

PROPUESTA ESCRITA EXAMEN / ELECTRICIDAD

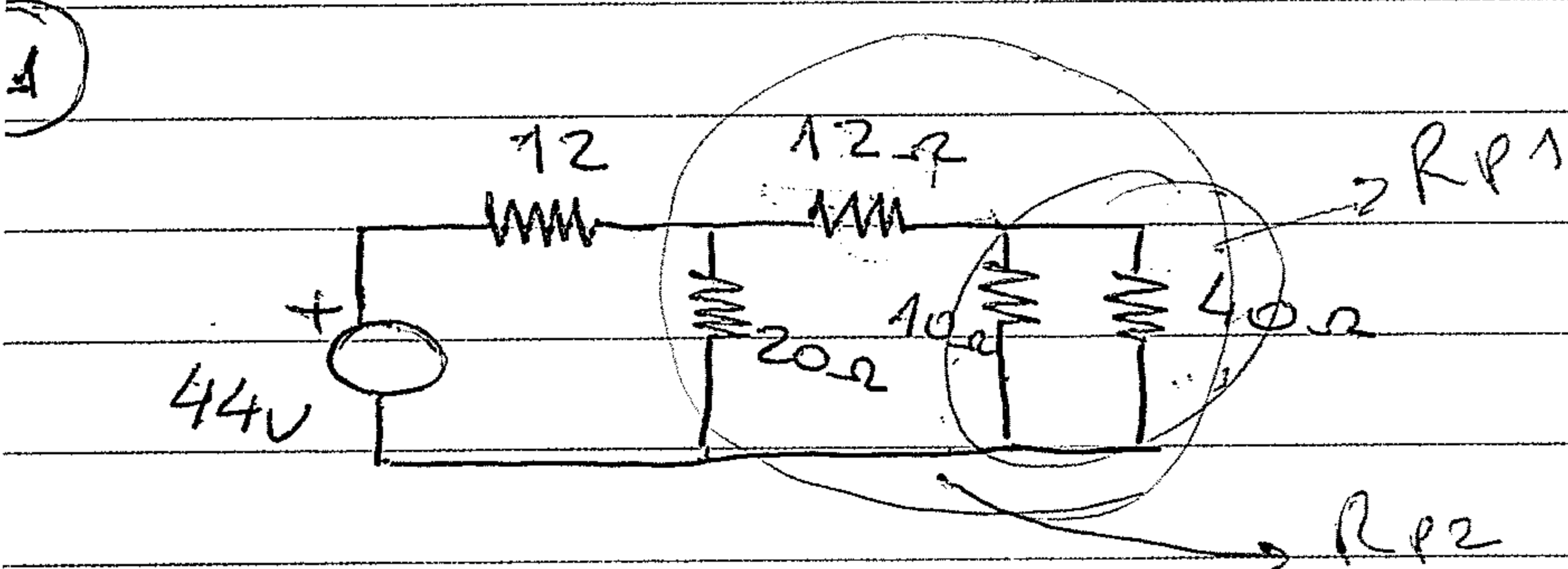
FEBRERO 2016 1º AÑO EST.

NOMBRE:

APELLIDO:

GRUPO:

FECHA:



Hallar R_T , I_T , P_T .

2) Un conductor de sección 2 mm^2 tiene una resistencia de 10Ω , el valor coeficiente de resistividad es $0,0172 \frac{\Omega \cdot \text{m}}{\text{m}^2}$.
 CALCULAR EL LARGO DEL ALAMBRE EN METRO.

1

$$R_{p1} = \frac{10 \times 40}{10 + 40} = 8 \Omega$$

$$R_S = R_{p1} + 12 \Omega = 8 \Omega + 12 \Omega = 20 \Omega$$

$$R_{p2} = \frac{R_S \times 20 \Omega}{R_S + 20 \Omega} = \frac{20 \Omega \times 20 \Omega}{20 \Omega + 20 \Omega} = 10 \Omega$$

