

# TAREFA 7

## Questão 2

u1= -10000 x^2 20000 x

u1= 2500 x^4 -10000 x^3 20000 x

## Proposit.1

Mmax= 20000 Nm

V(x=0)= 0 N

Delta\_max= 10000 m

## Proposit. 2

Mmax= 30000 Nm

V(x=0)= 60000 N

Delta\_max= 12500 m

## Exata

Mmax= 30000 Nm

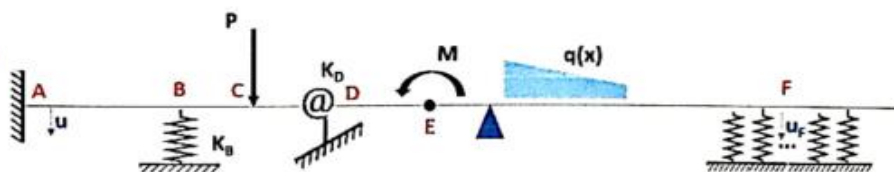
V(x=0)= 60000 N

Delta\_max= 12500 m

## Questão 1

### Tarefa 1:

E agora? Você conseguiria construir o funcional deste problema?  $(z, 0)$



$$\begin{aligned} \Pi = & \frac{1}{2} \int \epsilon I \left( \frac{d^2 u}{dx^2} \right)^2 dx + \frac{1}{2} \int K_F u_F^2 dx + \frac{1}{2} K_D \left( \frac{du_D}{dx} \right)^2 \\ & + \frac{1}{2} K_B u_B^2 - P u_C - M \left( \frac{du_E}{dx} \right) - \int q(x) u dx \end{aligned}$$