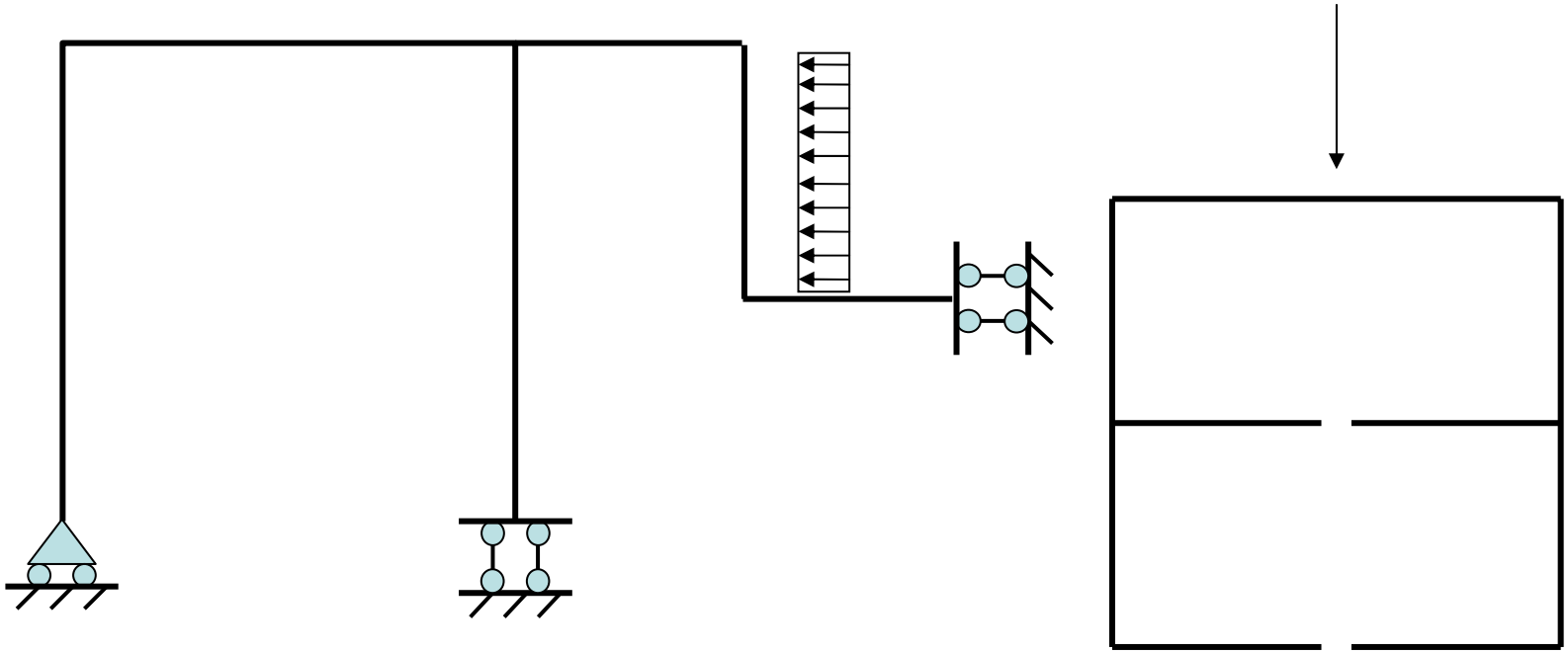


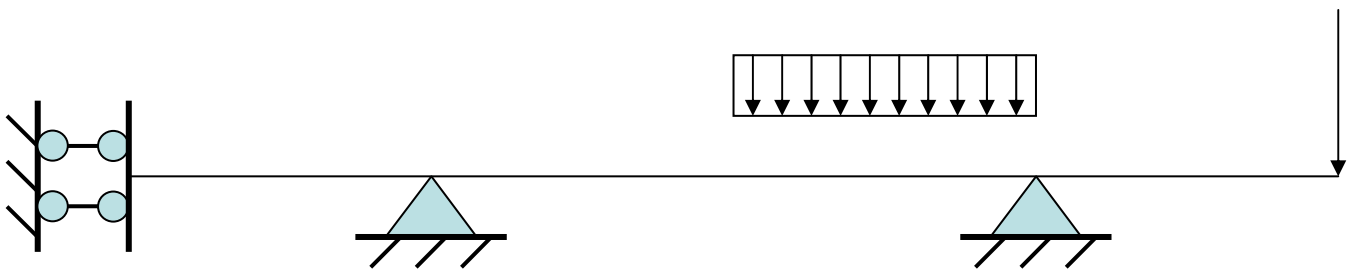
Verifica e rigidezza torsionale

