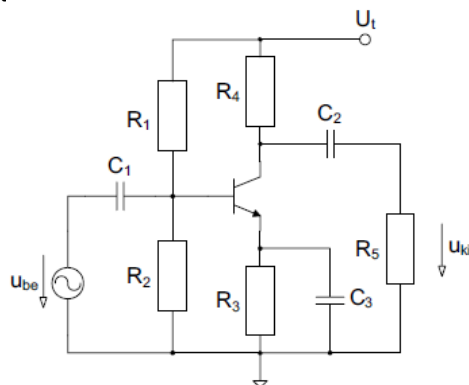


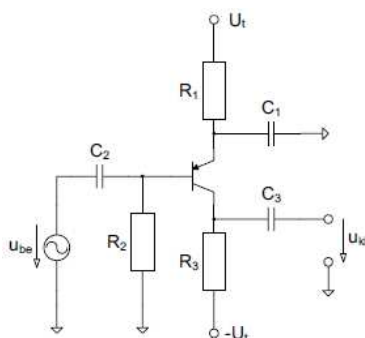
1. feladat



$$\begin{aligned}
 I_{C0} &= 0,3 \text{ mA} & U_t &= 12 \text{ V} \\
 B &= 100 & R_1 &= 900 \text{ k}\Omega \\
 U_{BE0} &= 0,6 \text{ V} & R_2 &= 100 \text{ k}\Omega \\
 & & R_4 &= 2 \text{ k}\Omega \\
 & & R_5 &= 10 \text{ k}\Omega
 \end{aligned}$$

$$\begin{aligned}
 R_3 &= ? & (1,089 \text{ k}\Omega) \\
 U_{CB0} &= ? & (10,47 \text{ V})
 \end{aligned}$$

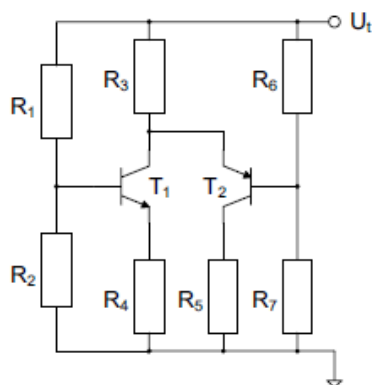
2. feladat



$$\begin{aligned}
 B &= 100 \\
 U_{EB0} &= 0,6 \text{ V} \\
 R_1 &= 7 \text{ k}\Omega \\
 R_2 &= 20 \text{ k}\Omega \\
 R_3 &= 3 \text{ k}\Omega \\
 U_t &= 15 \text{ V}
 \end{aligned}$$

$$\begin{aligned}
 I_{C0} &= ? & (1,98 \text{ mA}) \\
 U_{BC0} &= ? & (9,454 \text{ V})
 \end{aligned}$$

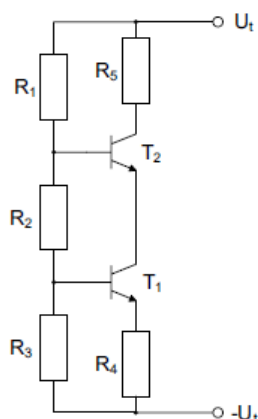
3. feladat



$$\begin{aligned}
 U_{BE01} &= U_{BE02} = 0,6 \text{ V} \\
 B_1 &= B_2 = \infty \\
 R_1 &= 7 \text{ k}\Omega & R_5 &= 2 \text{ k}\Omega \\
 R_2 &= 2 \text{ k}\Omega & R_6 &= 3,6 \text{ k}\Omega \\
 R_3 &= 10 \text{ k}\Omega & R_7 &= 5,4 \text{ k}\Omega \\
 R_4 &= 14 \text{ k}\Omega & U_t &= 9 \text{ V}
 \end{aligned}$$

$$\begin{aligned}
 I_{C01} &= ? & (0,1 \text{ mA}) \\
 I_{C02} &= ? & (0,2 \text{ mA})
 \end{aligned}$$