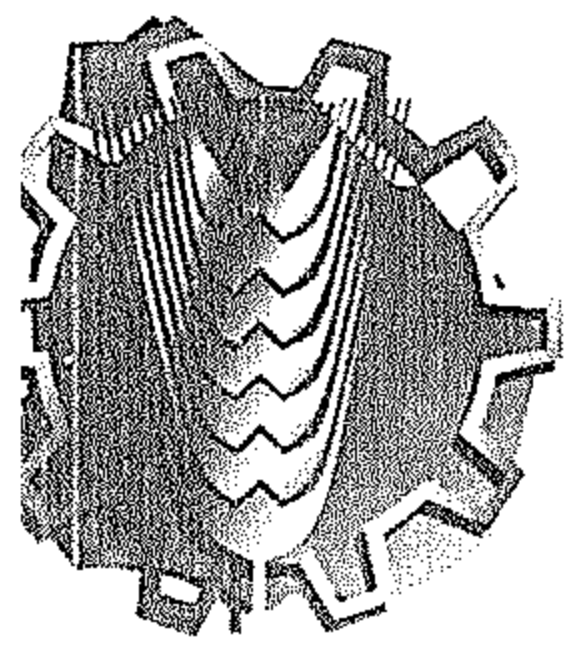
$$R_T = R_{p2} + 12 \Omega = 10 \Omega + 12 \Omega = \boxed{22 \Omega}$$

