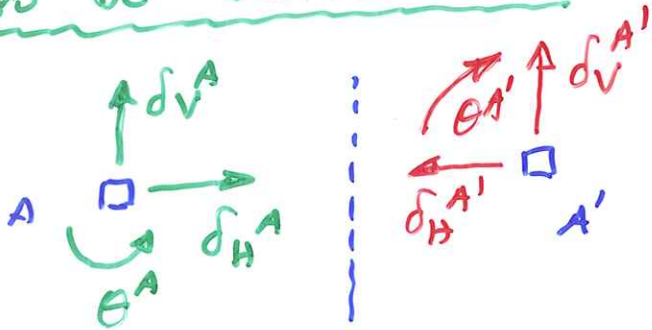


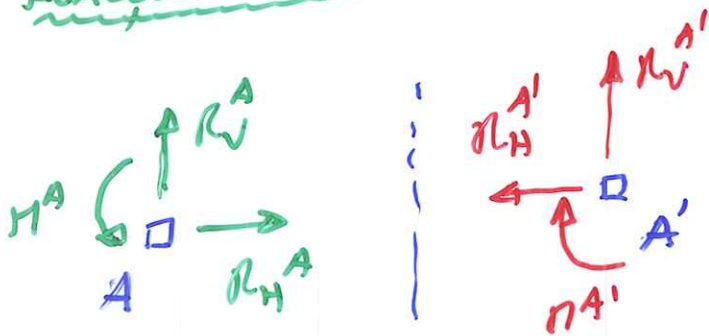
# ESTRUTURA SIMÉTRICA CARGAMENTO SIMÉTRICO

## CAMPO DE DESLOCAMENTOS



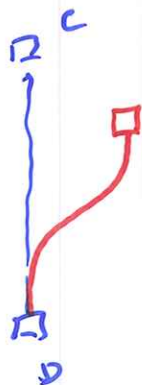
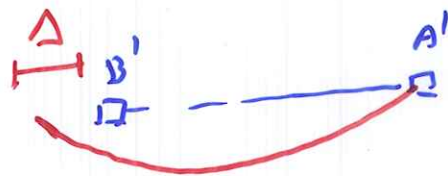
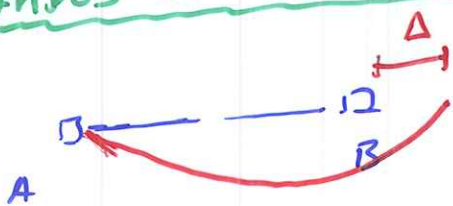
$$\begin{cases} \delta V^{A'} = + \delta V^A \\ \delta H^{A'} = - \delta H^A \\ \theta^{A'} = - \theta^A \end{cases}$$

## REAÇÕES DE APOIO



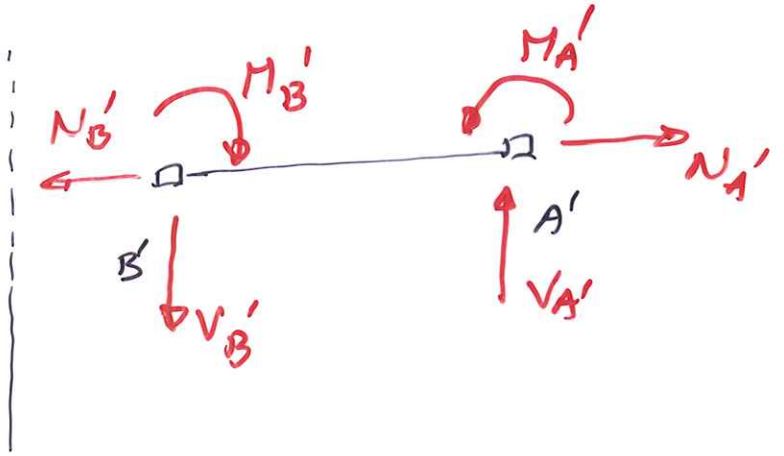
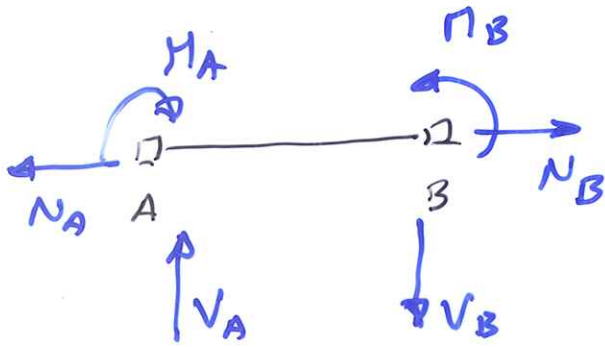
$$\begin{cases} R_V^{A'} = + R_V^A \\ R_H^{A'} = - R_H^A \\ M^{A'} = - M^A \end{cases}$$

