

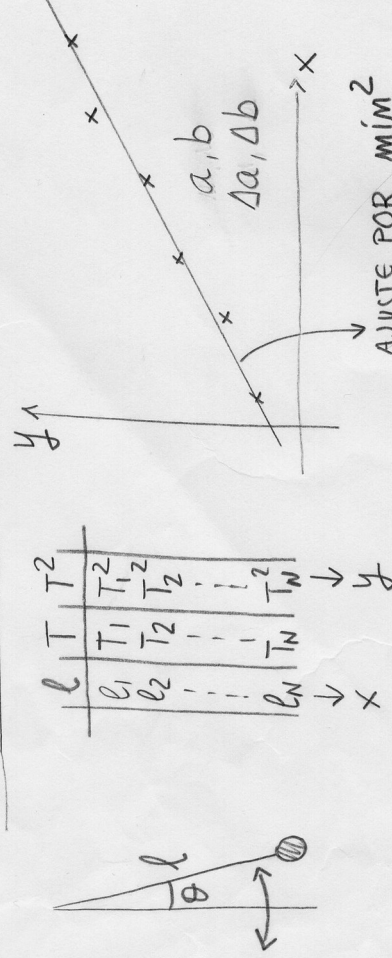
PENDULO SIMPLE

$$T = 2\pi \sqrt{\frac{l}{g}} \Rightarrow T^2 = \frac{4\pi^2}{g} l \Rightarrow \left(\begin{matrix} y = T^2 \\ x = l \end{matrix} \right)$$

LEY TEÓRICA

$$y = \frac{4\pi^2}{g} x$$

PROCEDIMIENTO EXPERIMENTAL



CONCLUSIONES

$$\textcircled{1} a = \frac{4\pi^2}{g} \Rightarrow g = \frac{4\pi^2}{a}$$

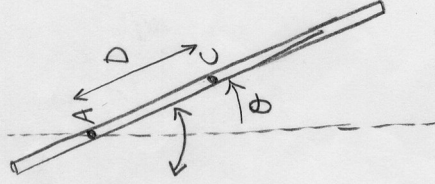
$$\textcircled{2} b \approx 0 \text{ DENTRO DE LOS ERRORES}$$

RESULTADO

$$g \pm \Delta g$$

REDONDEADO

PENDULO COMPUESTO



$$T = 2\pi \sqrt{\frac{I_A}{MgD}} \text{ CON } I_A = I_C + MD^2 \text{ (STEINER)}$$

$$I_C = M \cdot K^2 \text{ (RADIO DE GIRA)}$$

$$T = 2\pi \sqrt{\frac{K^2 + D^2}{gD}} \Rightarrow T^2 D = \frac{4\pi^2}{g} D^2 + \frac{4\pi^2 K^2}{g}$$

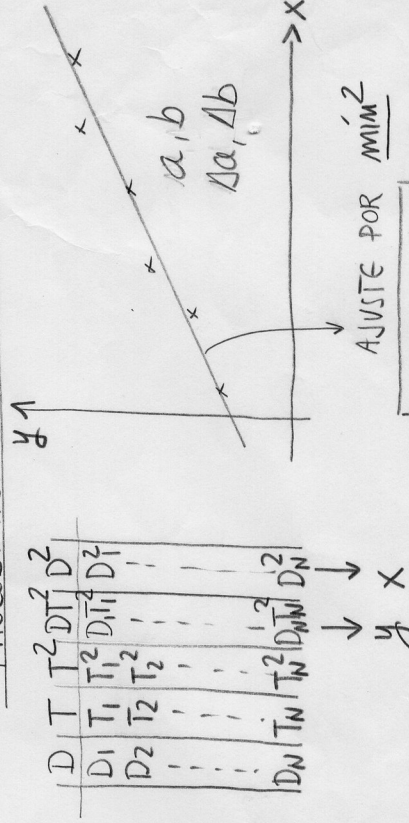
$$\text{CAMBIO A LAS VARIABLES: } y = T^2 D$$

$$x = D^2$$

$$y = \frac{4\pi^2}{g} x + \frac{4\pi^2 K^2}{g}$$

LEY TEÓRICA

PROCEDIMIENTO EXPERIMENTAL



CONCLUSIONES

$$\textcircled{1} a = \frac{4\pi^2}{g} \Rightarrow g = \frac{4\pi^2}{a}$$

$$\textcircled{2} b = \frac{4\pi^2 K^2}{a} \Rightarrow K = \frac{1}{2\pi} \sqrt{bg} \text{ y } \Delta K = \frac{K}{2} \left(\frac{\Delta b}{b} + \frac{\Delta g}{g} \right)$$