$$I_T = \frac{V_T}{R_T} = \frac{44 \text{ V}}{22 \Omega} = \boxed{2 \text{ A}}$$

$$P_T = V_T I_T = 44 \text{ V} \times 2 \text{ A} = \boxed{88 \text{ W}}$$

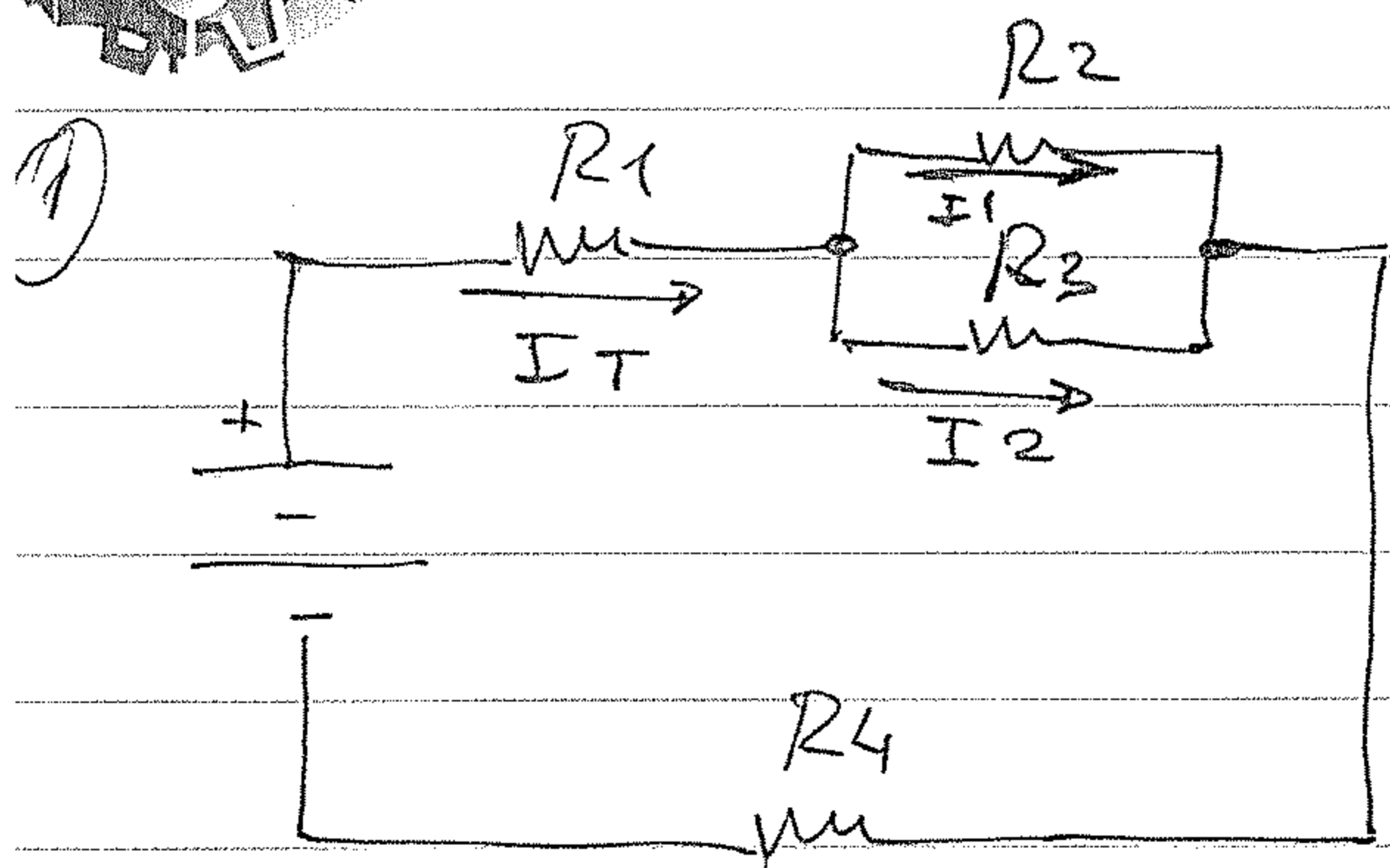
2

$$R = \rho \frac{l}{S} \Rightarrow l = \frac{R \times S}{\rho} = \frac{10 \Omega \times 2 \text{ mm}^2}{0,0172} = \boxed{1162,79 \text{ m}}$$

