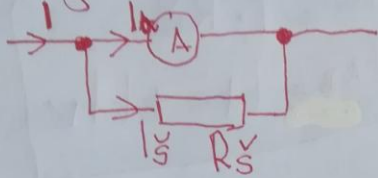


6. Замка: Електрична мерења  
 Поделба на притока (у складу са законима)

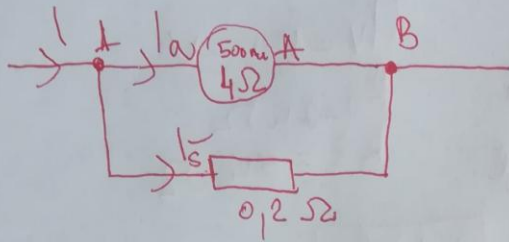
1) Замка:



$$I_a = \frac{U}{R_a} \quad I = I_a + I_{\check{s}}$$

$$I_{\check{s}} = \frac{U}{R_{\check{s}}}$$

↓  
у ризику  
ометар



$$I_a = 500 \mu\text{A}$$

$$R_a = 4 \Omega$$

$$R_{\check{s}} = 0,2 \Omega$$

$$I_a = 500 \mu\text{A} = 500 \cdot 10^{-3} \text{A} = 0,5 \text{A}$$

$$R_{\check{s}} = 0,2 \Omega$$

$$R_a = 4 \Omega$$

$$\Rightarrow I_{\check{s}} = \frac{U}{R_{\check{s}}} \quad \text{и} \quad I_a = \frac{U_a}{R_a}$$

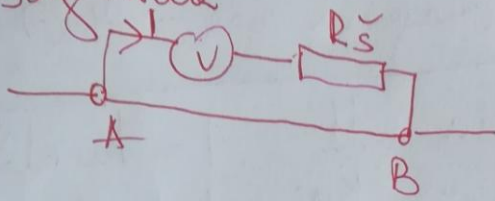
$$\Rightarrow U_a \stackrel{\#}{=} U_{AB} = I_a \cdot R_a = 0,5 \text{A} \cdot 4 \Omega = 2 \text{V}$$

$$U_a = 2 \text{V} = U_{AB}$$

$$\Rightarrow I_{\check{s}} = \frac{U_{AB}}{R_{\check{s}}} = \frac{2 \text{V}}{0,2 \Omega} = \boxed{10 \text{A}}$$

$$\Rightarrow I = I_a + I_{\check{s}} = 0,5 \text{A} + 10 \text{A} = \boxed{10,5 \text{A}}$$

② Zagađivanje

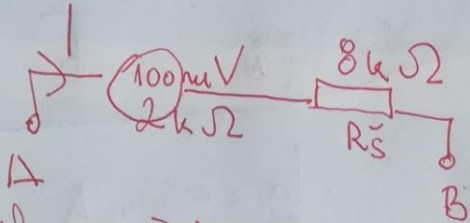


(učopija)

$$I = I_V = I_{\check{s}}$$

$$U_{\check{s}} = I \cdot R_{\check{s}}$$

$$U_{AB} = U_{\check{s}} + U_V$$



$$U_V = 100 \text{ mV}$$

$$R_V = 2 \text{ k}\Omega$$

$$R_{\check{s}} = 8 \text{ k}\Omega$$

- u ploči u preobrazovnoj regiji;

$$U_V = 100 \text{ mV} = 100 \cdot 10^{-3} \text{ V} = \boxed{0,1 \text{ V}}$$

$$R_V = 2 \text{ k}\Omega = 2 \cdot 10^3 \Omega = 2000 \Omega$$

$$R_{\check{s}} = 8 \text{ k}\Omega = 8 \cdot 10^3 \Omega = 8000 \Omega$$

$$I_V = \frac{U_V}{R_V} = \frac{0,1 \text{ V}}{2000 \Omega} = 5 \cdot 10^{-5} \text{ A}$$

$$U_{AB} = U_{\check{s}} + U_V$$

$$U_{\check{s}} = R_{\check{s}} \cdot I_V = 8 \cdot 10^3 \Omega \cdot 5 \cdot 10^{-5} \text{ A} = 40 \cdot 10^{-2} \text{ V} = \boxed{0,4 \text{ V}}$$

$$U_{AB} = 0,4 \text{ V} + 0,1 \text{ V} = \boxed{0,5 \text{ V}}$$

Haganu ce ga tie bavi ova bjestoda  
 novostu ga namu cab ragane i pagubo.  
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