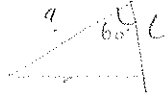
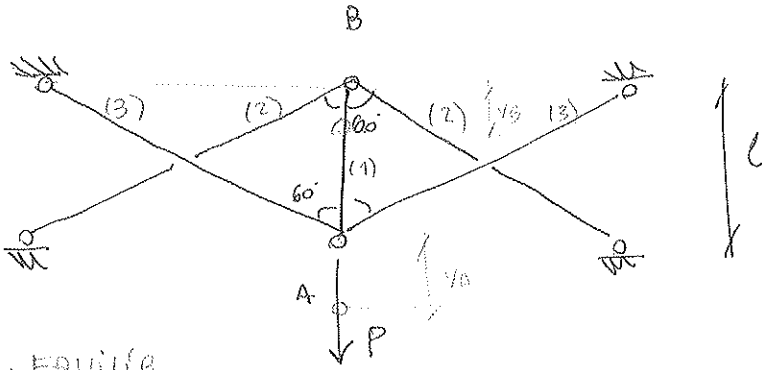


Exercício



$\cos 60^\circ = \frac{L}{2}$   
 $2 = 2L$

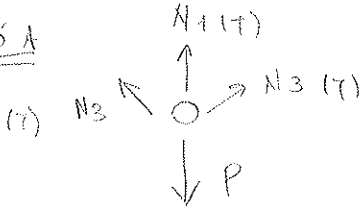
ADRIANA OGAWA  
8555831



$\delta L_3 \quad \delta L_2$   
 $\downarrow \quad \downarrow$   
 $\delta VA - \delta VB = \delta L_1$

1º EQ. EQUILIB.

Nº A

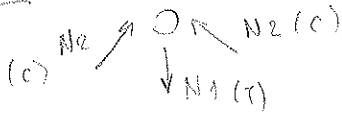


$\rightarrow N_1 + 2 \cdot \frac{N_3}{2} = P$

$N_1 + N_3 = P$

$N_3 = P - N_1$

Nº B



$\rightarrow 2 \cdot \frac{N_2}{2} - N_1 = 0$

$N_1 = N_2$



$\sin 60^\circ = \frac{?}{N_3}$

$\frac{1}{2} = \frac{?}{N_3}$

$? = \frac{N_3}{2}$

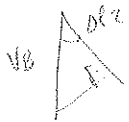
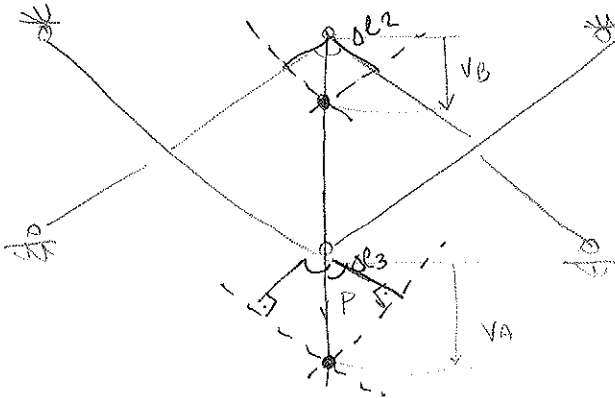


$\cos 60^\circ = \frac{?}{N_2}$

$\frac{1}{2} = \frac{?}{N_2}$

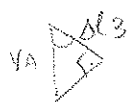
$? = \frac{N_2}{2}$

2º EQ. COMPATIB.



$\frac{1}{2} = \frac{\delta L_2}{V_B}$

$V_B = 2 \delta L_2$



$\frac{1}{2} = \frac{\delta L_3}{V_A}$

$V_A = 2 \delta L_3$

$4N_3 - 4N_2 = N_1$

$4N_3 - 4N_1 - N_1 = 0$

$4N_3 - 5N_1 = 0$

$4(P - N_1) - 5N_1 = 0$

$4P - 4N_1 - 5N_1 = 0$

$4P = 9N_1$

$N_2 = N_1 = \frac{4}{9} P$

$N_3 = \frac{3P}{9} - \frac{4}{9} P$

$N_3 = \frac{5P}{9}$

$V_A - V_B = \delta L_1$

$2\delta L_3 - 2\delta L_2 = \delta L_1$

$\frac{2 \cdot N_3 \cdot 2L}{EA} - 2 \cdot \frac{N_2 \cdot 2L}{EA} = \frac{N_1 \cdot L}{EA}$