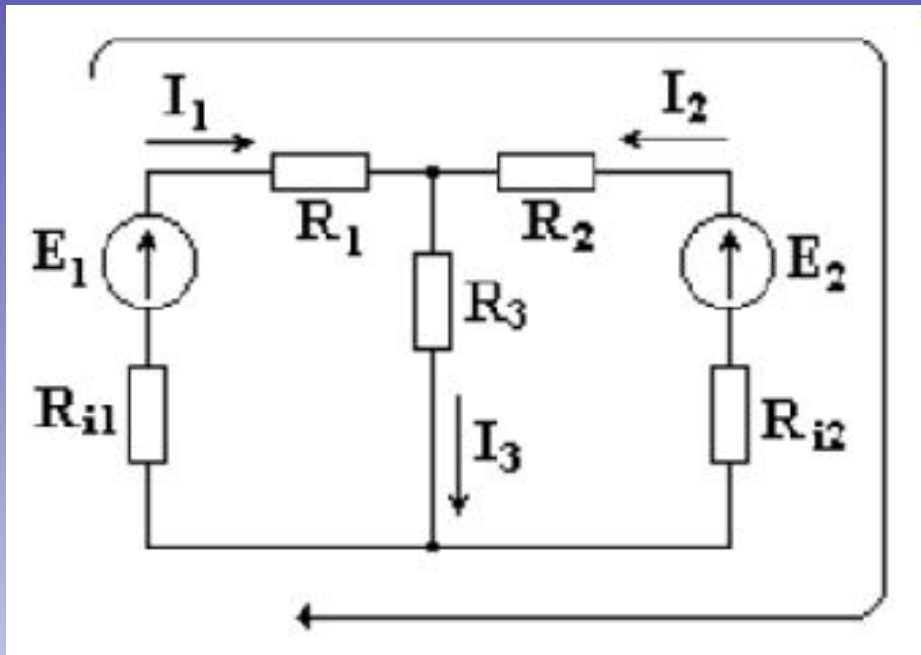


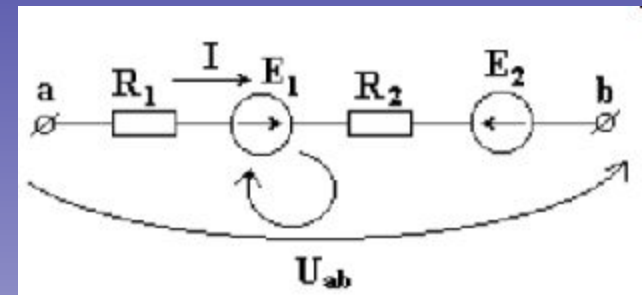
Второй закон Кирхгофа.



$$I_1 + I_2 - I_3 = 0$$

$$I_1(R_1 + Ri_1) + I_3 R_3 = E_1$$

$$-I_2(R_2 + Ri_2) + I_3 R_3 = -E_2$$



$$I \cdot R_1 + I \cdot R_2 - U_{ab} = E_1 - E_2$$

$$I = \frac{U_{ab} + E_1 - E_2}{R_1 + R_2}$$

$$I = \frac{U_{ab} + \sum E}{\sum R}$$