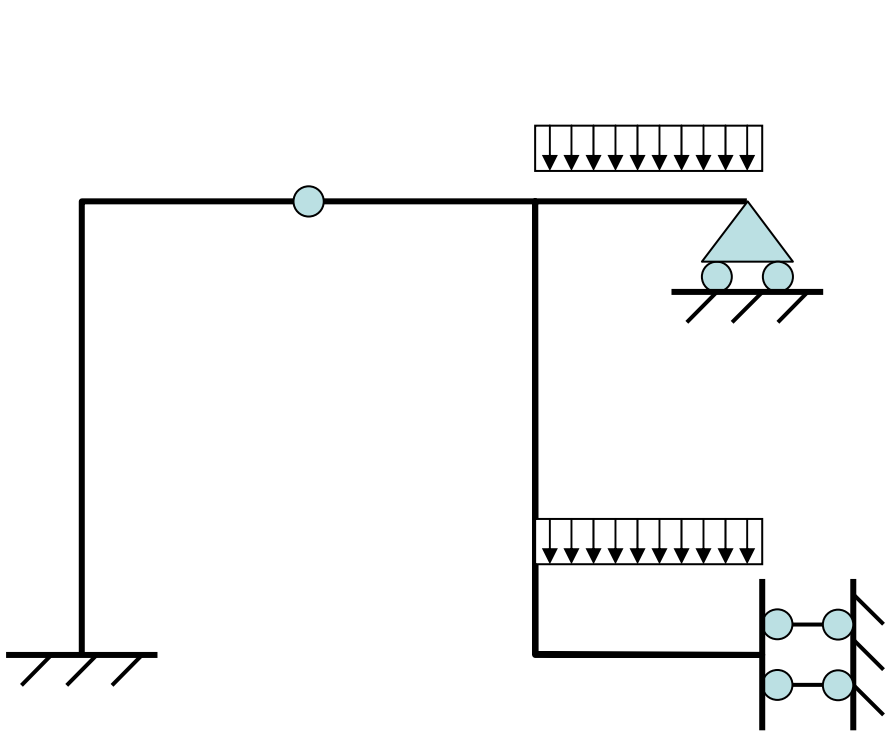


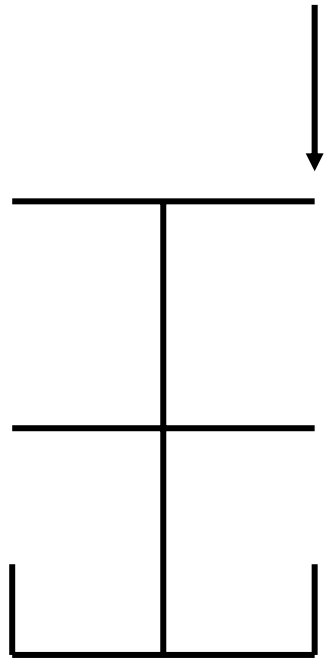


N_c = ?