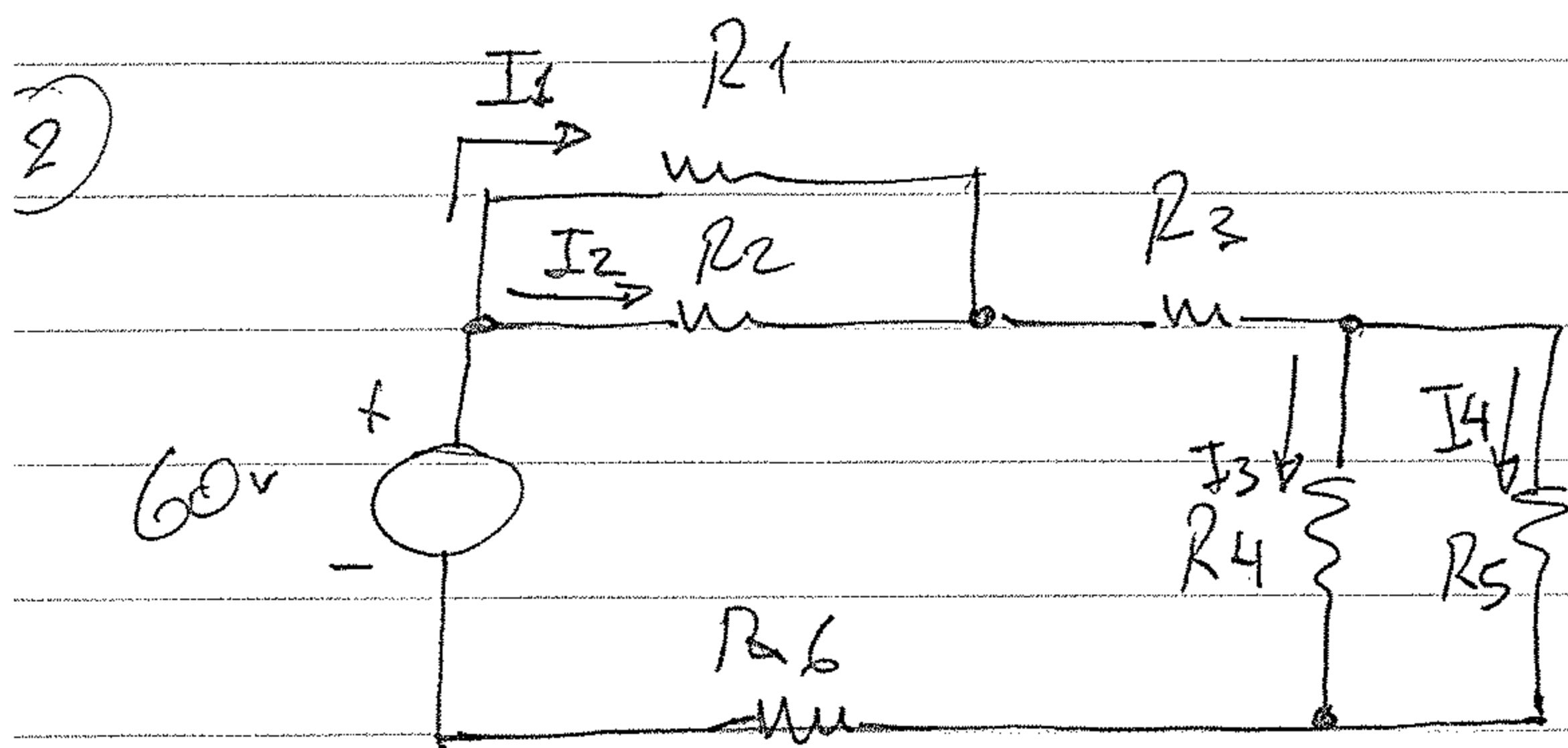


NOMBRE: Villarreal, Lemos, Gonzalez APELLIDO: Propuesta 14/12/2015

GRUPOS 1° Electricidad FECHA: _____

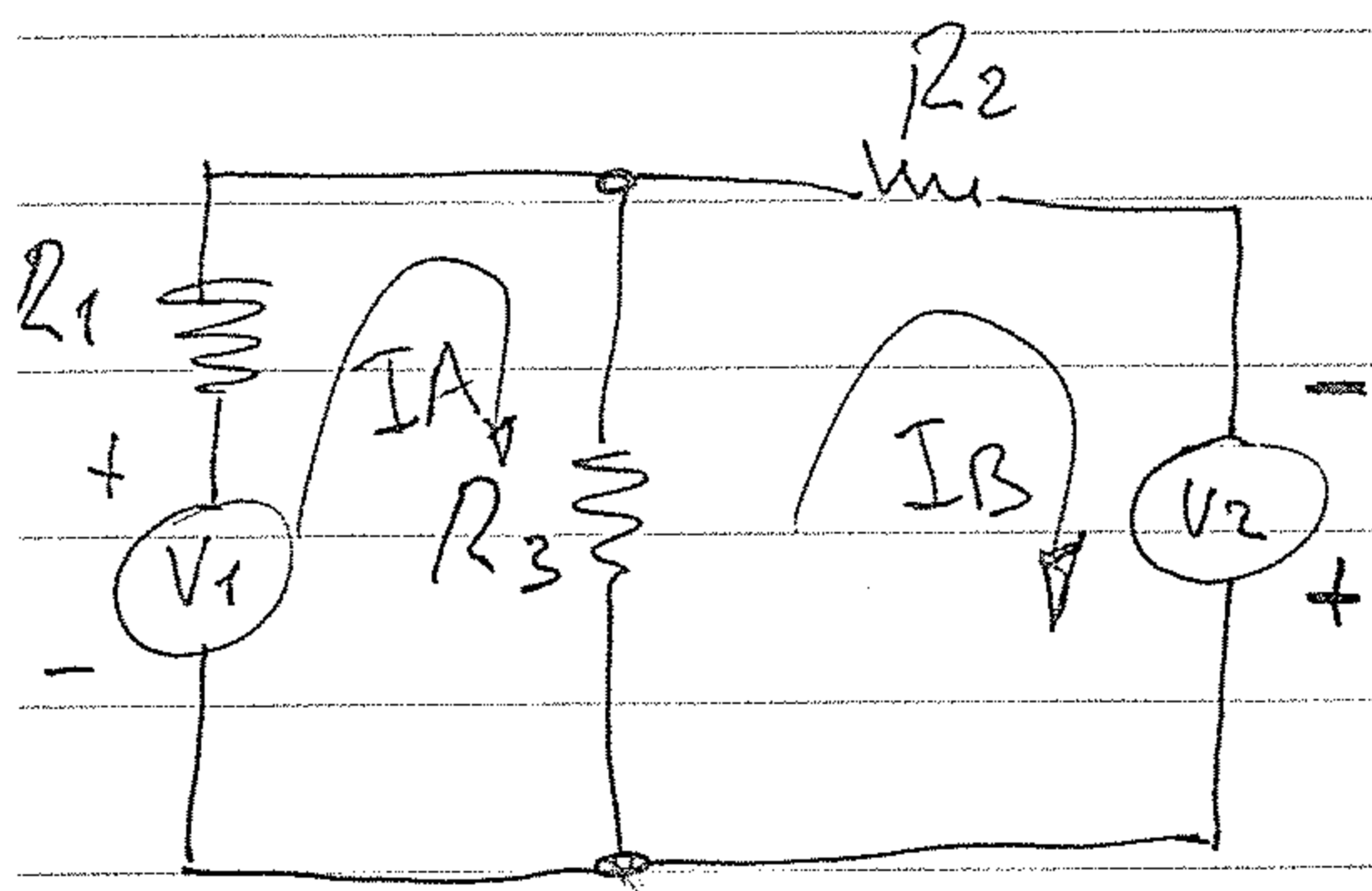


$R_1 = 1,4 \text{ K}\Omega$ $I_T = ?$
 $R_2 = 2 \text{ K}\Omega$ $R_T = ?$
 $R_3 = 8 \text{ K}\Omega$ $P_{R_3} = ?$
