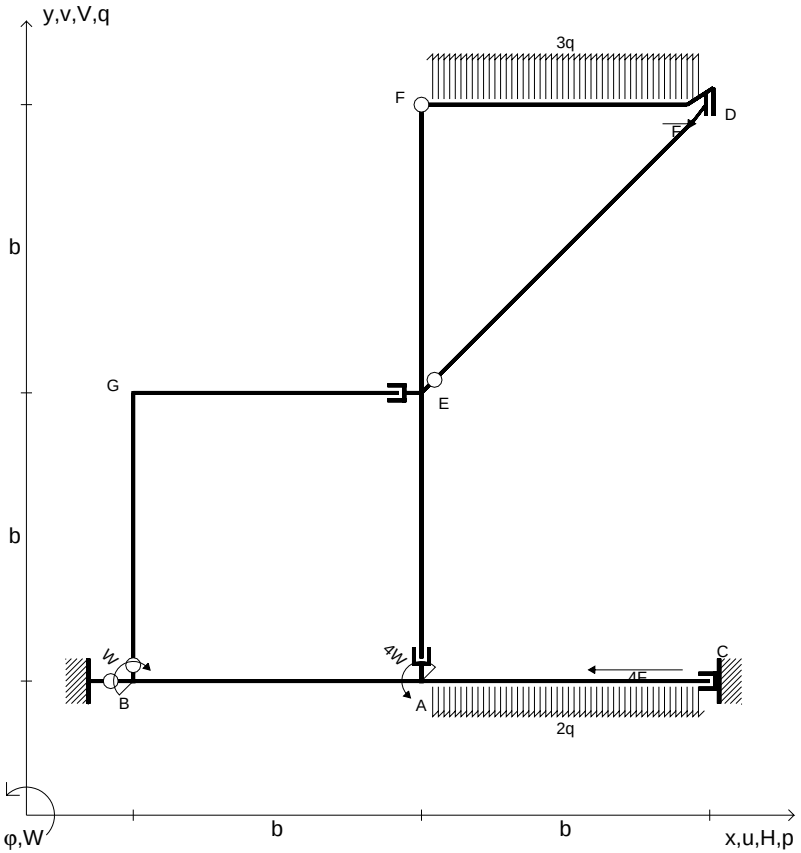
H_{CA} = -4F
H_{DE} = F
W_B = -W = -Fb
W_A = 4W = 4Fb
q_{CA} = -2q = -2F/b
q_{DF} = 3q = 3F/b
v_A = ?
φ_B = ?
EJ_{AB} = EJ
EJ_{CA} = EJ
EJ_{DE} = EJ
EJ_{DF} = EJ
EJ_{EF} = EJ
EJ_{AE} = EJ
EJ_{EG} = EJ
EJ_{BG} = EJ



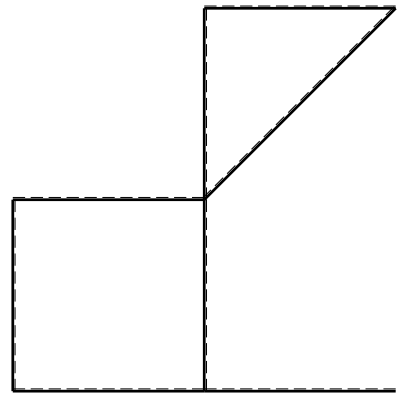
.
Svolgere l'analisi cinematica.
Risolvere con LE e/o PLV.
Riportare RV finali in forma grafica e analitica.
Riportare la soluzione sul testo (AC,RV,N,T,M con valori).
Tracciare la deformata elastica del tratto ABC.
Consegnare la relazione di calcolo.
.
Carichi e deformazioni date hanno verso efficace in disegno.
Calcolare reazioni vincolari della struttura e delle aste.
Tracciare i diagrammi quotati delle azioni interne nelle aste.
Esprimere la linea elastica delle aste. AB CA
J_{YZ} - x_{YZ} - θ_{YZ} riferimento locale asta YZ con origine in Y.
Calcolare lo spostamento verticale del nodo A
Calcolare la rotazione assoluta del nodo B

