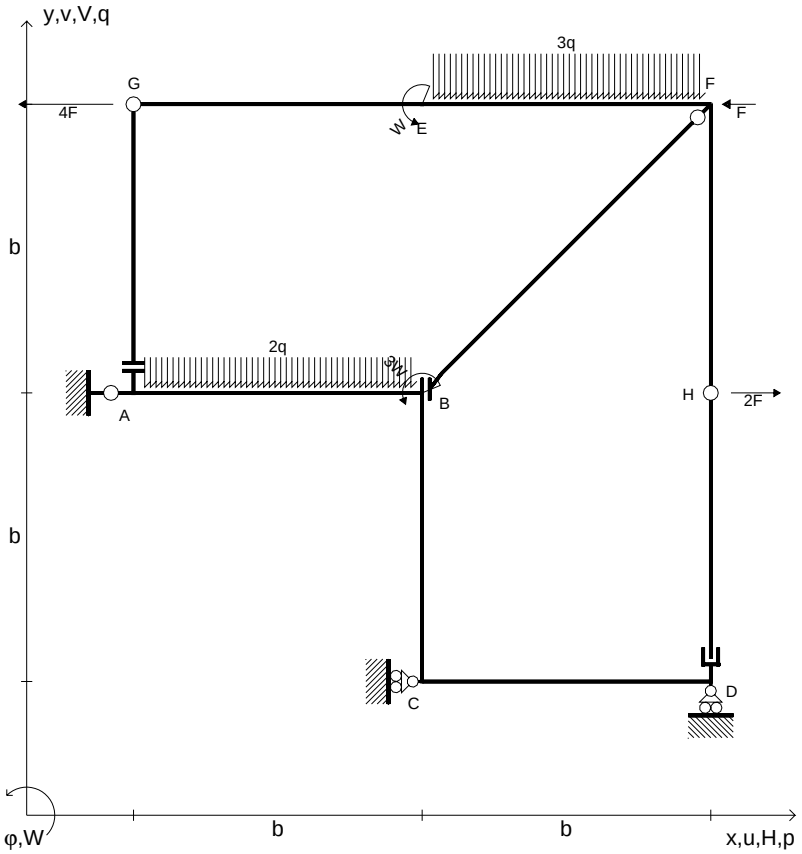
$H_H = 2F$
$H_G = -4F$
$H_F = -F$
$W_B = 3W = 3Fb$
$W_E = W = Fb$
$q_{AB} = -2q = -2F/b$
$q_{EF} = -3q = -3F/b$
$v_B = ?$
$\varphi_C = ?$
$EJ_{AB} = EJ$
$EJ_{CD} = EJ$
$EJ_{BC} = EJ$
$EJ_{EF} = EJ$
$EJ_{GE} = EJ$
$EJ_{GA} = EJ$
$EJ_{HD} = EJ$
$EJ_{FB} = EJ$
$EJ_{FH} = EJ$



.
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 ABCD.
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 CD BC
Carichi di aste curve misurati in proiezione sugli assi x,y.
J_{YZ} - x_{YZ} - θ_{YZ} riferimento locale asta YZ con origine in Y.
Calcolare lo spostamento verticale del nodo B
Calcolare la rotazione assoluta del nodo C

