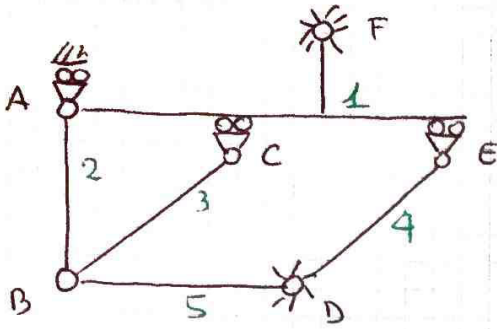


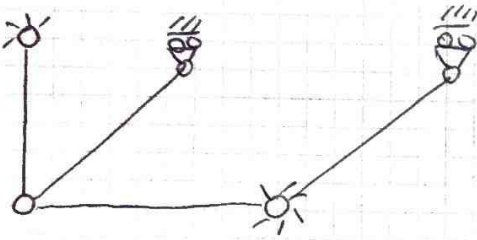
# RIPASSO CINEMATICA

$$GdL = 3m = 15$$

$$\sum GdV = 3_A + 4_B + 1_C + 4_D + 1_E + 2_F = 15$$



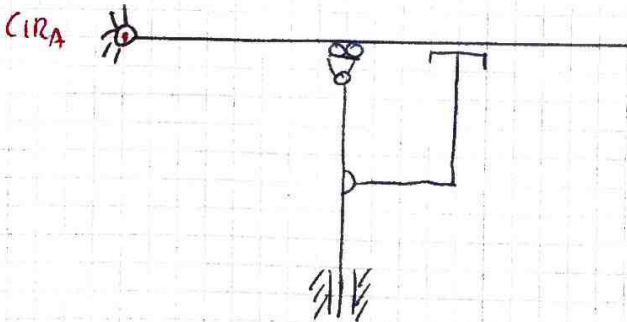
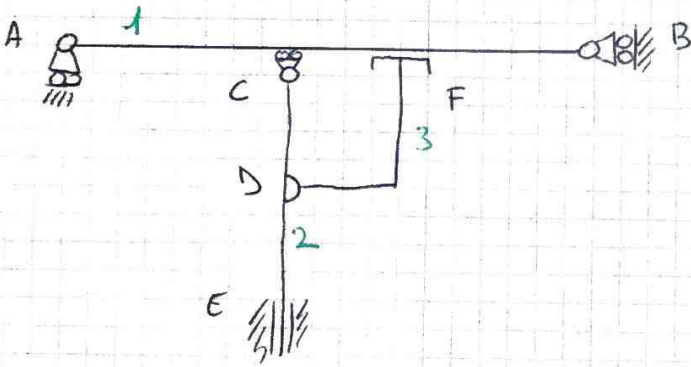
Asta 1: Ben vincolata a terra



