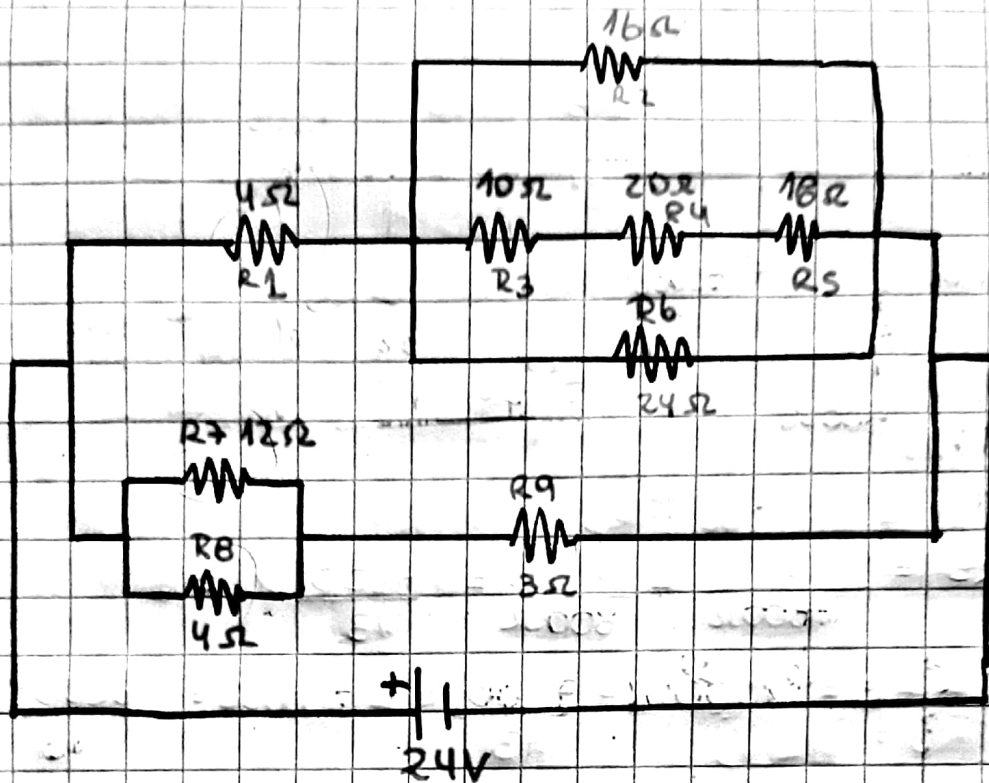


N° 1



$$R2 \parallel R3 \parallel R4 \parallel R5 \quad R3 + R4 + R5 = \text{PARALELO AS 3}$$

$$R3 + R4 + R5 = 10\Omega + 20\Omega + 18\Omega$$

$$R_A = 48\Omega$$

$$R2 \parallel R_B + \parallel R3 + R4 + R5$$

$$R_A + R2 + R6 = \frac{1}{48\Omega} + \frac{1}{16\Omega} + \frac{1}{24\Omega} = \frac{1}{8\Omega} = 8\Omega$$

