

prvni priklad zadani C

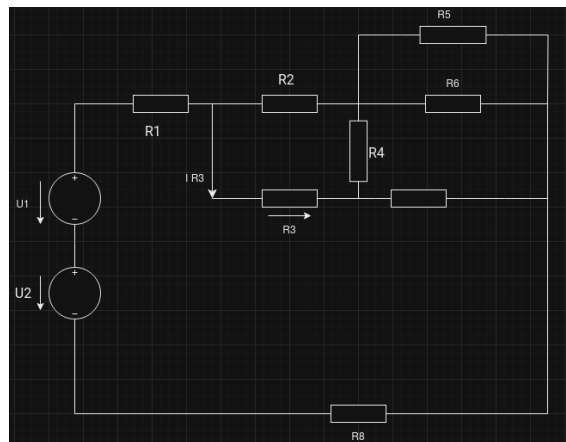


Figure 1: Uprava na pomoci hvezdy

$$R_{56} = \frac{1}{R_5} + \frac{1}{R_6}$$

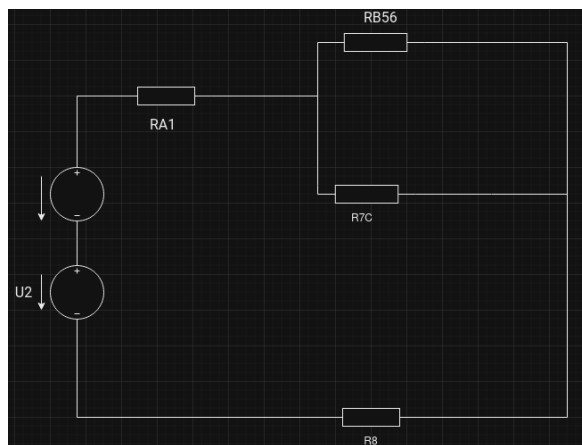


Figure 2: dalsi uprava

$$R_{A1} = \frac{R_2 \times R_3}{R_2 + R_3 + R_4} + R_1$$

$$R_{A1} = \frac{810 \times 220}{810 + 220 + 190} + 450$$

$$R_{B56} = \frac{R_2 \times R_4}{R_2 + R_3 + R_4} + \frac{1}{R_5} + \frac{1}{R_6}$$

$$R_{B56} = \frac{810 \times 220}{810 + 190 + 720} + \frac{1}{220} + \frac{1}{720} = 146.072$$

$$R_{C7} = \frac{R_3 \times R_4}{R_2 + R_3 + R_4} + R_7$$

$$R_{C7} = \frac{190 \times 220}{810 + 190 + 720} + 260 = 284.302$$

$$R = \frac{1}{576.148} + \frac{1}{284.302} + 576.148 + 180 \Rightarrow R = 756.153$$

$$I = \frac{U}{R} = \frac{180}{756.153} \Rightarrow I = 0.238$$

$$R_{B567C} = \frac{1}{146.072} + \frac{1}{284.302} = 0.010$$

$$U_{B567C} = 0.010 \times 0.238 = 0.00238$$

$$I_{RC7} = \frac{U_{B567C}}{R_{C7}}$$

$$I_{RC7} = \frac{0.00238}{284.302} \Rightarrow I_{RC7} = 8.371 \times 10^{-3}$$