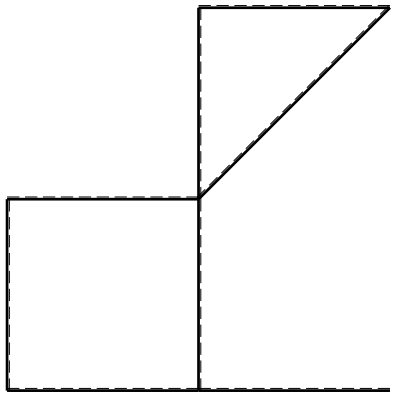
v_A =

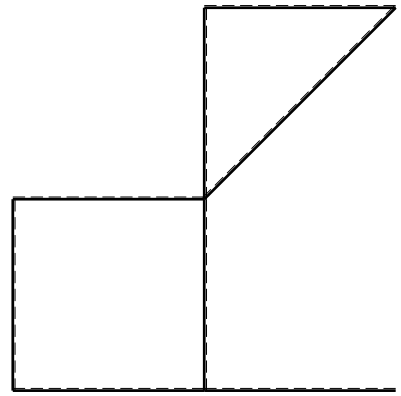
φ_B =
Indicare il verso del riferimento locale AB oppure BA

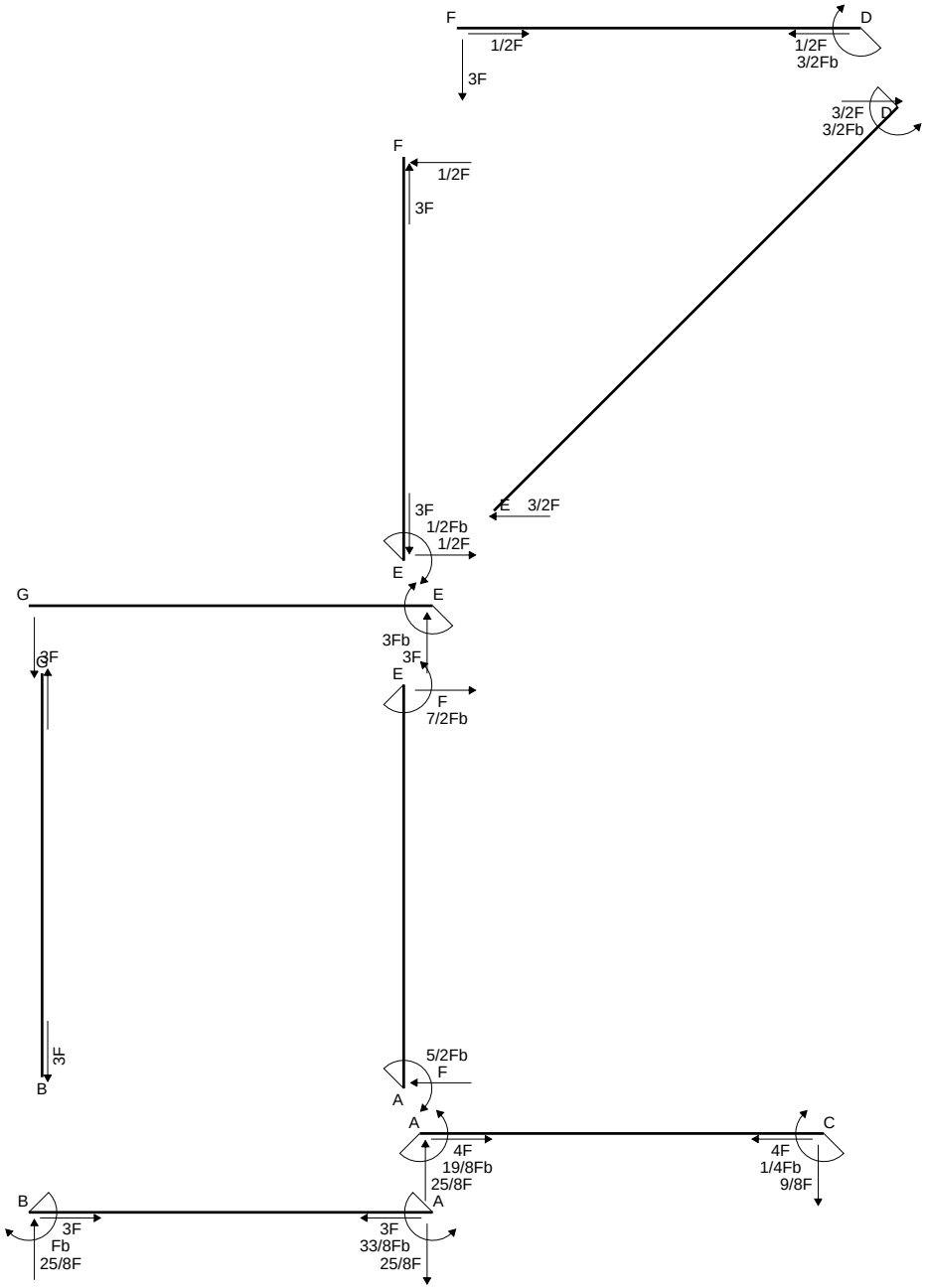
AB BA y(x)EJ=

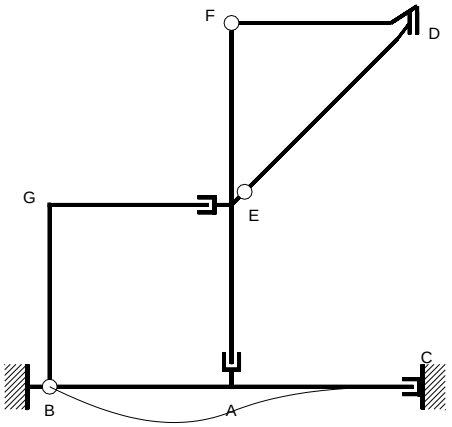
CA AC y(x)EJ=

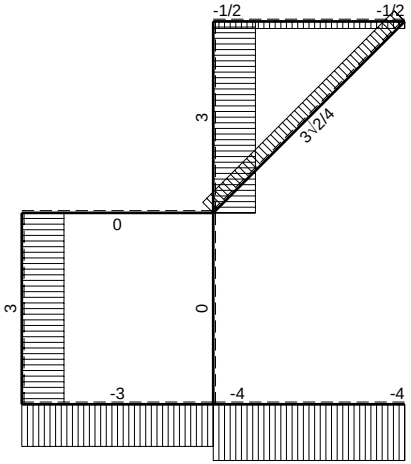




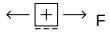


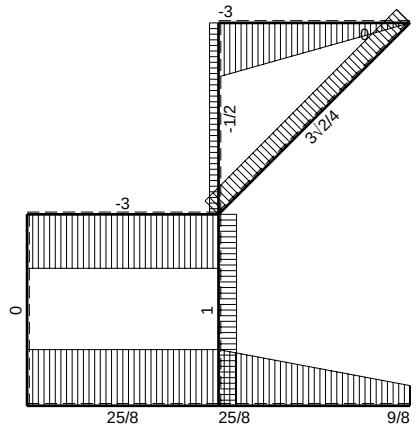


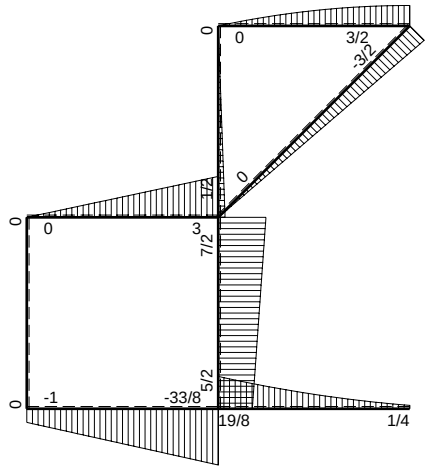


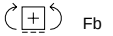


$\longmapsto$ 1.2 Fb^3/EJ



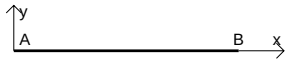






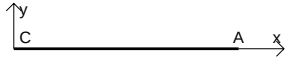
DEFORMATA (coordinate locali)

AB $y(x)EJ = 19/48Fb^3 +55/48xFb^2 -33/16x^2Fb +25/48x^3F$

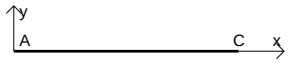


BA $y(x)EJ = -17/12xFb^2 +1/2x^2Fb +25/48x^3F$

CA $y(x)EJ = 1/8x^2Fb +3/16x^3F +1/12x^4q$



AC $y(x)EJ = -19/48Fb^3 +55/48xFb^2 -19/16x^2Fb +25/48x^3F -1/12x^4q$



SPOSTAMENTI ASSOLUTI

$v_A = -19/48(Fb^3/EJ)$

$\varphi_{BBA} = -17/12(Fb^2/EJ)$

Es.N.001

@ Adolfo Zavelani Rossi, Politecnico di Milano, vers.11.05.11 01.06.11