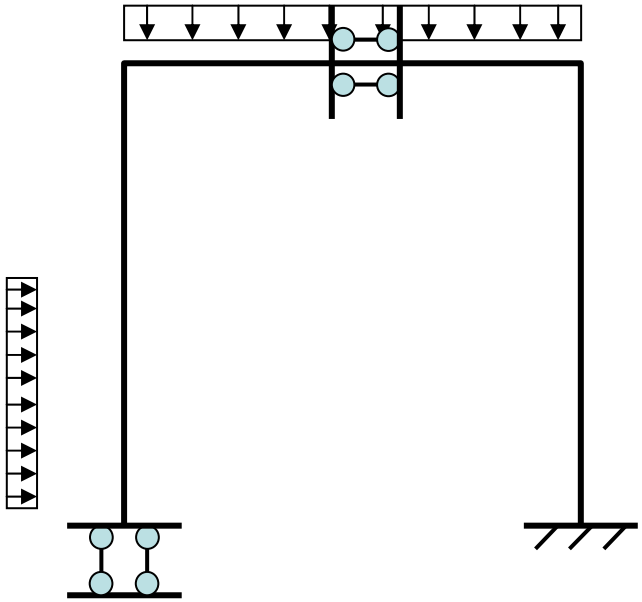




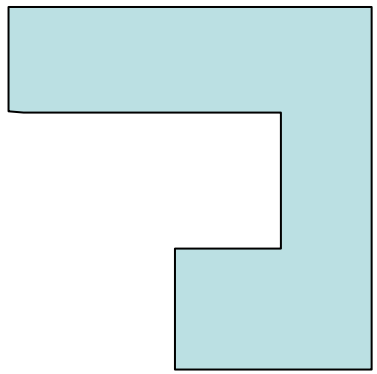


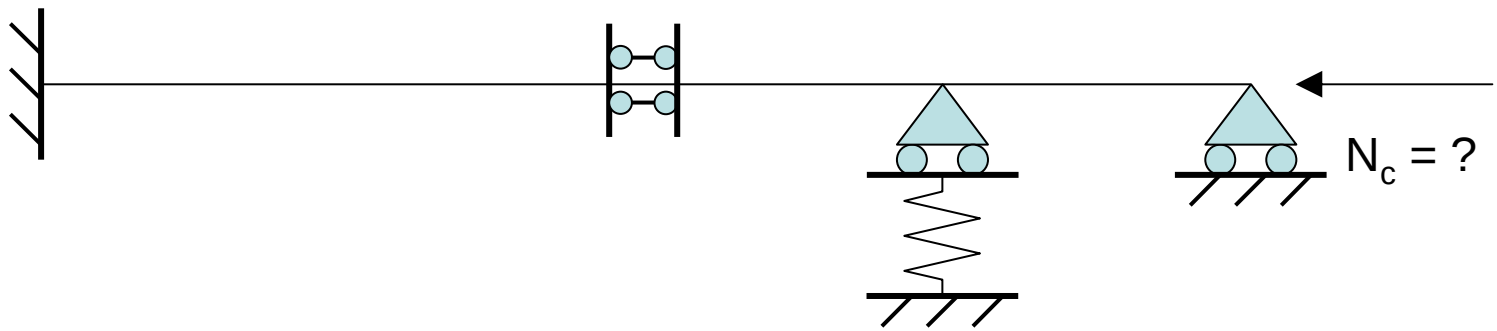


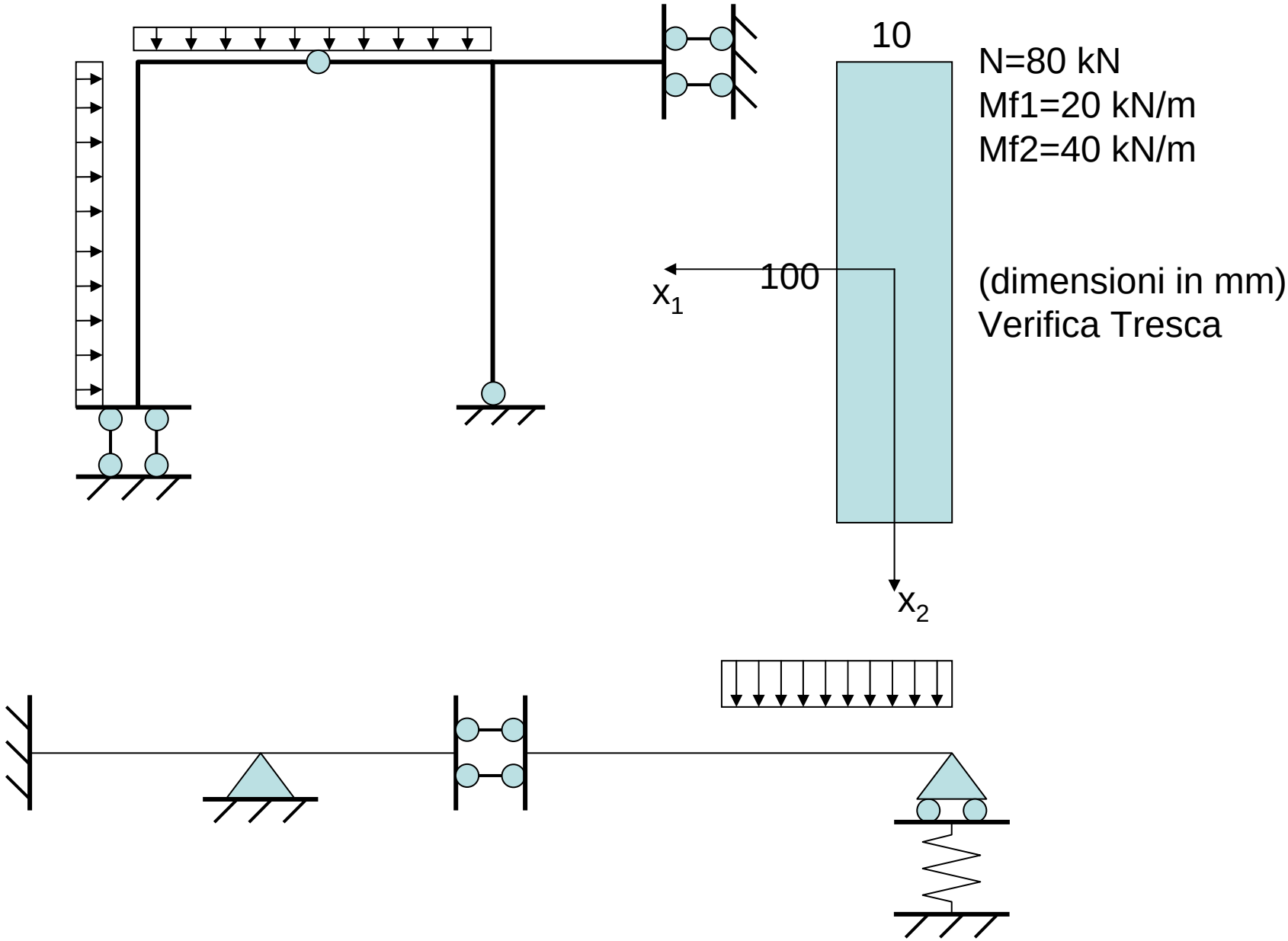
Determinare la sezione dove si ha massimo momento flettente