## CAMPOS DE DEFORMAÇÃO



ESTRUTURA SIMÉTRICA  
CARREGAMENTO SIMÉTRICO

CAMPOS DE ESFORÇOS



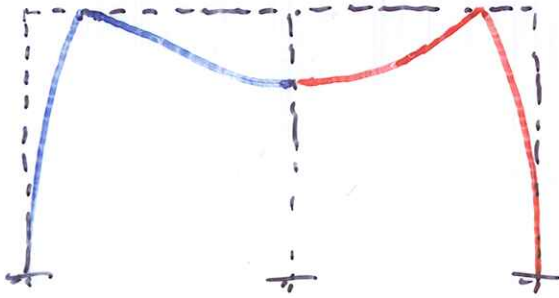
ESTRUTURA

SIMÉTRICA

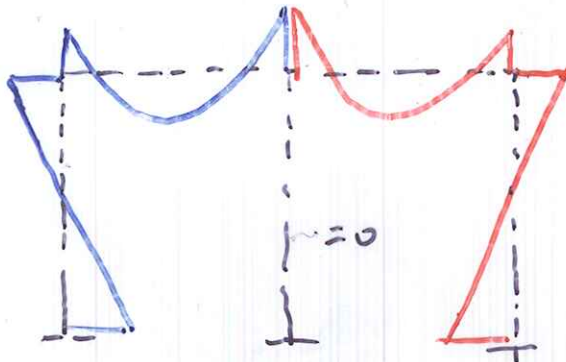
CARREGAMENTO

SIMÉTRICO

Deformada Simétrica

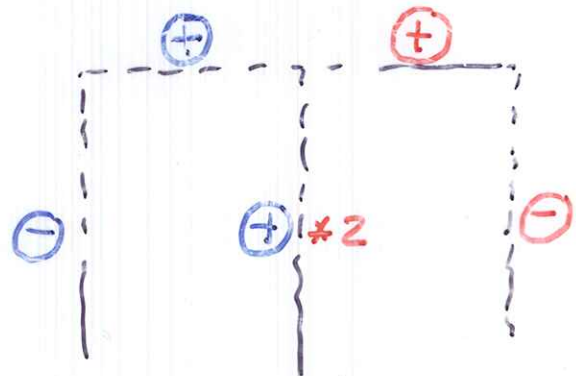
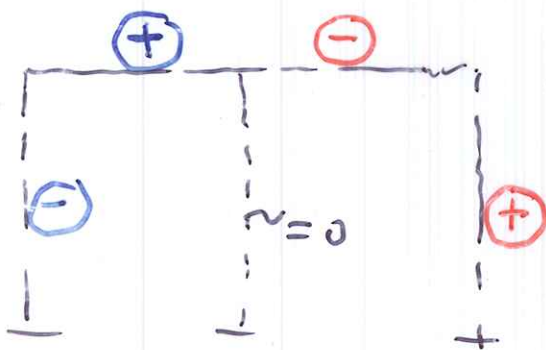


(M) Simétricos em Tragado



(V) Antissimétricos em valor.

(N) Simétricos em valor.



ESTRUTURA — SIMÉTRICA  
CARGAMENTO — SIMÉTRICO

