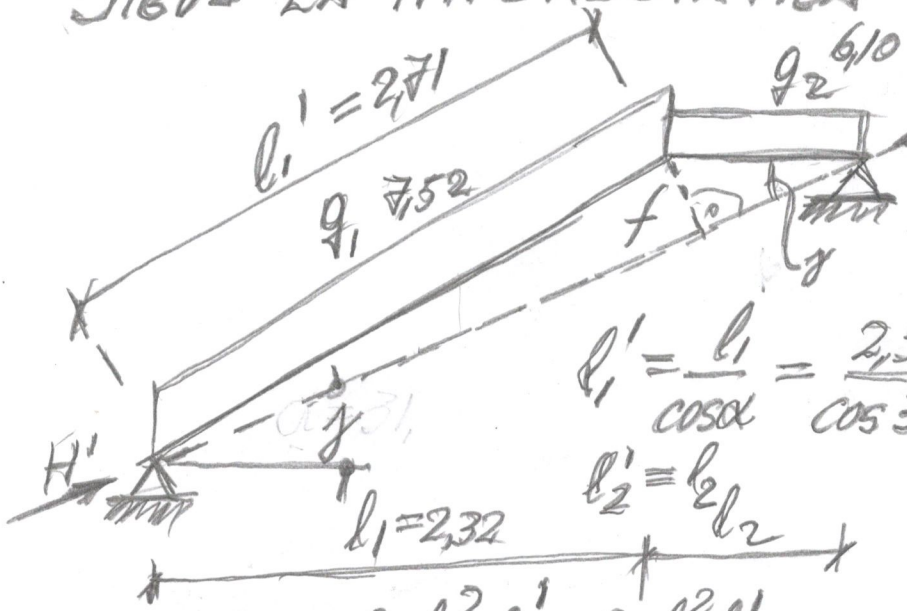
SIGUE LA HIPERESTÁTICA



$$l_1' = \frac{l_1}{\cos\alpha} = \frac{2{,}32\,m}{\cos 31{,}1^\circ} \cong 2{,}71\,m$$

$$M_2^0 \bar{o} M_c = \frac{q_1 \cdot l_1^2 l_1' + q_2 l_2^2 l_2'}{-8(l_1' + l_2')} =$$

$$= \frac{7{,}52\,\frac{kN}{m^2} \cdot 2{,}32^2\,m^2 \cdot 2{,}71\,m + 6{,}1\,\frac{kN}{m^2} \cdot 1{,}1^2\,m^2 \cdot 1{,}1\,m}{-8(2{,}71\,m + 1{,}1\,m)} = -3{,}87\,\frac{kNm}{m}$$

$$\gamma = tg^{-1}(1{,}4\,m / 3{,}42\,m) = 22{,}26^\circ (\cong 22{,}3^\circ)$$

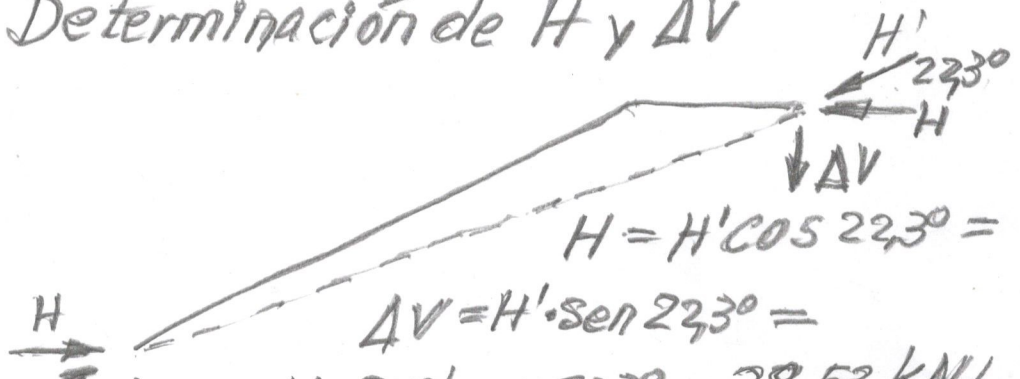
$$f = 1{,}1\,m \cdot \operatorname{sen} 22{,}3^\circ \cong 0{,}417\,m$$

$$H' \cdot f = M_2^0 - M_2 \therefore$$

$$H' = \left(\left(8{,}99\,\frac{kNm}{m} - \left(-3{,}87\,\frac{kNm}{m}\right)\right)\right) / 0{,}417\,m =$$

$$= 30{,}84\,kN/m$$

Determinación de H y ΔV



$$H = H' \cos 22{,}3^\circ =$$

$$\Delta V = H' \cdot \operatorname{sen} 22{,}3^\circ =$$

$$H = 30{,}84 \cdot \cos 22{,}3^\circ = 28{,}53\,kN/m$$

$$\Delta V = 30{,}84 \cdot \operatorname{sen} 22{,}3^\circ = 11{,}70\,"$$