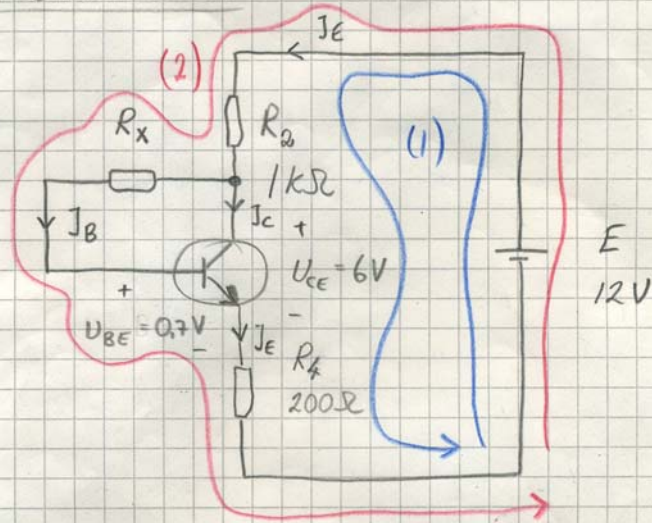


E3

## LICKSTROMSSCHEMA



$$+E - R_2 \cdot J_E - U_{CE} - R_4 \cdot J_E = 0 \quad \dots (1)$$

$$+E - R_2 \cdot J_E - R_x \cdot J_B - U_{BE} - R_4 \cdot J_E = 0 \quad \dots (2)$$

$$\left. \begin{array}{l} J_E = J_B + J_c \\ J_c = h_{FE} \cdot J_B \end{array} \right\} \Rightarrow J_B = \frac{J_E}{1 + h_{FE}}$$

$$(1) \Rightarrow 12 - 1000 J_E - 6 - 200 J_E = 0$$

$$\Rightarrow J_E = 5 \text{ mA} \Rightarrow J_B = \frac{5}{1 + 100} \text{ mA} = \frac{5}{101} \text{ mA}$$

$$(2) \Rightarrow +12 - 1000 \cdot 0,005 - R_x \cdot \frac{5}{101} \cdot 10^{-3} - 0,7 - 200 \cdot 0,005 = 0$$

$$\Rightarrow R_x = 107,06 \text{ k}\Omega$$