

Verso effettivo dei carichi riportato nel disegno.

Calcolare reazioni vincolari della struttura e delle aste.

Tracciare i diagrammi delle azioni interne nelle aste.

Esprimere le funzioni delle azioni interne nelle aste.

Calcolare spostamento e rotazione di tutti i nodi.

u_A, v_A, ϕ_A spostamento assoluto del nodo A.

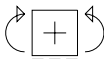
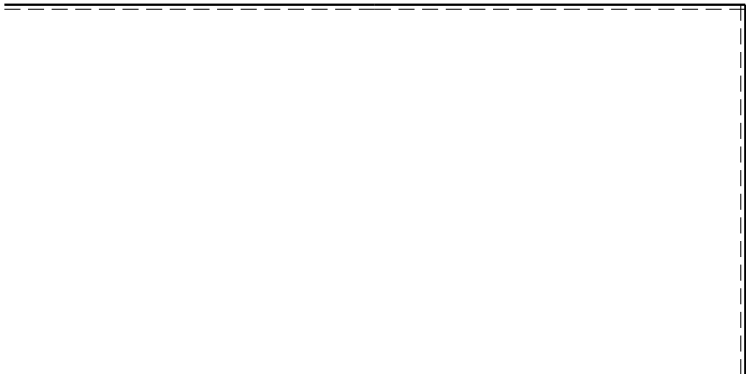
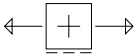
$J_{AB}, x_{AB}, \phi_{AB}$ riferimento locale asta AB con origine in A.

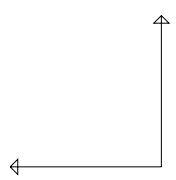
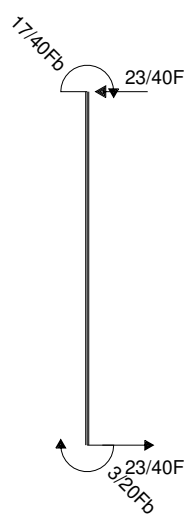
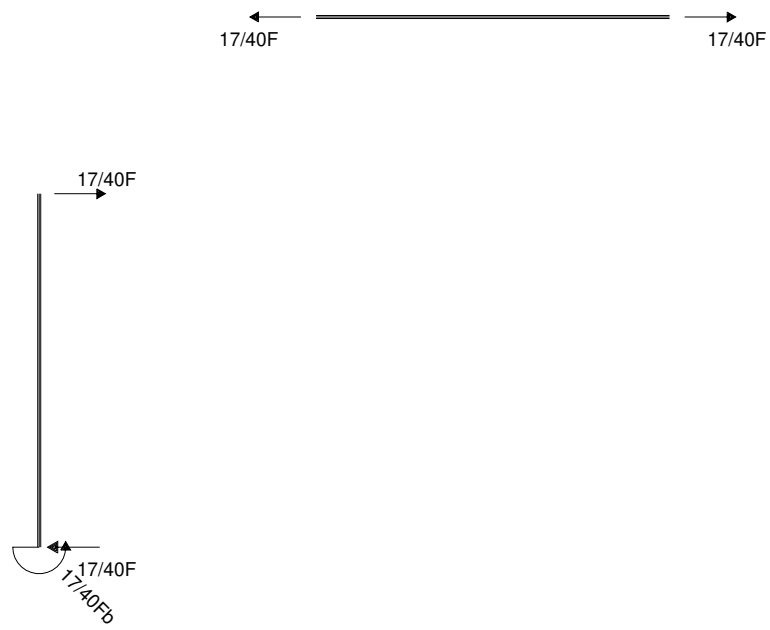
<> ESAME 15/01/2019 - APPELLO 01 - IPERSTATICA

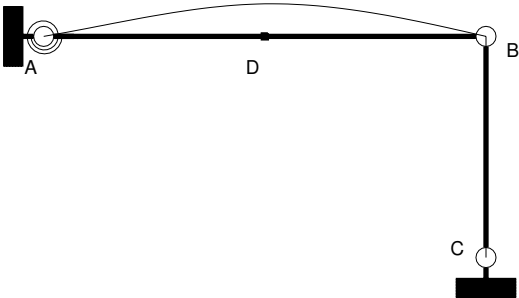
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<> Struttura 1: Iperstatica Test 1

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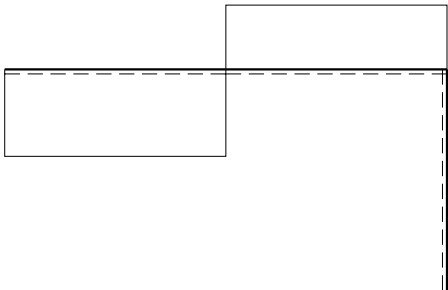




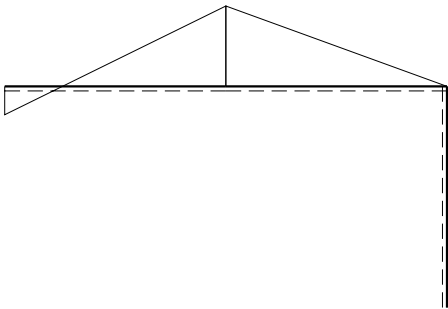
$0.3 F b^3 / EJ$



$0.4 F$



$0.5 F$



$0.4 F b$

REAZIONI

$$H_A = 0$$

$$V_A = -23/40F$$

$$W_A = -3/20Fb$$

$$W_B = 0$$

$$H_C = 0$$

$$V_C = -17/40F$$

$$H_{AD} = 0$$

$$V_{AD} = -23/40F$$

$$W_{AD} = -3/20Fb$$

$$H_{DA} = 0$$

$$V_{DA} = 23/40F$$

$$W_{DA} = -17/40Fb$$

$$H_{DB} = 0$$

$$V_{DB} = 17/40F$$

$$W_{DB} = 17/40Fb$$

$$H_{BD} = 0$$

$$V_{BD} = -17/40F$$

$$W_{BD} = 0$$

$$H_{BC} = 0$$

$$V_{BC} = 17/40F$$

$$W_{BC} = 0$$

$$H_{CB} = 0$$

$$V_{CB} = -17/40F$$

$$W_{CB} = 0$$

SPOSTAMENTI NODALI

$$u_A = 0$$

$$v_A = 0$$

$$\varphi_A = 3/20(Fb^2/EJ)$$

$$u_B = 0$$

$$v_B = 0$$

$$\varphi_B = 0$$

$$u_C = 0$$

$$v_C = 0$$

$$\varphi_{CCB} = 0$$

$$u_D = 0$$

$$v_D = 31/240(Fb^3/EJ)$$

$$\varphi_D = 1/80(Fb^2/EJ)$$

AZIONI INTERNE (coordinate locali)

$$N_{AD} = 0$$

$$T_{AD} = -23/40F$$

$$M_{AD} = 3/20Fb - 23/40Fx$$

$$N_{DB} = 0$$

$$T_{DB} = 17/40F$$

$$M_{DB} = -17/40Fb + 17/40Fx$$

$$N_{BC} = 17/40F$$

$$T_{BC} = 0$$

$$M_{BC} = 0$$