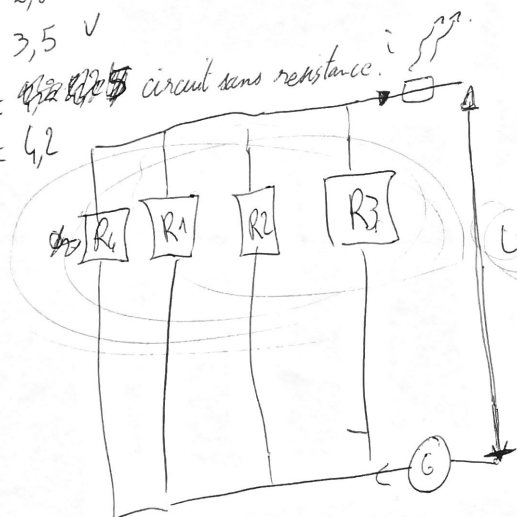


$R_1 = 0,7 \Omega$        $U = Ri$

- $U_0 = 0,0 \text{ V}$   
 $U_1 = 0,7 \text{ V}$   
 $U_2 = 1,4 \text{ V}$   
 $U_3 = 2,1 \text{ V}$   
 $U_4 = 2,8 \text{ V}$   
 $U_5 = 3,5 \text{ V}$   
 $U_6 = \text{circuit sans resistance}$   
 $U_7 = 4,2$



$U_0 = 0$   
 $U_1 = 0,7 \text{ V} = R$

1	<del>R1</del>	R1	X	X	Do. i. $R_3 = R_1$
2	<del>R1</del>	R1	R2	X	$R_3$
3	<del>R1</del>	<del>R2</del>	<del>R3</del>	R3	mi...
4	<del>R1</del>	X	R2	X	fa...
5	<del>R1</del>	X	R2	R3	Sol...
6	<del>R1</del>	R1	X	<del>R3</del>	la...
	<del>R1</del>	X	X	X	Silence.
	<del>R1</del>	X	X	<del>R3</del>	Si... 6.
	<del>R1</del>	<del>R2</del>	<del>R3</del>	<del>R4</del>	

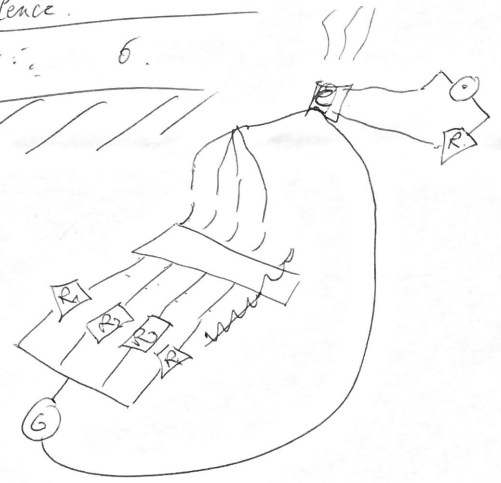
cas 1.

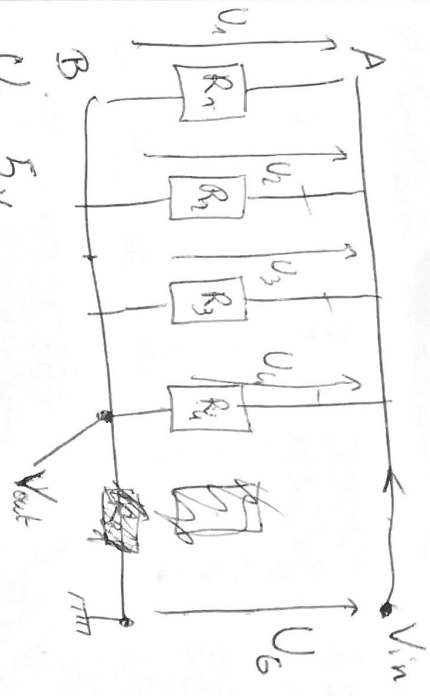
$$U = Ri = \frac{1}{\frac{1}{R_1} + \frac{1}{R_2} + \frac{1}{R_3}}$$