$$R_B = 8\Omega + 4\Omega = 12\Omega$$

$$R_A \parallel R_B \text{ en serie } R9$$

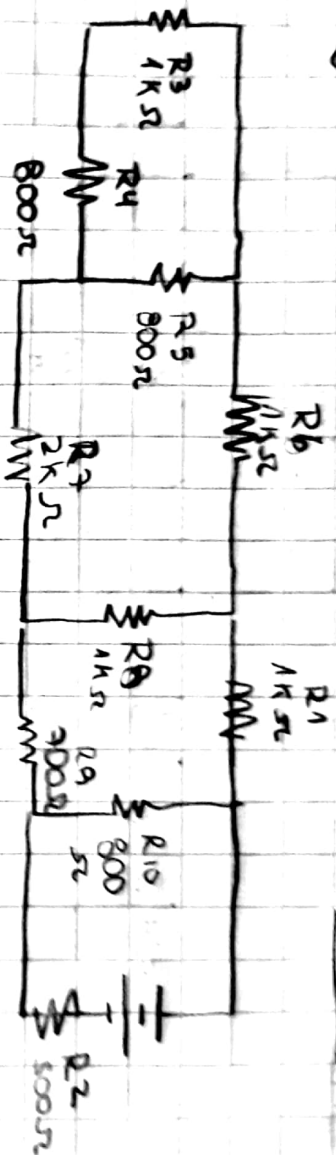
$$R7 \parallel R8 = \frac{1}{12\Omega} + \frac{1}{4\Omega} = \frac{1}{3\Omega} = 3\Omega$$

$$R_C = R9 + (R7 + R8) = 3\Omega + 3\Omega = 6\Omega$$

$$R_B + R_C = \frac{1}{12} + \frac{1}{6} = 4\Omega$$

$$R_T = 4\Omega$$

Nº 2



$$R3 + R4 = 1800 \Omega \quad \parallel R5 \parallel R6 \parallel R7 \parallel R8 \parallel R9 \parallel R10$$

$$A + R5 = \frac{1}{1800 \Omega} + \frac{1}{800 \Omega} = \frac{3200}{13} \Omega = B$$

$$R6 + R7 + B = 1000 \Omega + 2200 \Omega + 2000 \Omega = \frac{46200}{13} \Omega = C$$

$$C + R8 = \frac{1}{\frac{46200}{13}} + \frac{1}{1000 \Omega} = \frac{28875}{37} \Omega = D$$

$$R1 + D + R9 = \frac{28875}{37} \Omega + 1000 \Omega + 300 \Omega = \frac{91325}{37} \Omega = E$$

$$E + R10 = \frac{1}{\frac{91325}{37}} + \frac{1}{800 \Omega} = \frac{582360}{921} \Omega = F$$

$$F + R2 = 500 \Omega + \frac{582360}{921} = 11041,9 \Omega = R_T$$

Nº2

FECHA: / /

	(Ω)	(A)	(V)
RT	1105	IT 0,036	VT 40
R1	1000	I1 0,008	V1 8,8
R2	500	I2 0,0362	V2 18,1
R3	1000	I3 0,0006	V3 0,6
R4	800	I4 0,0008	V4 0,48
R5	800	I5 0,0013	V5 1,052
R6	1000	I6 0,0019	V6 1,9
R7	2000	I7 0,0019	V7 3,8
R8	1000	I8 0,00686	V8 6,864
R9	700	I9 0,0088	V9 6,16
R10	800	I10 0,0274	V10 21,901
RA	1800	IA 0,0006	VA 1,0526
RB	554	IB = 0,0019	VB = 1,0526
RC	3554	IC = 0,0019	VC = 6,864
RD	780	ID = 0,0088	VD 6,864
RE	2480	IE = 0,0088	VE 21,901
RF	605	IF = 0,0362	VF 21,901

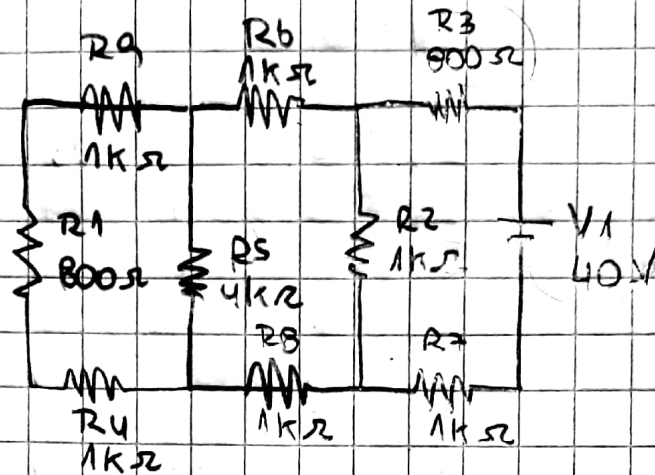
- a) $RT = 1105 \Omega$
 b) $V8 = 6,864 [V]$
 c) $V4 = 0,48 V$
 d) $I3 = 0,006 A \text{ v } 0,6 mA$