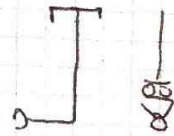
Anco a tre cerniere A-B-D

$$GdL = 3m = 9$$

$$\sum GdV = 1_A + 1_B + 1_C + 2_D + 2_E + 2_F = 9$$

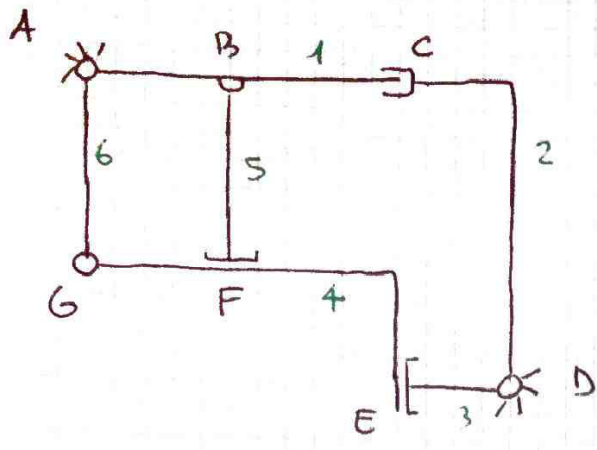


Asta 3: biella



→ CIRE ∞

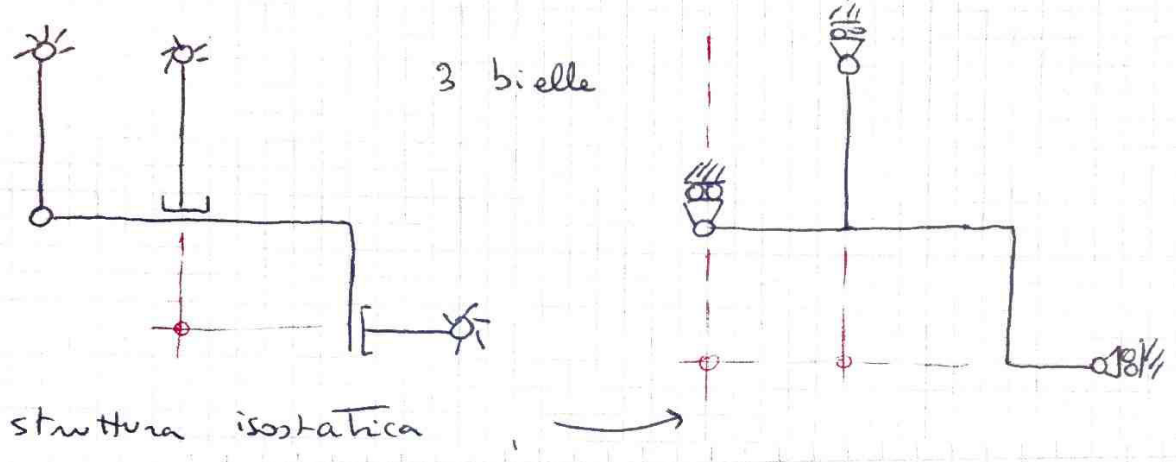
labile

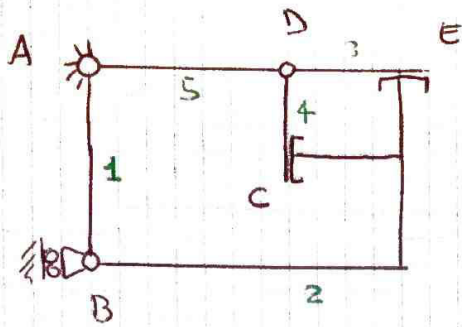


$$G_{dl} = 3m = 18$$

$$\sum G_{dl} = 4_A + 2_B + 2_C + 4_D + 2_E + 2_F + 2_G = 18$$

Aster 1-2 → A-C-D arco a tre cerniere non allineato

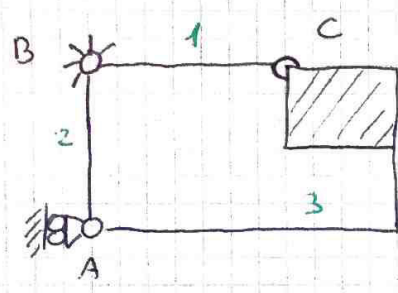




$$\sum GdL = 4_A + 3_B + 2_C + 4_D + 2_E = 15$$

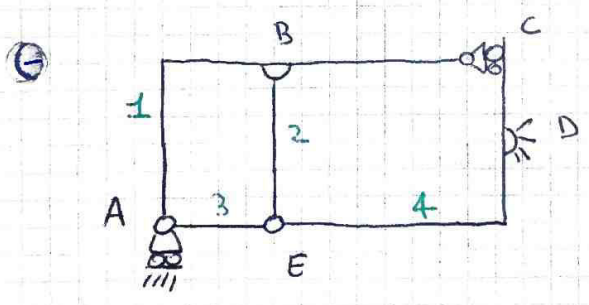
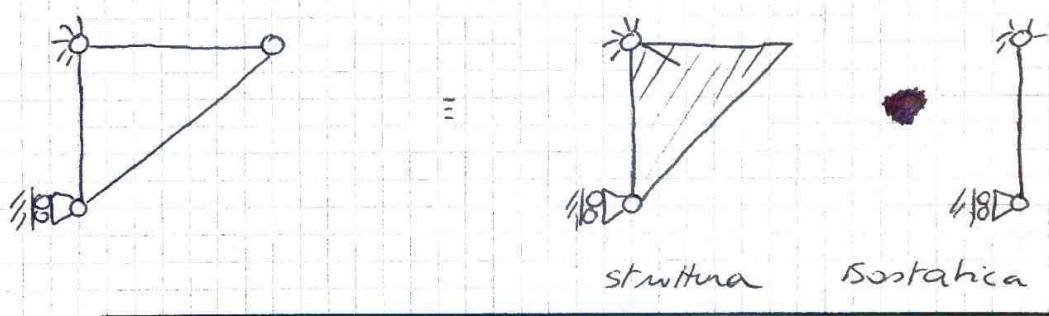
$$GdL = 3m = 15$$