$$= \frac{R_1 R_2 R_3}{R_1 R_2 + R_1 R_3 + R_2 R_3}$$

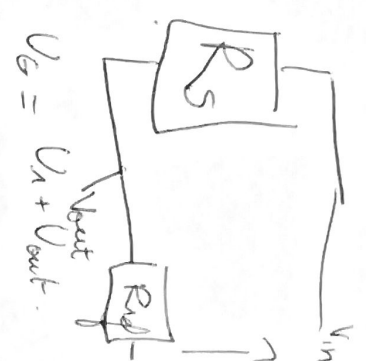
○.  $R_1 = 0,7$

$\frac{R_1 + R_2}{R_1 R_2} = 1,4$   
 $\frac{1}{R_1} + \frac{1}{R_2} = \frac{1,4}{R_1}$   
 $R_2 = \frac{1}{\frac{1,4}{R_1} - \frac{1}{R_1}}$





$$U_G = 5V$$



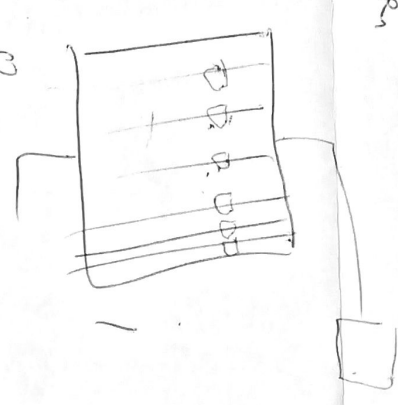
$$U_A = U_G - U_{out}$$

$$U_{out} = 5.0V$$

$$= 4, 3$$

$$V_{out} = U_A = R_A \times i = U_A$$

$$= \frac{V_A}{R_A} +$$



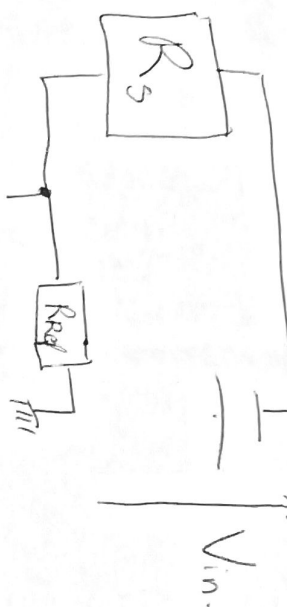
$$R_S = \frac{R_1 R_2 R_3 R_4}{R_1 + R_2 + R_3 + R_4}$$

$$V_S = \frac{\frac{V_A}{R_1} + \frac{V_A}{R_2}}{\frac{1}{R_1} + \frac{1}{R_2}} = \frac{V_A}{R_1} \times \frac{1}{\frac{1}{R_1} + \frac{1}{R_2}}$$

$$= \frac{V_A}{R_1} \times \frac{1}{\frac{R_1 + R_2}{R_1 R_2}} = \frac{V_A R_2}{R_1 + R_2}$$

$$= V_A \times \frac{R_2}{R_1 + R_2}$$

$$V_{out} = \frac{R_{net}}{R_s + R_{eq}}$$



$$\frac{1}{R} = \frac{1}{R_1} + \frac{1}{R_2}$$

1	$R_s = R_1 = 880 \Omega$	$V_{out} = 0,2 \cdot V_{in}$
2	$R_s = \frac{R_1 R_2}{R_1 + R_2} = 399 \Omega$	$V_{out} = 0,368 \cdot V_{in}$
3	$R_s = \frac{R_1 R_2 R_3}{R_1 R_2 + R_1 R_3 + R_2 R_3} = 189,103 \Omega$	$V_{out} = 0,33 V_{in}$
4	$R_s = R_2 = 660 \Omega$	$V_{out} = 0,25 V_{in}$
5	$R_s = \frac{R_2 R_3}{R_2 + R_3} = 204,09 \Omega$	$V_{out} = 0,455 V_{in}$
6	$R_s = \frac{R_1 R_2}{R_1 + R_2} = 399 \Omega$	$V_{out} = 0,368 V_{in}$
7	$R_s = R_4 = 220 \Omega$	$V_{out} = 0,5 V_{in}$

$$R_s = \frac{R_1 R_2 R_3 R_4}{R_1 + R_2 + R_3 + R_4} = 26 \times 10^6 \Omega = 26 M\Omega$$