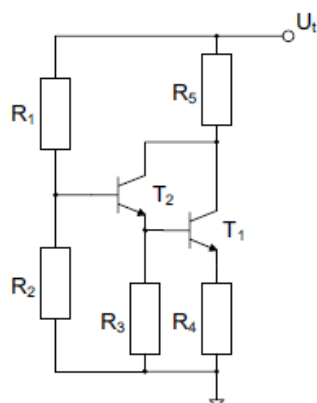
4. feladat



$$\begin{aligned}
 U_{BE01} &= U_{BE02} = 0,6 \text{ V} \\
 B_1 &= B_2 = \infty \\
 R_1 &= 7 \text{ k}\Omega & R_5 &= 2 \text{ k}\Omega \\
 R_2 &= 2 \text{ k}\Omega & R_6 &= 3,6 \text{ k}\Omega \\
 R_3 &= 10 \text{ k}\Omega & R_7 &= 5,4 \text{ k}\Omega \\
 R_4 &= 14 \text{ k}\Omega & U_t &= 9 \text{ V}
 \end{aligned}$$

$$\begin{aligned}
 I_{C01} &= ? & (0,634 \text{ mA}) \\
 I_{C02} &= ? & (0,634 \text{ mA}) \\
 U_{CE01} &= ? & (5,21 \text{ V}) \\
 U_{CE02} &= ? & (2,65 \text{ V})
 \end{aligned}$$

5. feladat



$$\begin{aligned} U_{BE01} &= 0,6 \text{ V} & R_1 &= 6 \text{ M}\Omega \\ U_{BE02} &= 0,5 \text{ V} & R_2 &= 1,2 \text{ M}\Omega \\ B_1 &= 100 & R_5 &= 1 \text{ k}\Omega \\ B_2 &= 200 & U_t &= 12 \text{ V} \end{aligned}$$

a.) $R_3 = \infty$; $R_4 = 150 \Omega$;

$$I_{C01} = ? \quad (0,022 \text{ mA})$$

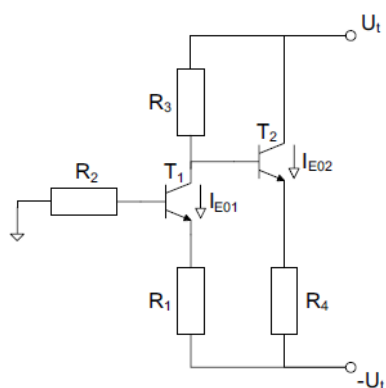
$$I_{C02} = ? \quad (4,49 \text{ mA})$$

b.) $R_3 = 6 \text{ k}\Omega$; $R_4 = 0$;

$$I_{C01} = ? \quad (0,09 \text{ mA})$$

$$I_{C02} = ? \quad (1,51 \text{ mA})$$

6. feladat

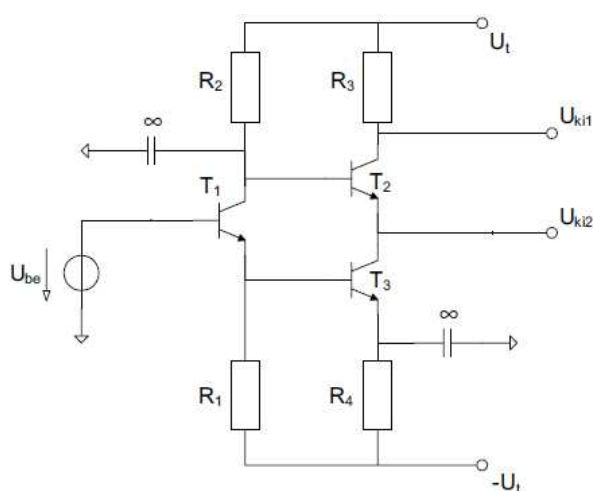


$$\begin{aligned} U_{BE01} &= 0,6 \text{ V} & U_t &= 12 \text{ V} \\ U_{BE02} &= 0,6 \text{ V} & R_1 &= 11 \text{ k}\Omega \\ B_1 &= 99 & R_2 &= 40 \text{ k}\Omega \\ B_2 &\rightarrow \infty & R_3 &= 10 \text{ k}\Omega \\ & & R_4 &= 6,8 \text{ k}\Omega \end{aligned}$$

$$I_{E01} = ? \quad (1 \text{ mA})$$

$$I_{E02} = ? \quad (1,985 \text{ mA})$$

7. feladat



$$\begin{aligned} U_{BE0} &= 0,6 \text{ V} & R_1 &= 7,2 \text{ k}\Omega \\ B &= 99 & R_2 &= 6 \text{ k}\Omega \\ & & R_3 &= 5 \text{ k}\Omega \\ & & R_4 &= 6,9 \text{ k}\Omega \\ & & U_t &= 15 \text{ V} \end{aligned}$$

$$I_{C01} = ? \quad (1,9998 \text{ mA})$$

$$I_{C02} = ? \quad (1,96 \text{ mA})$$

$$I_{C03} = ? \quad (1,98 \text{ mA})$$