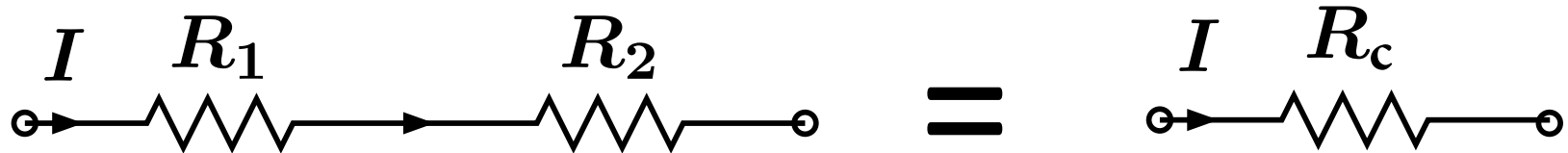


Quiz 0-1

What is the value of combined resistance?

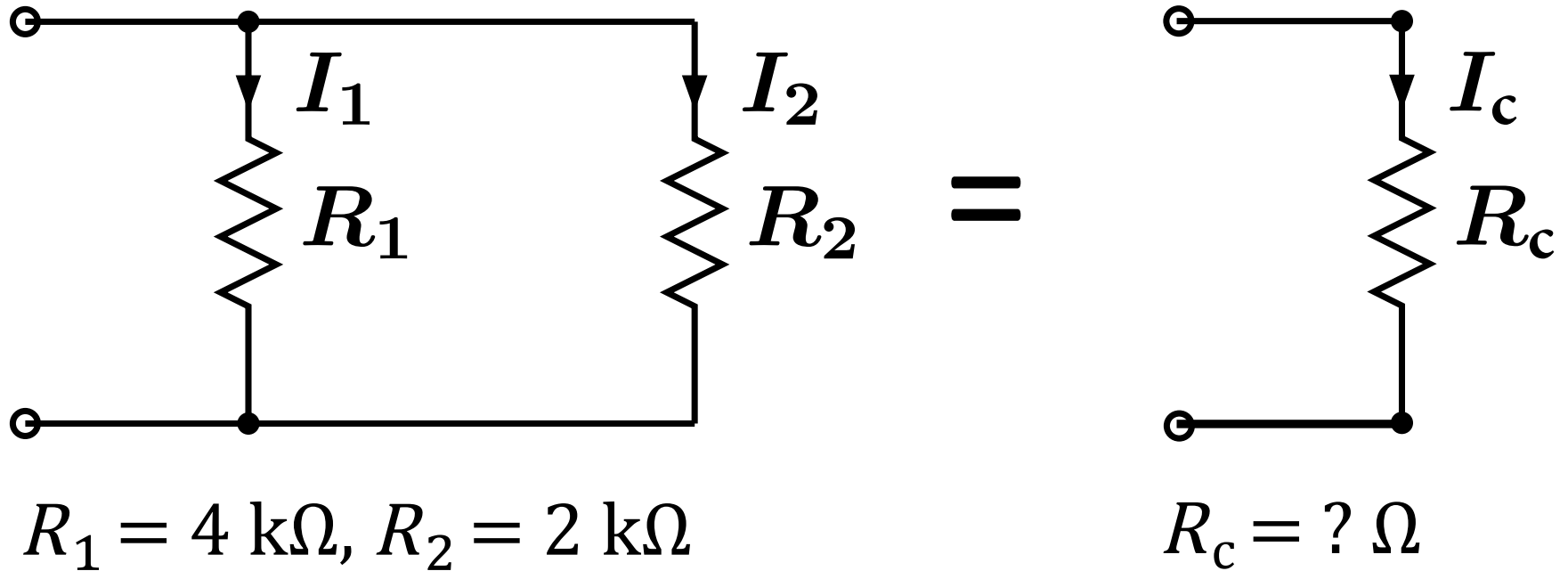


$$R_1 = 1 \text{ k}\Omega, R_2 = 2 \text{ k}\Omega$$

$$R_c = ? \Omega$$

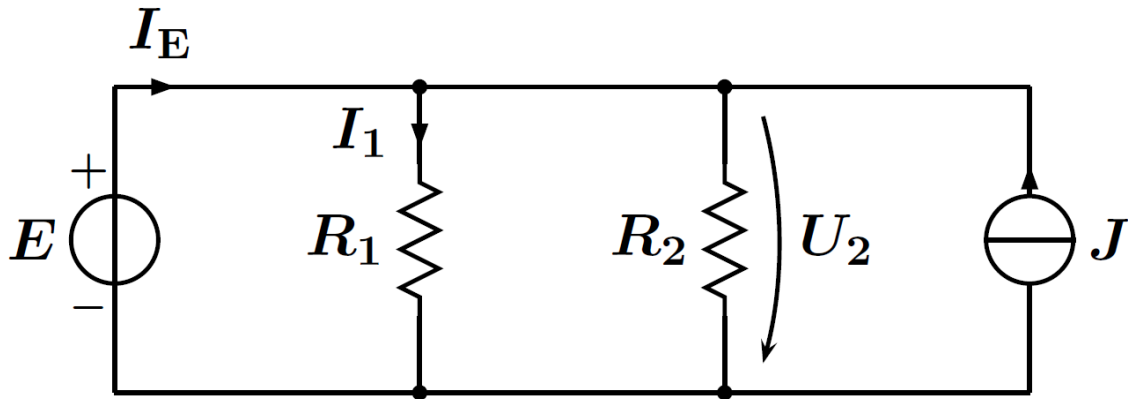
Quiz 0-2

