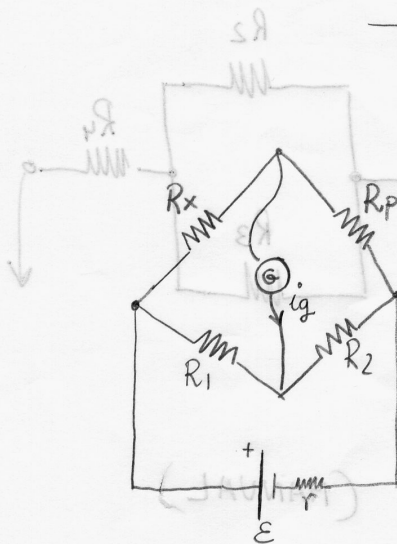


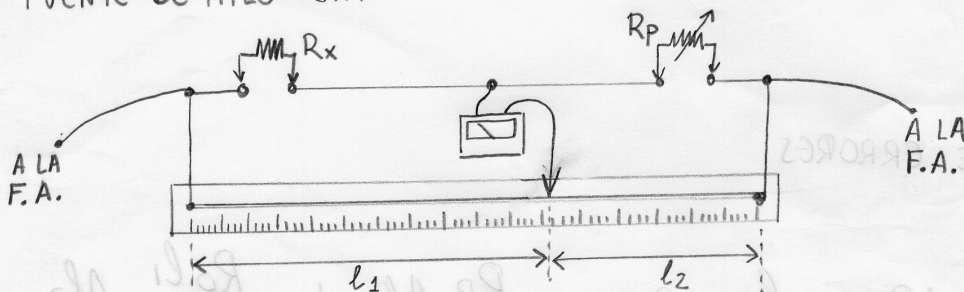
MEDIDA EXPERIMENTAL DE RESISTENCIAS

(PUENTE DE WHEATSTONE/HILO)



EQUILIBRIO : $I_g = 0 \Rightarrow \frac{R_x}{R_p} = \frac{R_1}{R_2} \Rightarrow R_x = R_p \cdot \frac{R_1}{R_2}$

EL PUENTE DE HILO ESTA BASADO EN EL PUENTE DE WHEATSTONE ANTERIOR

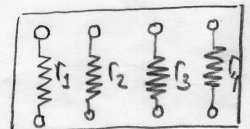


$$R_x = R_p \cdot \frac{R_1}{R_2} = R_p \cdot \frac{l_1}{l_2} = R_p \cdot \frac{l_1}{(L - l_1)}$$

$$R_1 = \rho \cdot \frac{l_1}{S}$$

$$R_2 = \rho \cdot \frac{l_2}{S}$$

OBJETIVO: DETERMINAR EL VALOR DE LAS RESISTENCIAS



	r_1	r_2	r_3	r_4	r_5	r_p	r_m	r_A
l_1								
l_2								
R_p								

$$r_s = \text{SERIE} (r_1, r_2, r_3, r_4)$$

$$r_p = \text{PARALELO} (r_1, r_2, r_3, r_4)$$

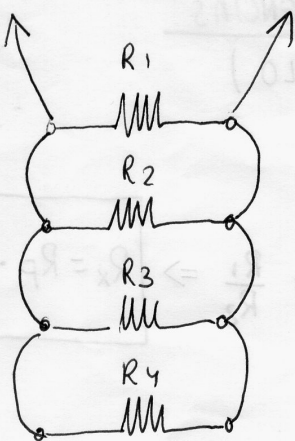
$$r_m = \text{MANUAL} (r_1, r_2, r_3, r_4)$$

$$r_A = \text{ALUMNO} (r_1, r_2, r_3, r_4)$$

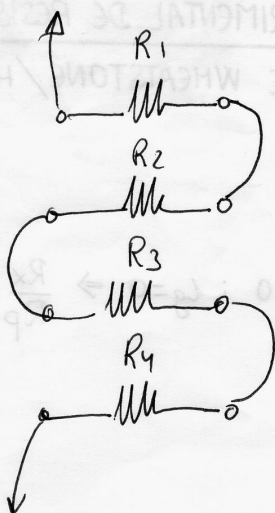
NO OLVIDAR

*CALCULO DE ERRORES EN LA FORMULA

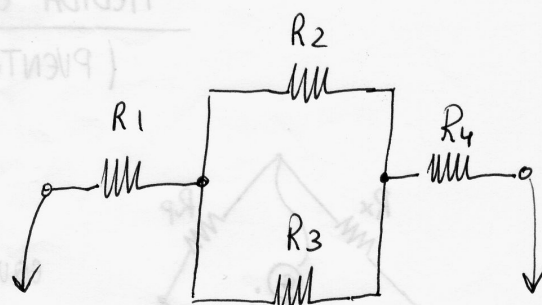
$$R_x = R_p \cdot \frac{l_1}{l_2}$$



(PARALELO)



(SERIE)

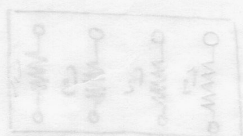


(MANUAL)

CALCULO DE ERRORES

$$\Delta R_x = \frac{l_1}{l_2} \Delta R_p + \frac{R_p}{l_2} \Delta l_1 + \frac{R_p l_1}{l_2^2} \Delta l_2$$

$\uparrow$ $\uparrow$ $\uparrow$
 1Ω $1mm$ $1mm$



OBJETIVO: DETERMINAR EL VALOR DE LA RESISTENCIA

	1	2	3	4	5	6	7	8	9	10
R_p										
l_1										
l_2										

$T_2 = \text{SERIE } (l_1, l_2, l_3, l_4)$
 $T_3 = \text{PARALELO } (l_1, l_2, l_3, l_4)$
 $T_4 = \text{MANUAL } (l_1, l_2, l_3, l_4)$
 $T_5 = \text{ALUMNO } (l_1, l_2, l_3, l_4)$

NO OLVIDAR
 *CALCULO DE
 ERRORES EN LA
 FORMULA
 $R_x = R_p \cdot \frac{l_1}{l_2}$