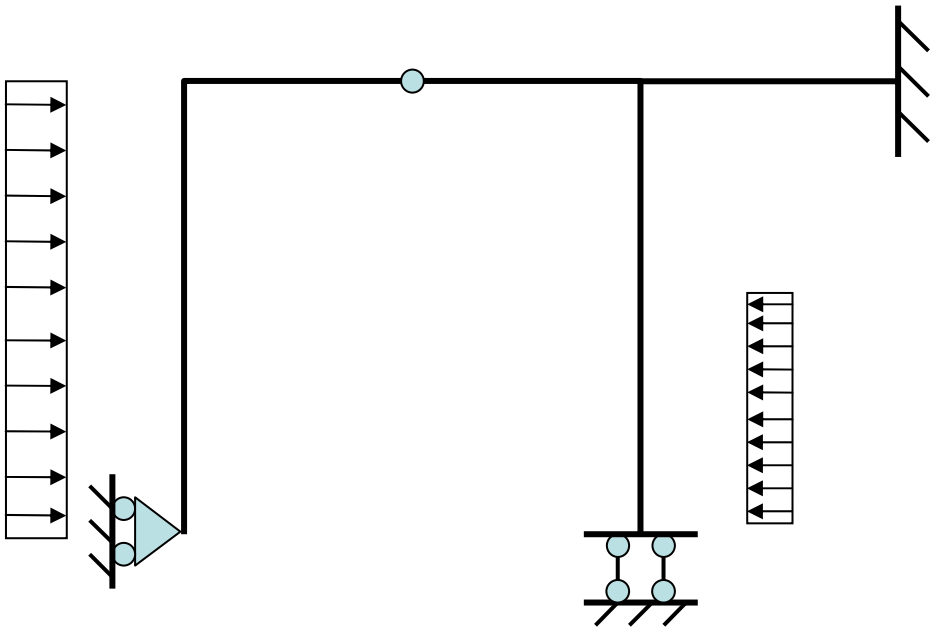


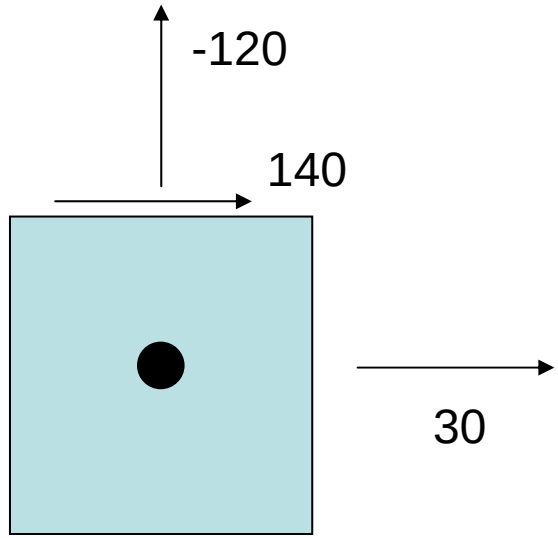
Rigidezza torsionale



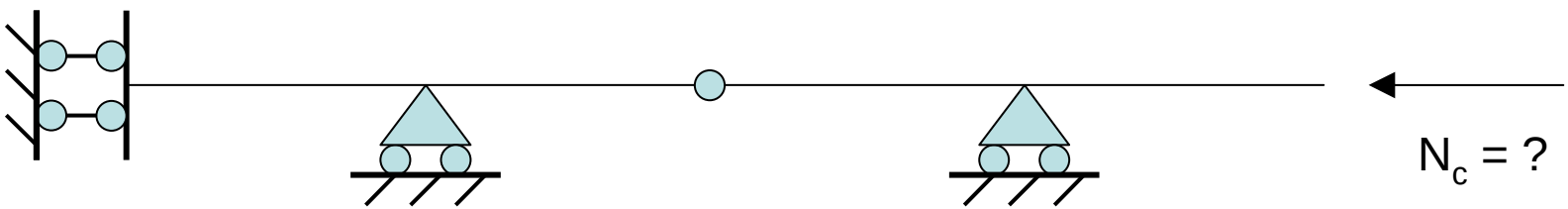


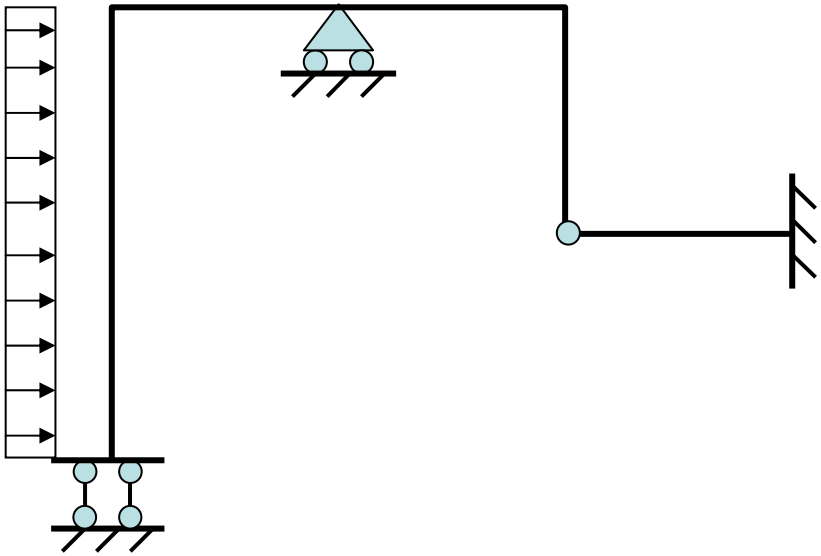

10
N=80 kN
Mf1=20 kN/m
Mf2=40 kN/m
100
x1
x2
(dimensioni in mm)