What is the value of combined resistance?



Quiz 1-1

How many nodes are there in the circuit?

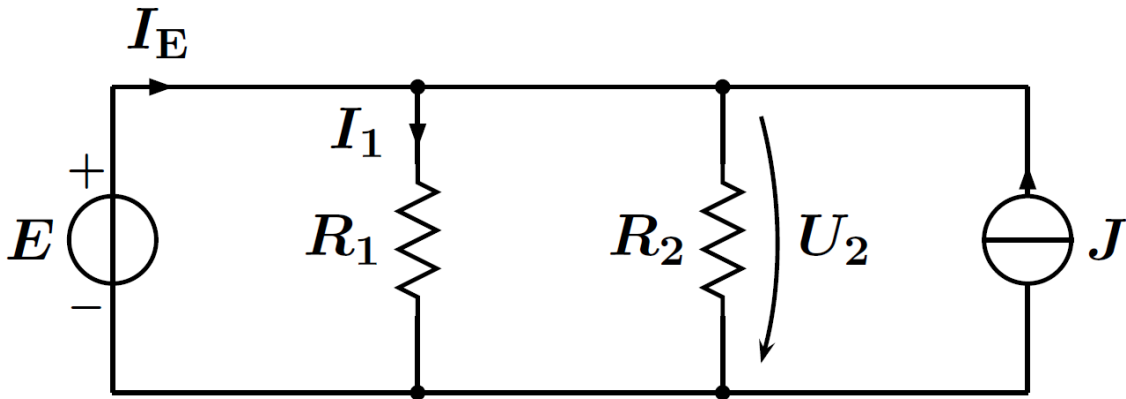


$$E = 2 \text{ V}, J = 2 \text{ mA}$$

$$R_1 = 1 \text{ k}\Omega, R_2 = 2 \text{ k}\Omega$$

Quiz 1-2

How large is the voltage U_2 ?

