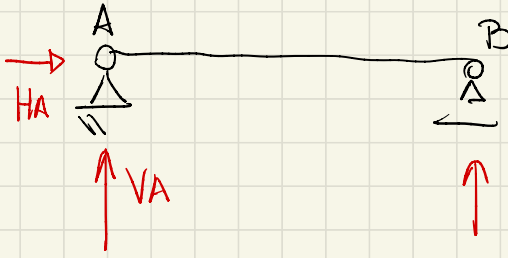
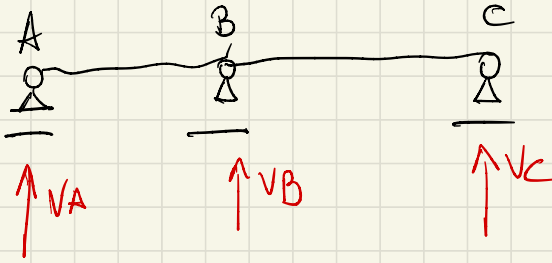


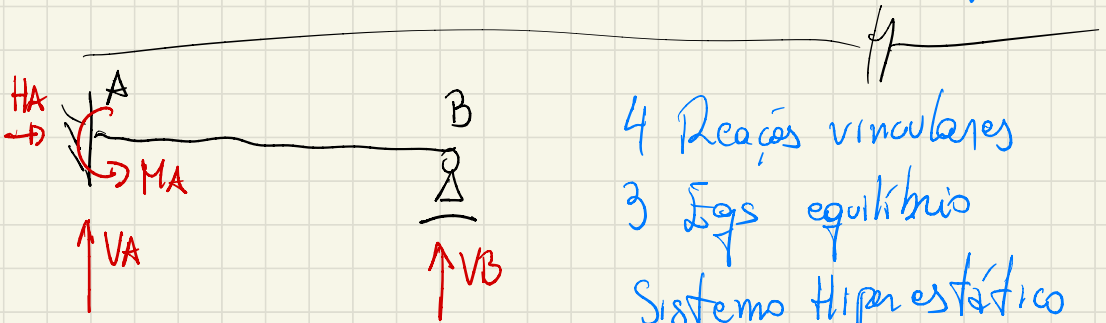
Cuidado



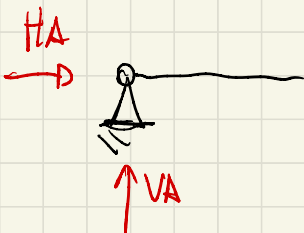
3 Eqs de equilíbrio
3 incógnitas
Vinculares
Sist. Isostático
"Foco do curso"



Posso ter movimento
de corpo rígido
Sistema hipostático



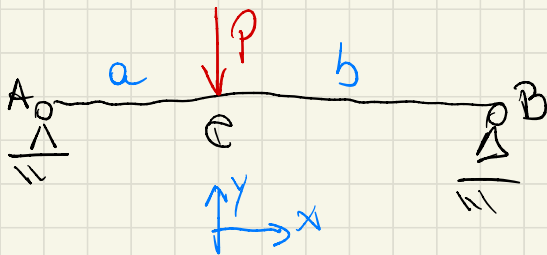
4 Reações vinculares
3 Eqs equilíbrio
Sistema hiperestático



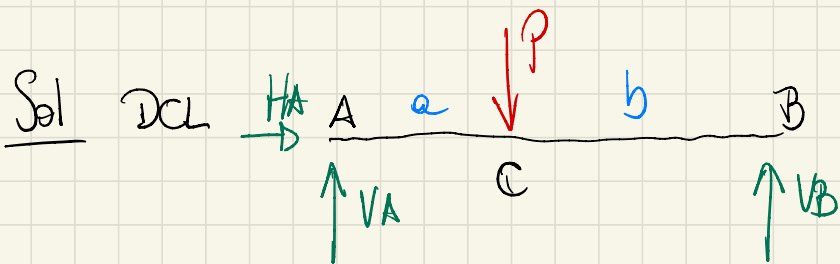
2 Eqs vinculares
3 Eqs equilíbrio

Sist. hipostático
"Mov. de
corpo rígido"

Exemplo



Achar
reações
vinculares!



V_A, V_B, H_A
reações vin-
culares (esforços
externos rea-
tivos)

P esforço externo ativo

Equilíbrio $\sum F_x = 0 \Rightarrow H_A = 0$

$$\sum F_y = 0 \Rightarrow V_A - P + V_B = 0$$
$$\Leftrightarrow \boxed{V_A + V_B = P} \quad (a)$$

$$\sum M_A = 0 \Rightarrow -P a + V_B (a+b) = 0$$

$$\Rightarrow \boxed{V_B = \frac{P a}{a+b}} \quad (b)$$

De (a) e (b)

$$\boxed{V_A = \frac{P b}{a+b}}$$

Se $a=b$

$$V_A = \frac{P}{2} = V_B$$

Para presença

Achar as reações vinculares

$P/$