Verifica Tresca

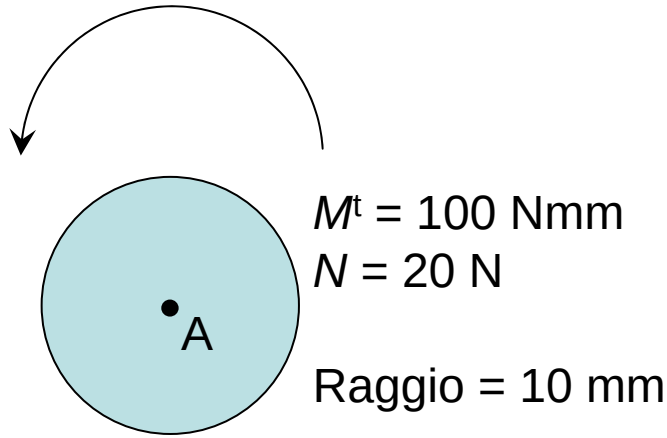




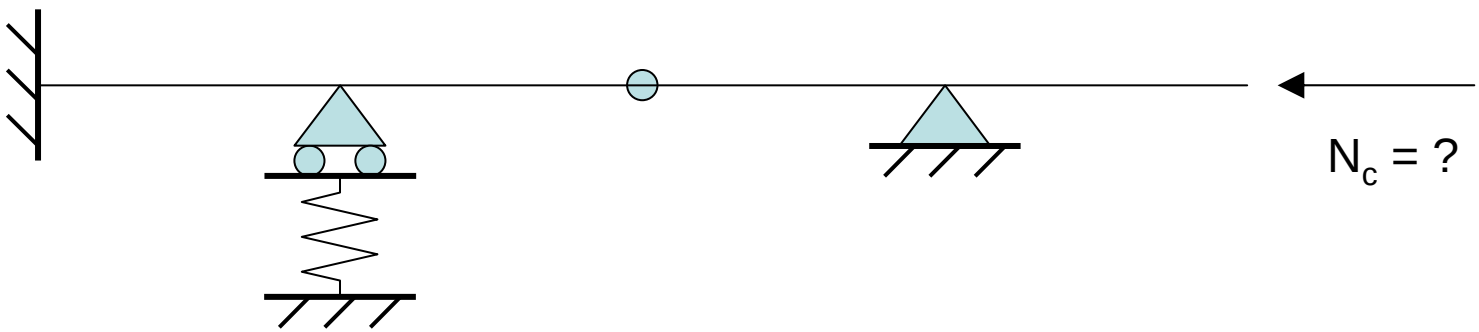
Dato lo stato di tensione [MPa] nel punto materiale rappresentato, determinare la dilatazione massima, assumendo:
E=300000 MPa , ν=0.15.

