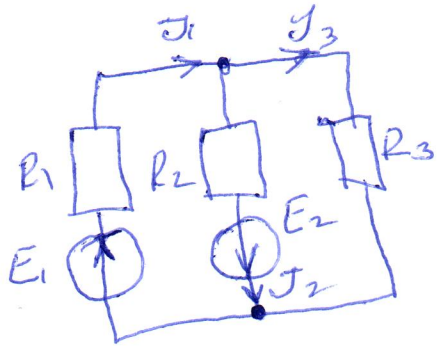

Дано:

$R_1 = R_2 = 1\,Ом$; $R_3 = 3\,Ом$;

$E_1 = E_2 = 3\,V$;

J_1; J_2; J_3 – ?

Решение:

$$J_1 = J_2 + J_3 \quad (1)$$

$$E_1 + E_2 = J_1 R_1 + J_2 R_2 \quad (2)$$

$$E_1 = J_1 R_1 + J_3 \cdot R_3 \quad (3)$$

(2) $3 + 3 = 1 \cdot J_1 + 1 \cdot J_2$

$6 = J_1 + J_2$

$J_2 = 6 - J_1$

(3) $3 = 1 \cdot J_1 + 3 \cdot J_3$

$3 = J_1 + 3 J_3$

$J_3 = 1 - J_1/3$

(1) $J_1 = 6 - J_1 + 1 - J_1/3$

$2 J_1 = 7 - J_1/3$

$6 J_1 = 21 - J_1$

$7 J_1 = 21$

$J_1 = 3\,A$

(2) $J_2 = 6 - 3 = 3\,A$;

(3) $J_3 = 1 - 3/3 = 0\,A$.