 $R_4 = 22 \text{ K}\Omega$
 $V_T = 50 \text{ V}$



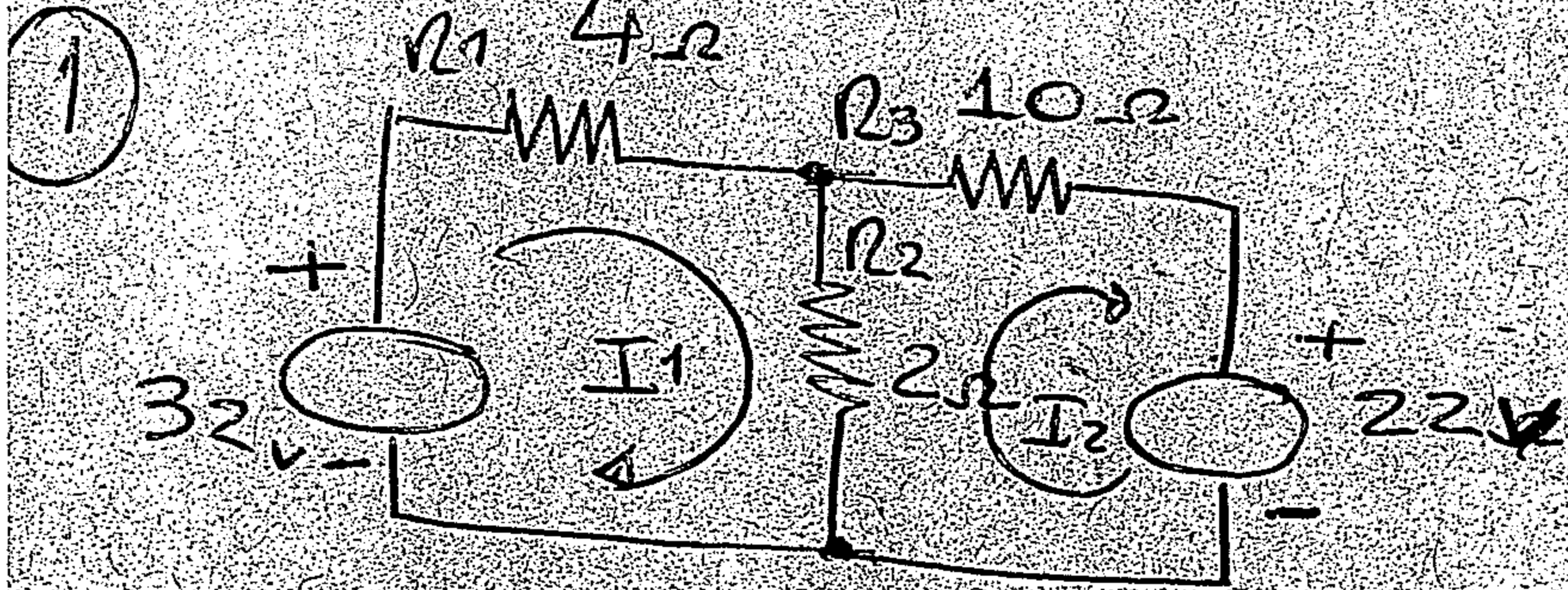
$R_1 = 40 \Omega$ $I_T = ?$
 $R_2 = 10 \Omega$ $I_1 = ?$
 $R_3 = 4 \Omega$ $I_2 = ?$
 $R_4 = 20 \Omega$ $I_3 = ?$
 $R_5 = 80 \Omega$ $I_4 = ?$
 $R_6 = 2 \Omega$

3) Encontrar el valor de I_A , I_B .