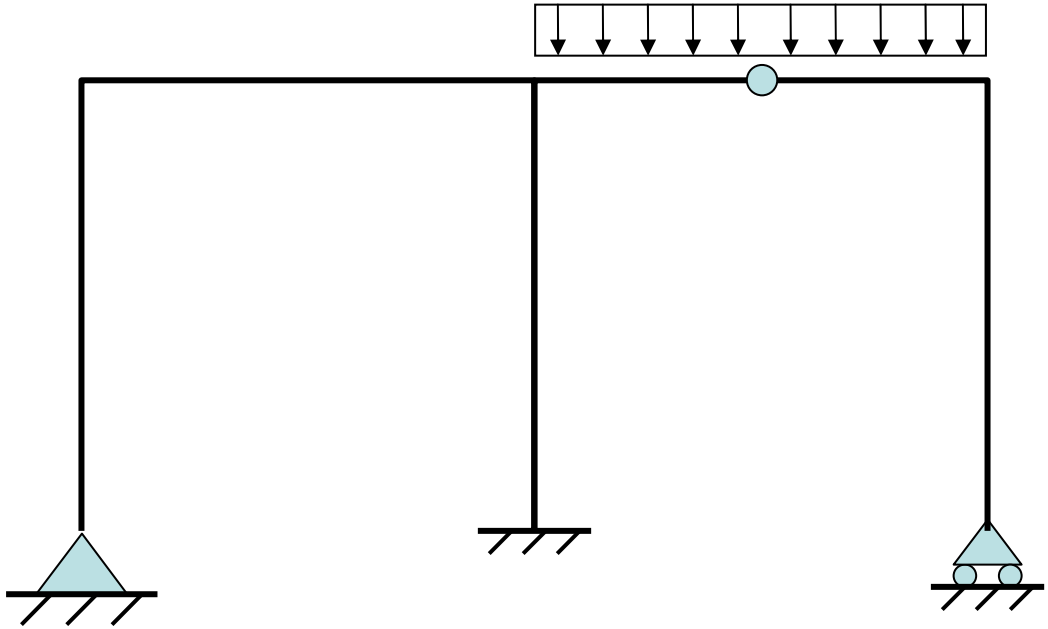


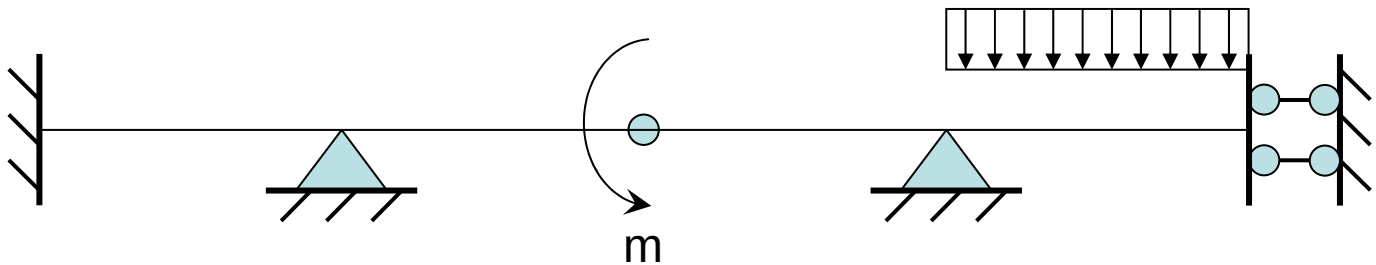


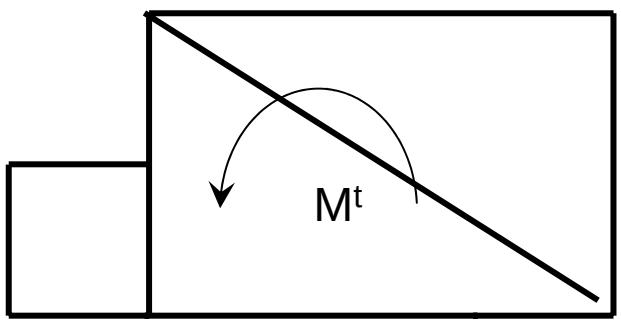


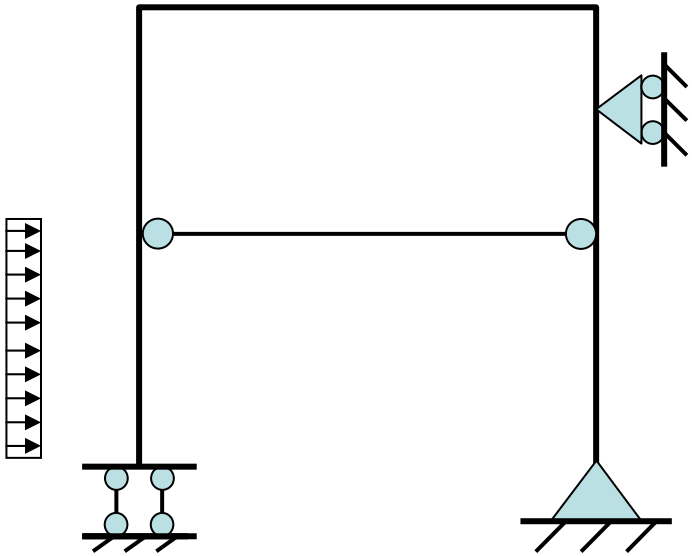
Verifica per torsione e sforzo normale secondo Tresca