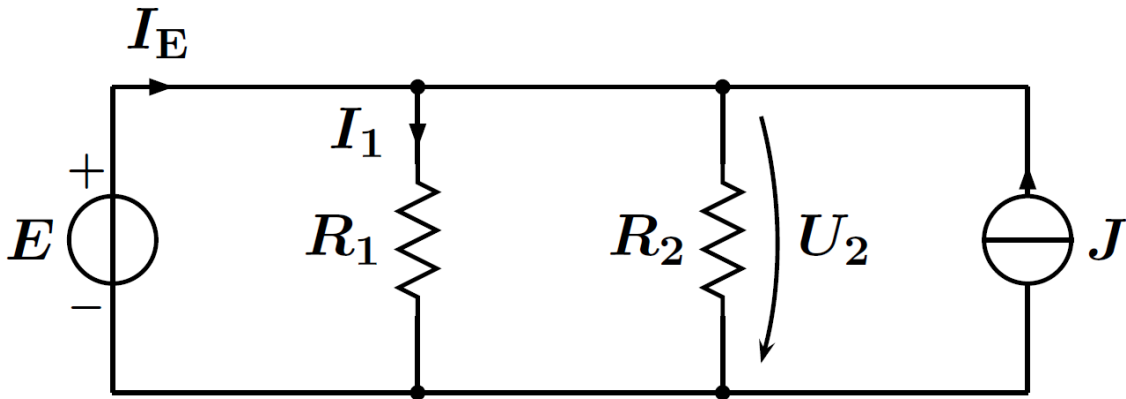


$$E = 2 \text{ V}, J = 2 \text{ mA}$$

$$R_1 = 1 \text{ k}\Omega, R_2 = 2 \text{ k}\Omega$$

Quiz 1-3

How much is current I_1 ?

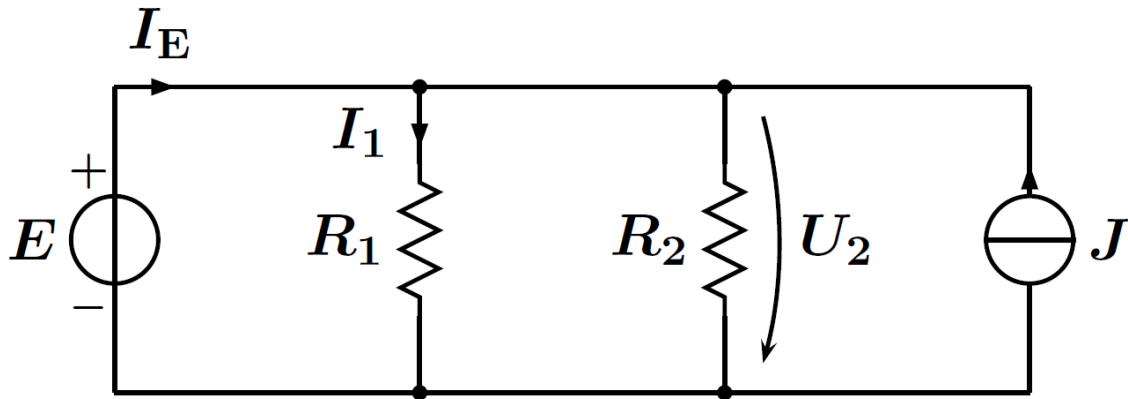


$$E = 2 \text{ V}, J = 2 \text{ mA}$$

$$R_1 = 1 \text{ k}\Omega, R_2 = 2 \text{ k}\Omega$$

Quiz 1-4

How large is current I_E ?

