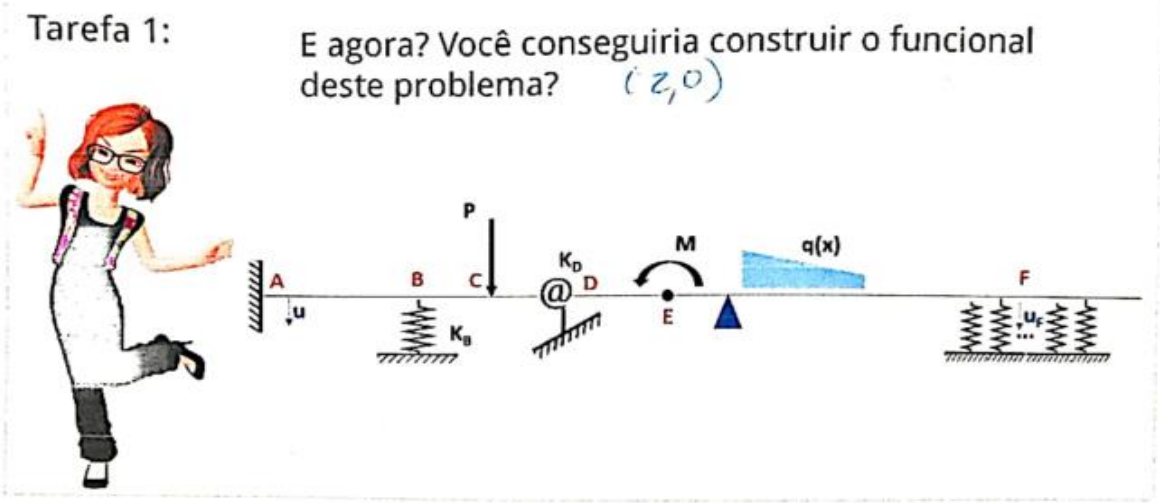
TAREFA 7

Questão 2

u1=	-10000	x^2	20000	x		
u1=	2500	x^4	-10000	x^3	20000	x

Proposit.1			Proposit. 2			Exata		
Mmax=	20000	Nm	Mmax=	30000	Nm	Mmax=	30000	Nm
V(x=0)=	0	N	V(x=0)=	60000	N	V(x=0)=	60000	N
Delta_max=	10000	m	Delta_max=	12500	m	Delta_max=	12500	m

Questão 1



$$\Pi = \frac{1}{2}\int EI\left(\frac{d^2u}{dx^2}\right)^2 dx + \frac{1}{2}\int K_F u_F^2\, dx + \frac{1}{2}K_D\left(\frac{du_D}{dx}\right)^2$$

$$+ \frac{1}{2}K_B u_B^2 - P u_C - M\left(\frac{du_E}{dx}\right) - \int q(x)\, u\, dx$$