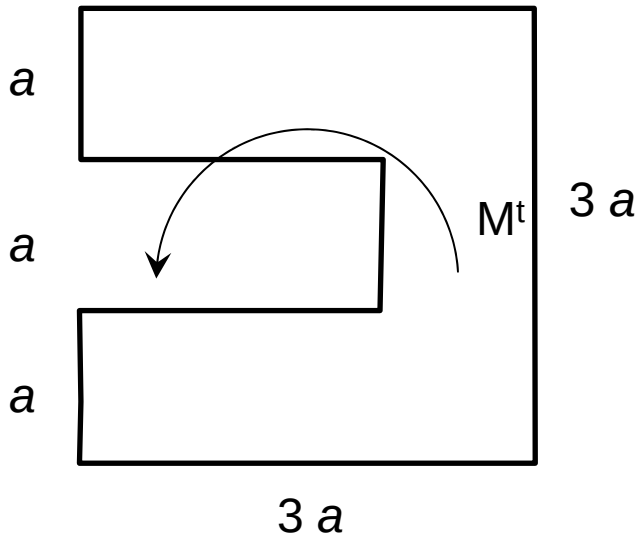


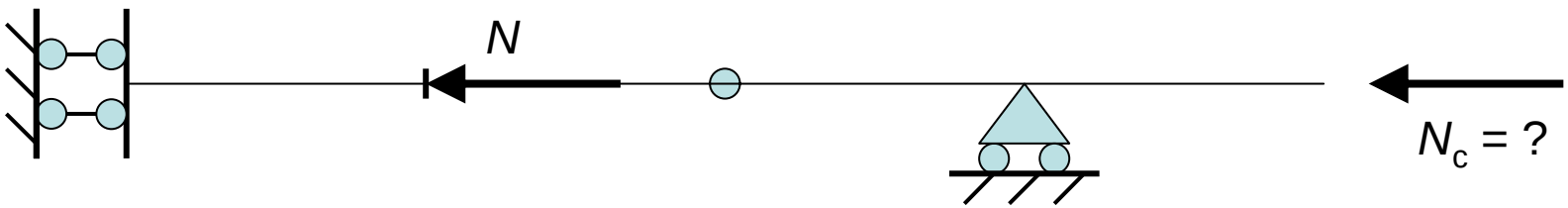

m

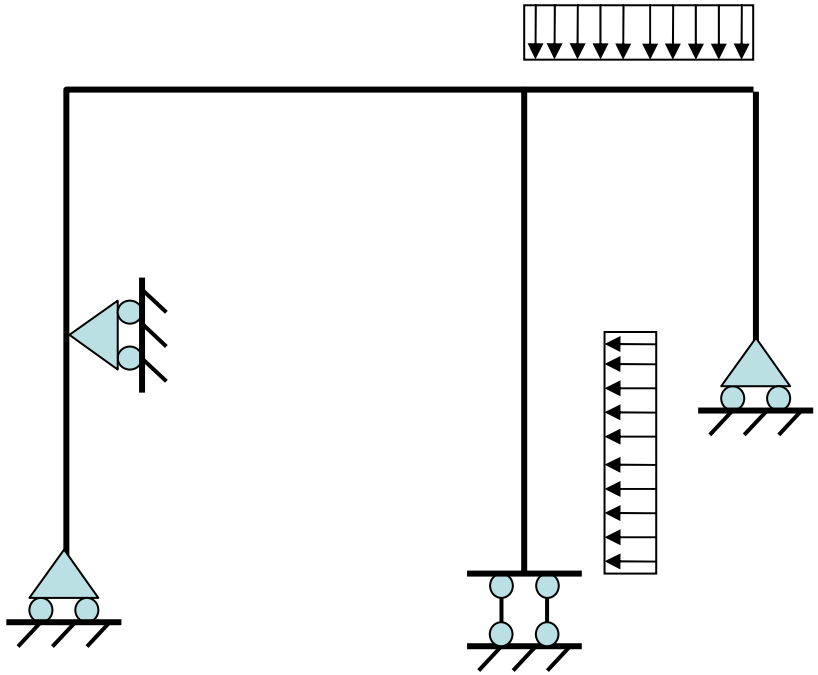

M^t

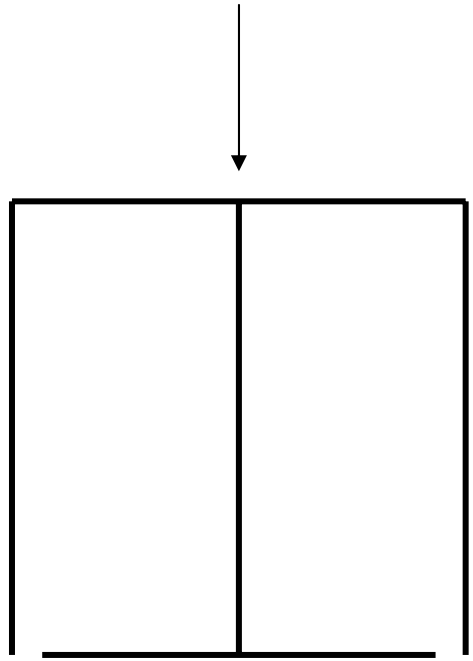


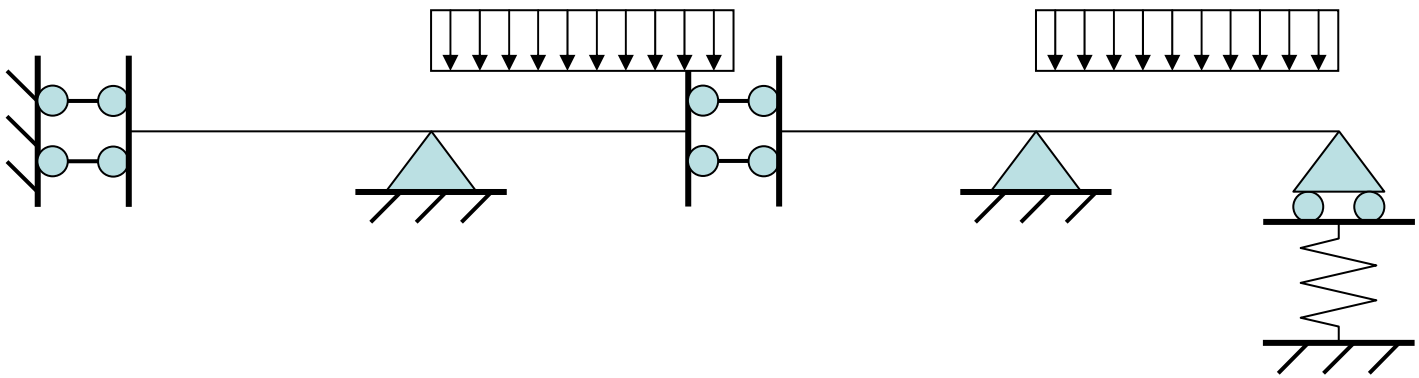