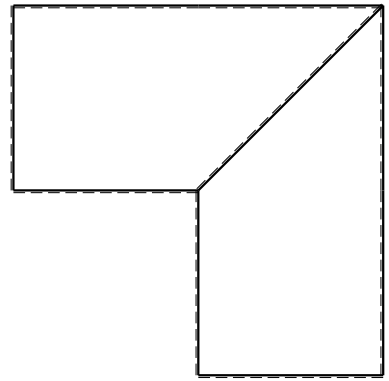
$v_B =$

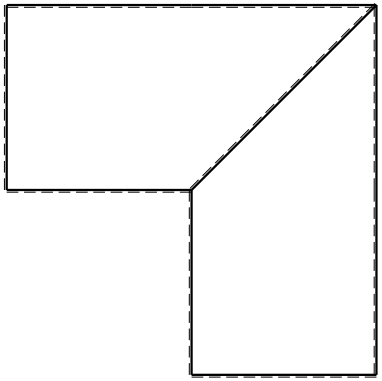
$\varphi_C =$

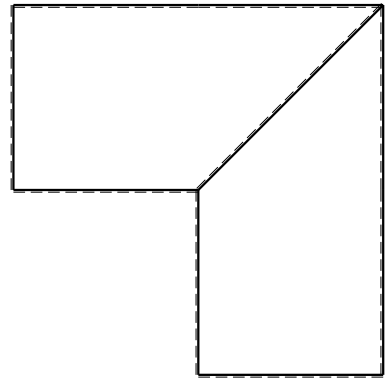
AB y(x)EJ =

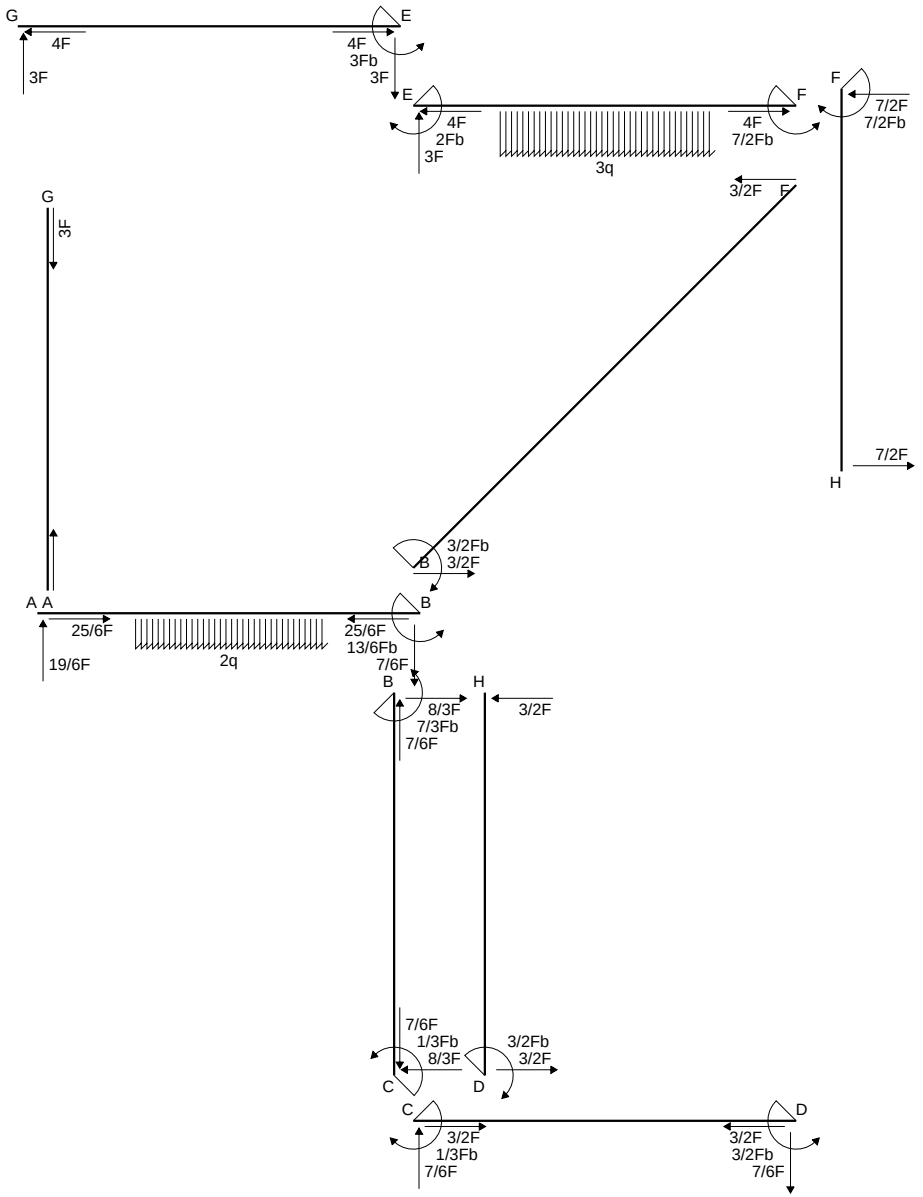
CD y(x)EJ =

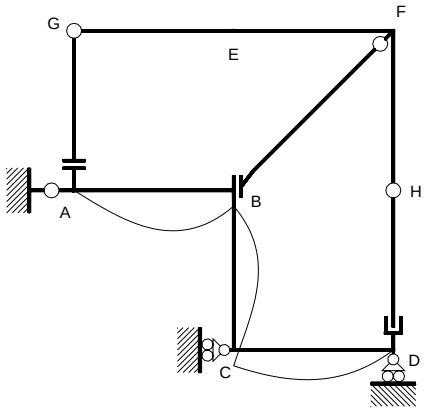
BC y(x)EJ =

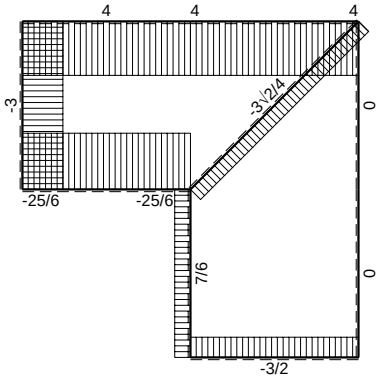






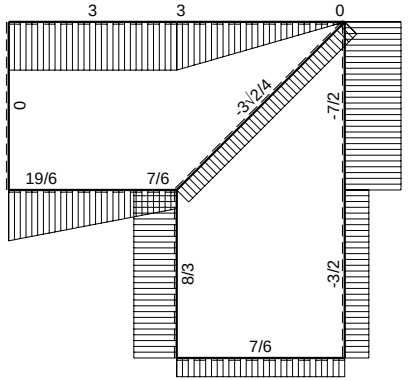


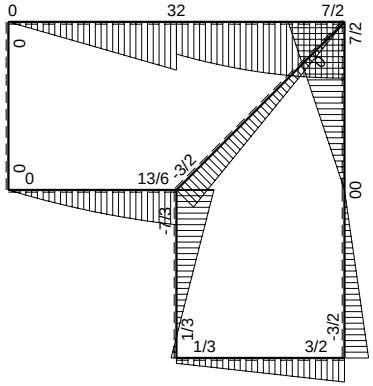




0.4 Fb^3/EJ

F





F

Fb

DEFORMATA (coordinate locali)

AB $y(x)EJ = -19/36xFb^2 +19/36x^3F -1/12x^4q$

BA $y(x)EJ = -1/12Fb^3 -13/18xFb^2 +13/12x^2Fb -7/36x^3F -1/12x^4q$

CD $y(x)EJ = -1/12Fb^3 -5/18xFb^2 +1/6x^2Fb +7/36x^3F$

DC $y(x)EJ = -23/36xFb^2 +3/4x^2Fb -7/36x^3F$

BC $y(x)EJ = 13/18xFb^2 -7/6x^2Fb +4/9x^3F$

CB $y(x)EJ = 5/18xFb^2 +1/6x^2Fb -4/9x^3F$

SPOSTAMENTI ASSOLUTI

$v_B = -1/12(Fb^3/EJ)$

$\varphi_C = -5/18(Fb^2/EJ)$

Es.N.xxxx.001

@ Adolfo Zavelani Rossi, Politecnico di Milano, vers.03.11.08