(3-4-2) formano un anello chiuso isostatico, lo possiamo sostituire con un corpo rigido -



$$GdL = 3m = 9$$

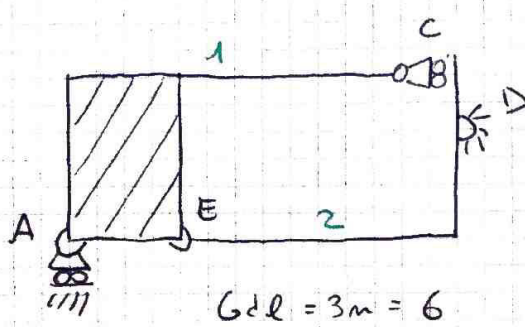
$$\sum GdL = 3_A + 4_B + 2_C = 9$$



$$GdL = 3m = 12$$

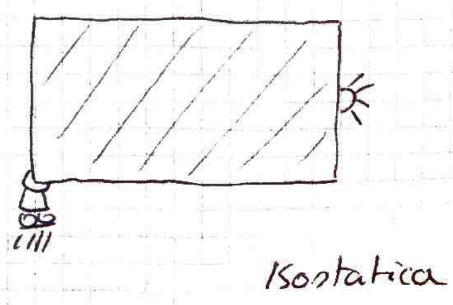
$$\sum GdL = 3_A + 2_B + 1_C + 2_D + 4_E = 12$$

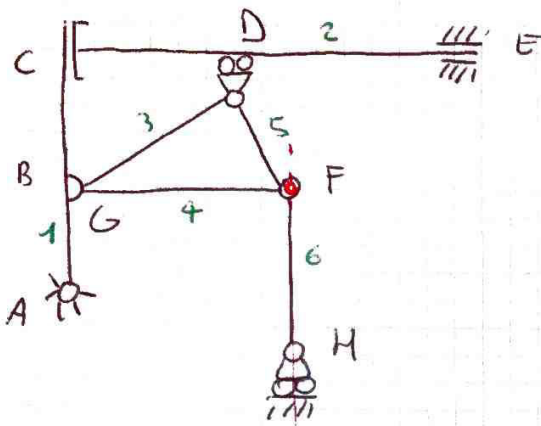
Anello chiuso in traliccio isostatico: Asle 1-2-3



$$GdL = 3m = 6$$

$$\sum GdL = 1_A + 1_C + 2_E + 2_D = 6$$





$$Gdl = 3m = 18$$

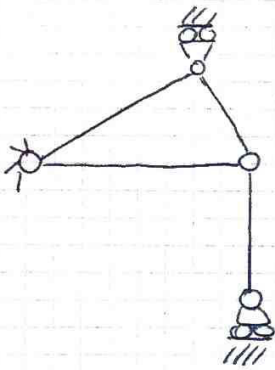
$$\sum GdU = 2A + 4B + 2C + 3D + 2E + 4F + 1H = 18$$