Verifica e rigidezza torsionale

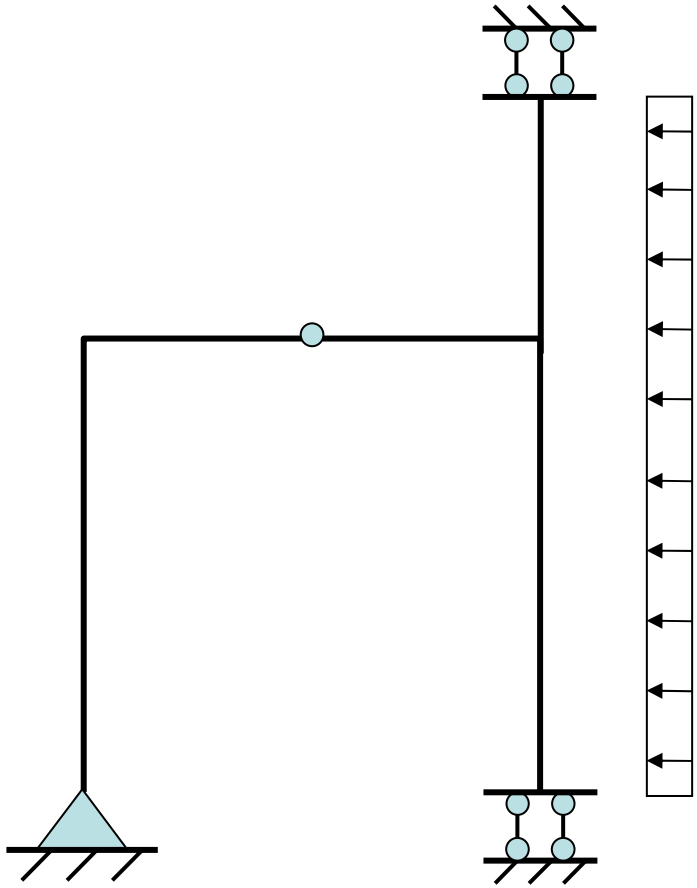


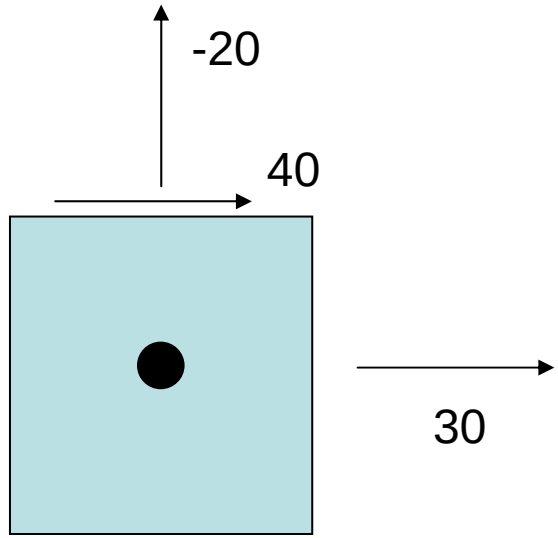
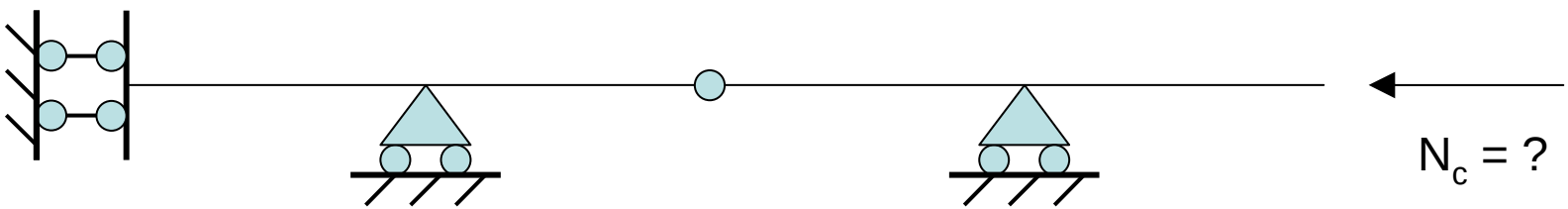








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