$V_1 = 15 \text{ V}$
 $V_2 = 20 \text{ V}$
 $R_1 = 2,2 \text{ K}\Omega$
 $R_2 = 1 \text{ K}\Omega$
 $R_3 = 3,3 \text{ K}\Omega$

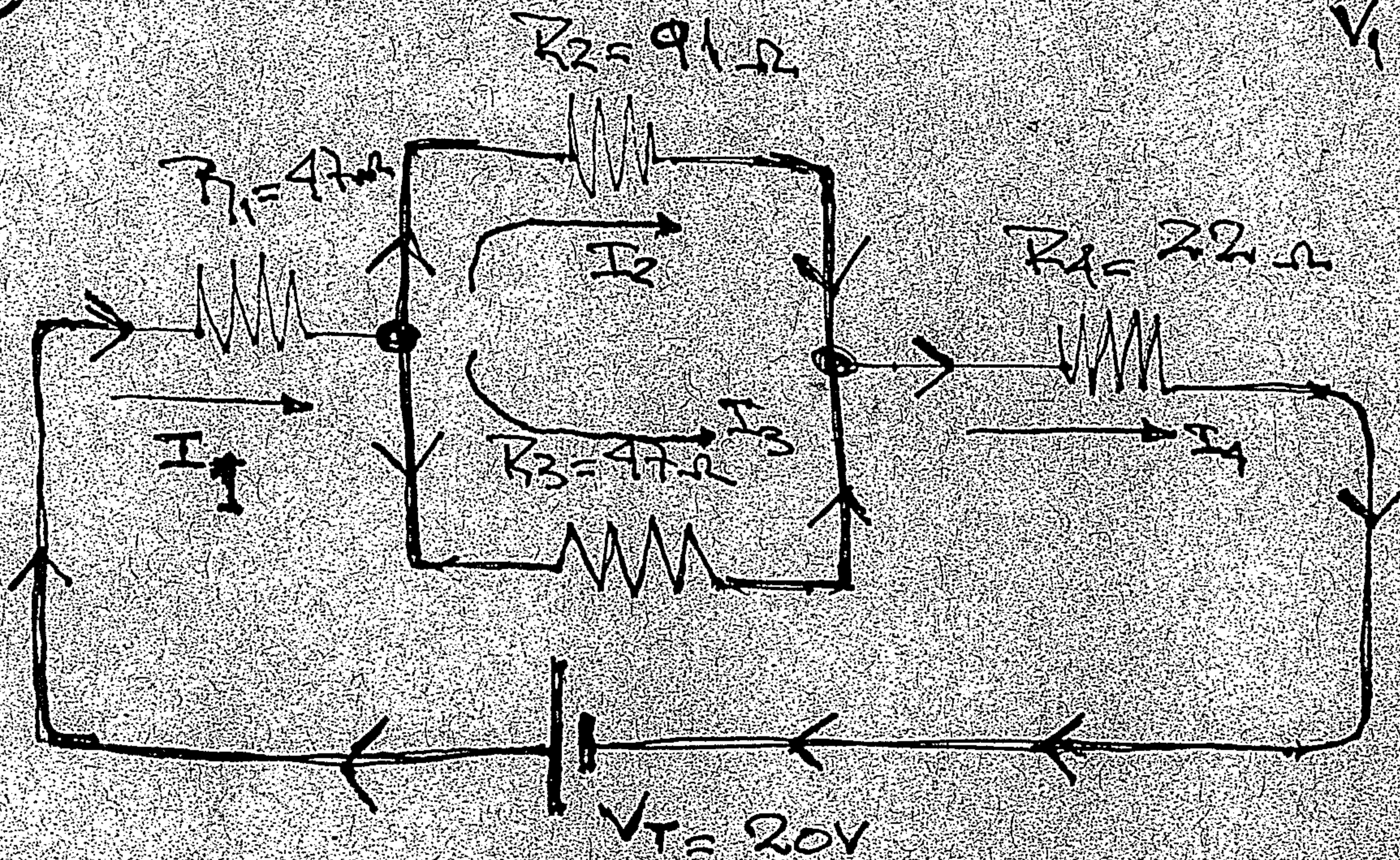