N° 3

$$V_T = 40V$$

$$R_T = 2584,18 \Omega$$

$$I_T = 0,015 A$$



$$R_1 + R_9 + R_4 = \parallel R_5 = \parallel R_6 + R_8 = \parallel R_2 = \parallel R_3 + R_7$$

$$R_1 + R_9 + R_4 = 1000 \Omega + 800 \Omega + 1000 \Omega = 2800 \Omega = R_A$$

$$R_A + R_5 = \frac{1}{2800 \Omega} + \frac{1}{4000 \Omega} = \frac{17}{28000} = \frac{28000}{17} \Omega = R_B$$

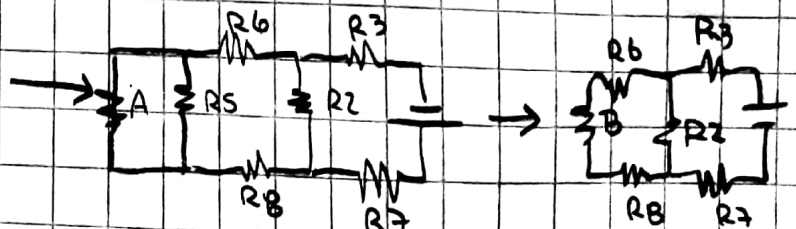
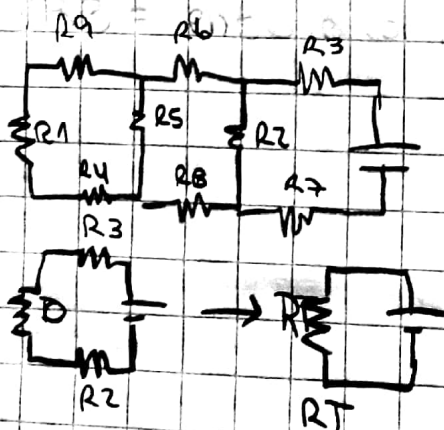
$$R_B + R_6 + R_8 = \frac{28000}{17} \Omega + 1000 \Omega + 1000 \Omega = \frac{62000}{17} \Omega = R_C$$

$$R_C = \frac{1}{\frac{62000}{17} \Omega} + \frac{1}{1000 \Omega} = \frac{79}{62000} = \frac{62000}{79} \Omega = R_D$$

$$R_D + R_3 + R_7 = 1000 \Omega + \frac{62000}{79} \Omega + 800 \Omega = \frac{204200}{79} \Omega$$

$$A) R_T = 2,59 k \Omega$$

B)



RHEIN

	(Ω)	(A)	(V)	$\frac{V}{RI}$
R1	800	$I_1 = 0,0019$	$V_1 = 1,52$	
R2	1000	$I_2 = 0,012$	$V_2 = 11,225$	
R3	800	$I_3 = 0,015$	$V_3 = 12$	
R4	1000	$I_4 = 0,0019$	$V_4 = 1,52$	
R5	4000	$I_5 = 0,0013$	$V_5 = 5,2204$	
R6	1000	$I_6 = 0,0032$	$V_6 = 3,2$	
R7	1000	$I_7 = 0,015$	$V_7 = 15$	
R8	1000	$I_8 = 0,0032$	$V_8 = 3,2$	
R9	1000	$I_9 = 0,0019$	$V_9 = 1,9$	
RT	2585 Ω	$I_T = 0,015 A$	$V_T = 40V$	

a) $R_T = 2585 [\Omega]$

b) $V_{R3} = 12 [V]$

c) $V_{R1} = 1,52 [V]$

d) $I_{R5} = 0,0013 [A]$