	$R_1$	$R_2$	$R_3$	$R_4$	
1	$R_1$	X	X	X	$R_s$
2	X	$R_2$	X	X	$R_s$
3	X	X	$R_3$	X	$R_s$
4	X	X	X	$R_4$	$R_s$
5	X	X	X	X	$R_s$
6	$R_1$	X	X	X	$R_s$
7	X	X	X	X	$R_s$
8	X	X	X	X	$R_s$

$$R_s = R_1 R_2 R_3 R_4 = 1 \times 220 \Omega$$

$$R_1 = 880 \Omega$$

$$R_2 = 660 \Omega$$

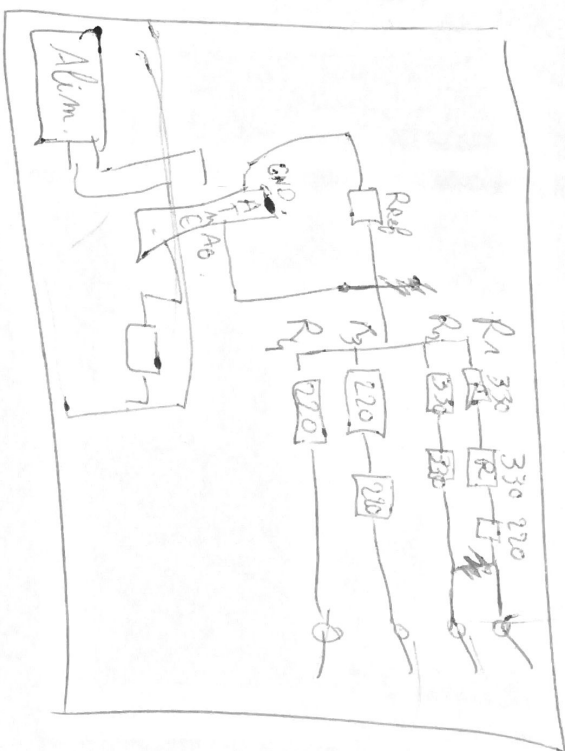
$$R_3 = 220 \Omega$$

$$R_4 = 220 \Omega$$

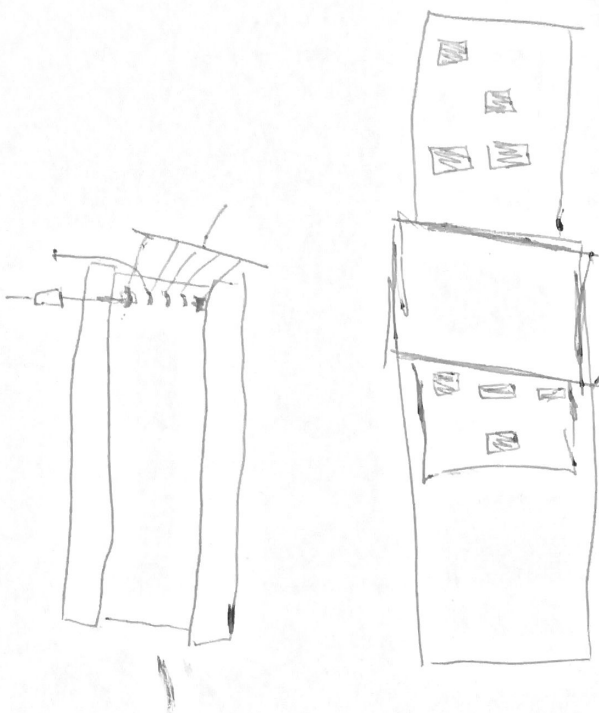
11 resistências de 220  $\Omega$ .

$$\begin{array}{r}
 2 \\
 + 2 \\
 + 1 \\
 + 2 \\
 + 1 \\
 + 1 \\
 \hline
 330 \\
 330 \\
 220 \\
 220 \\
 220 \\
 220 \\
 \hline
 1540 \quad (Req)
 \end{array}$$

$$\begin{array}{r}
 4 \times 330 \\
 5 \times 220
 \end{array}$$



$R_1 R_2 R_3 R_4$



Le joint est en 2 parties.