ELECTRICIDAD 1er AÑO



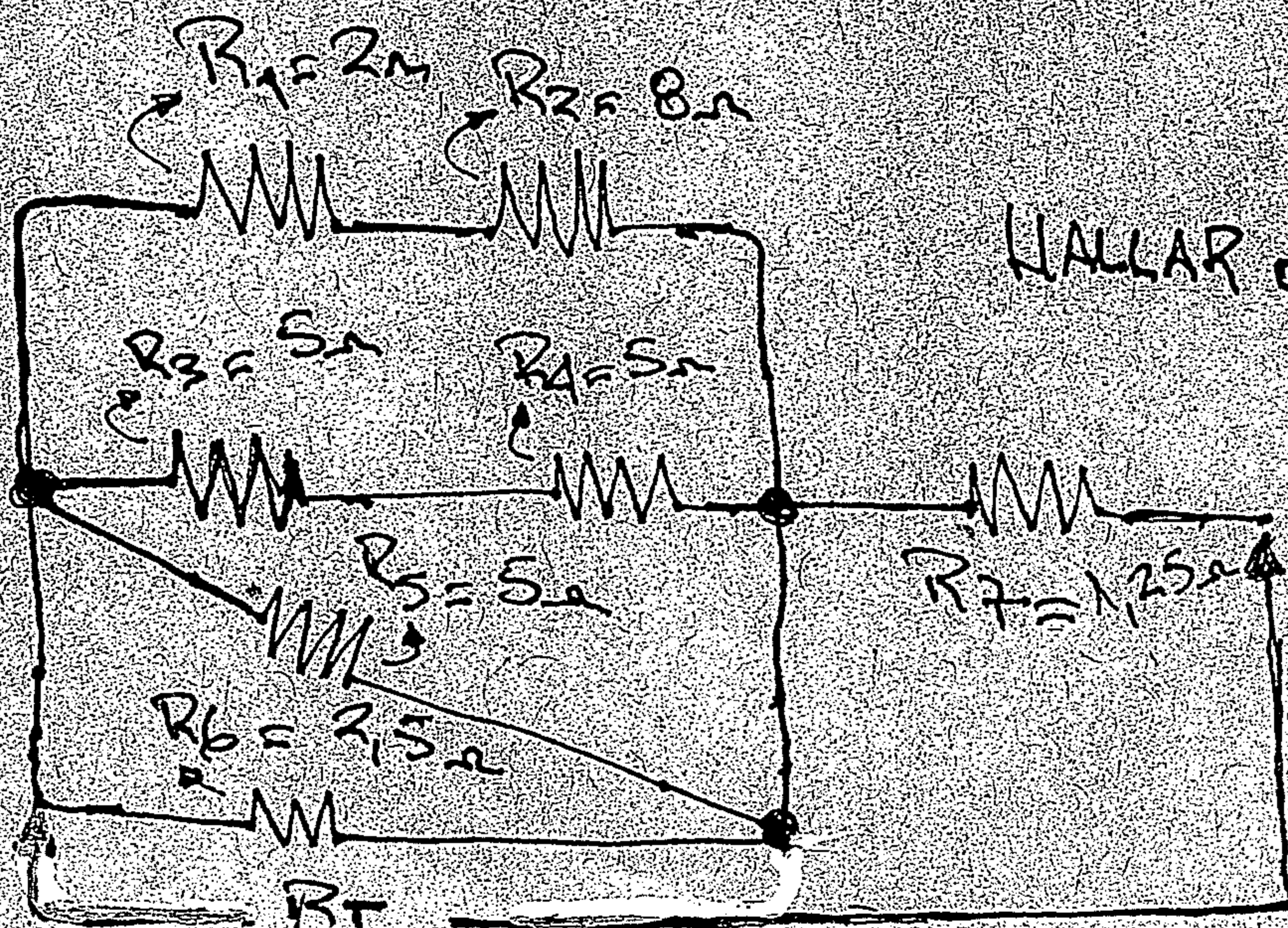
HALLAR I_1 , I_2 y POTENCIA EN R_1

②

CALCULAR: I_1, I_2, I_3, I_4
 V_1, V_2, V_3, V_4



③



HALLAR R_T