ASTA 6: l'asta 6 è labile

Aste 1-2 formano un arco a 3 cerniere non allineate



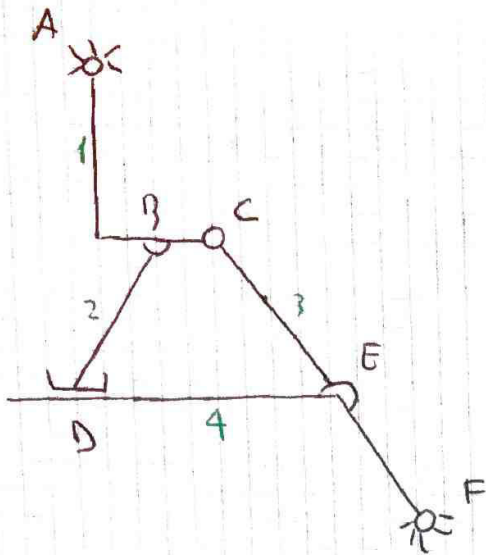
CIRCO



=



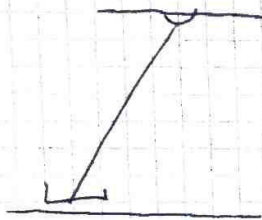
labile



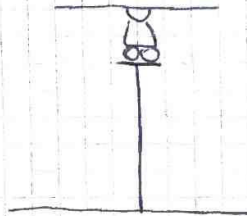
$$GdL = 3m = 12$$

$$\sum GdV = 2_A + 2_B + 2_C + 2_D + 2_E + 2_F = 12$$

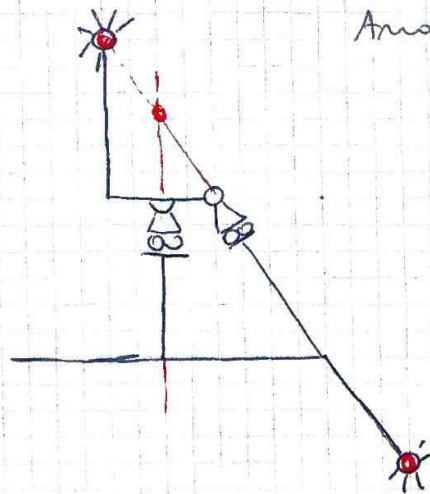
ASTA 2:



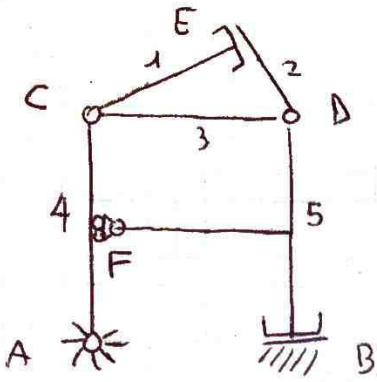
=



ASTA 3: biella



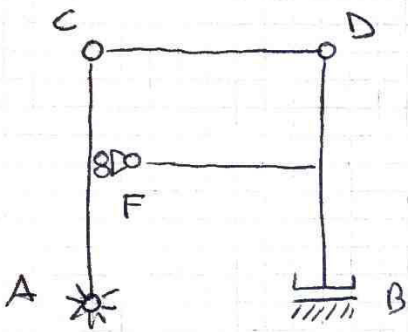
Arro a 3 cerniere allineate



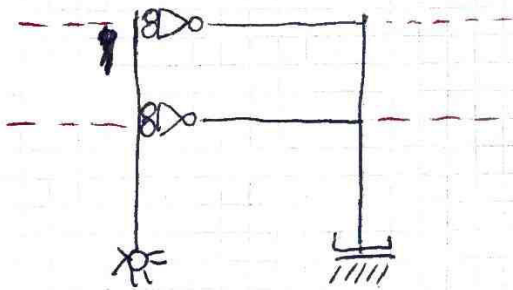
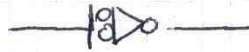
$$Gdl = 3 \cdot n = 15$$

$$\sum Gdu = 2_A + 4_C + 2_E + 4_C + 2_B + 1_F = 15$$

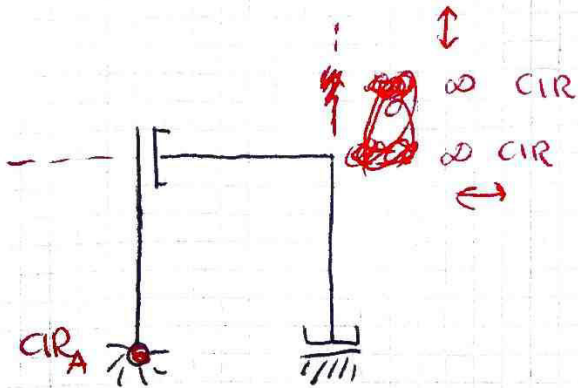
Insieme di aste C-D-E anello chiuso internamente isostatico - (lo posso escludere, ovviamente dal punto di vista "cinematico") -



$\overline{CD} \rightarrow$  biella, la sostituisco con



si incontrano all'inf-ito (proiezione proiettiva)



Arco a 3 cerniere non allineate

Struttura isostatica -