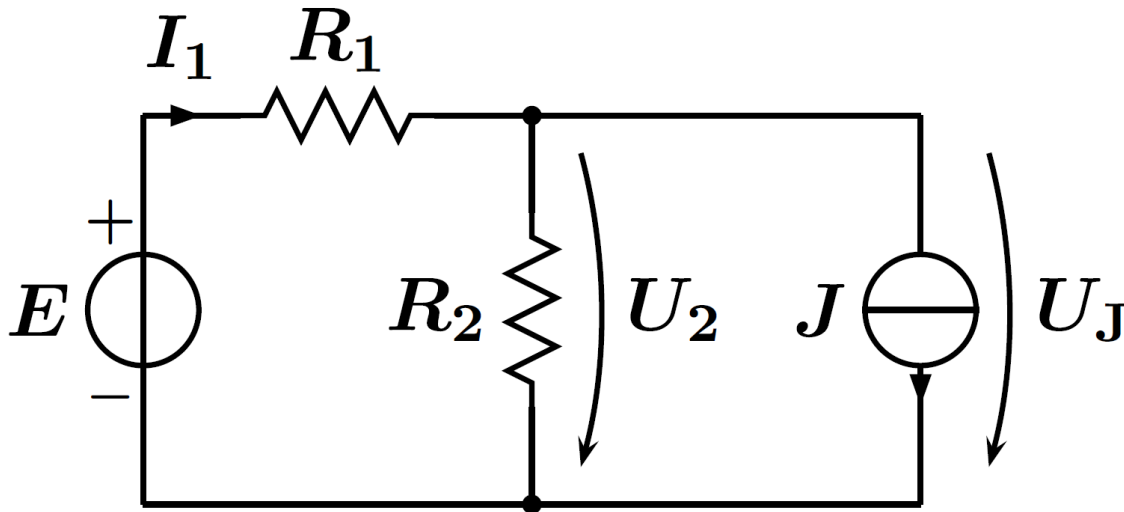


$$E = 2 \text{ V}, J = 2 \text{ mA}$$

$$R_1 = 1 \text{ k}\Omega, R_2 = 2 \text{ k}\Omega$$

Quiz 2-1

How large is current I_1 ?



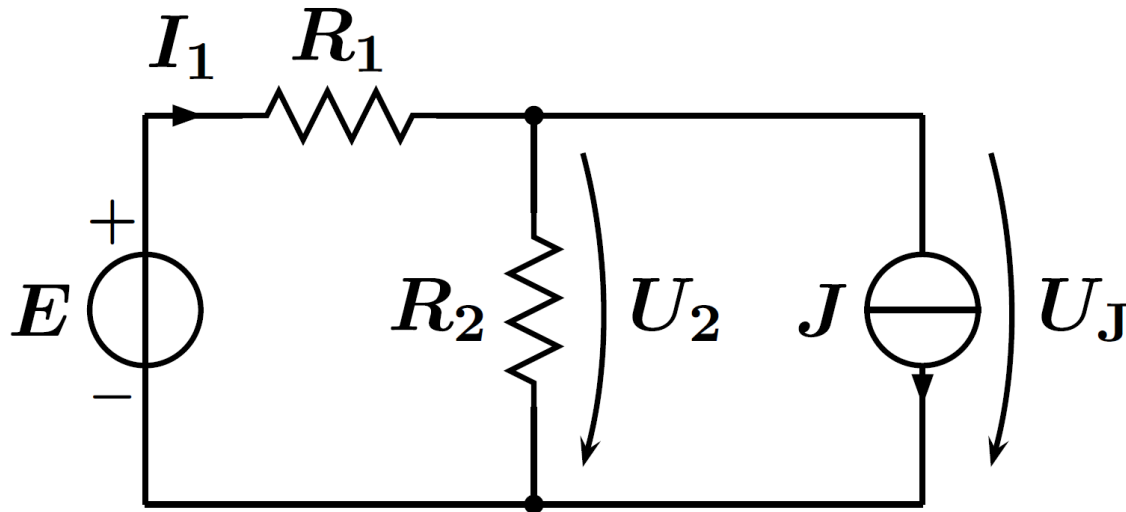
$$E = 4 \text{ V}, J = 2 \text{ mA}$$

$$R_1 = R_2 = 1 \text{ k}\Omega$$

$$U_2 = 1 \text{ V}$$

Quiz 2-2

How much power [mW] is consumed at source E ?



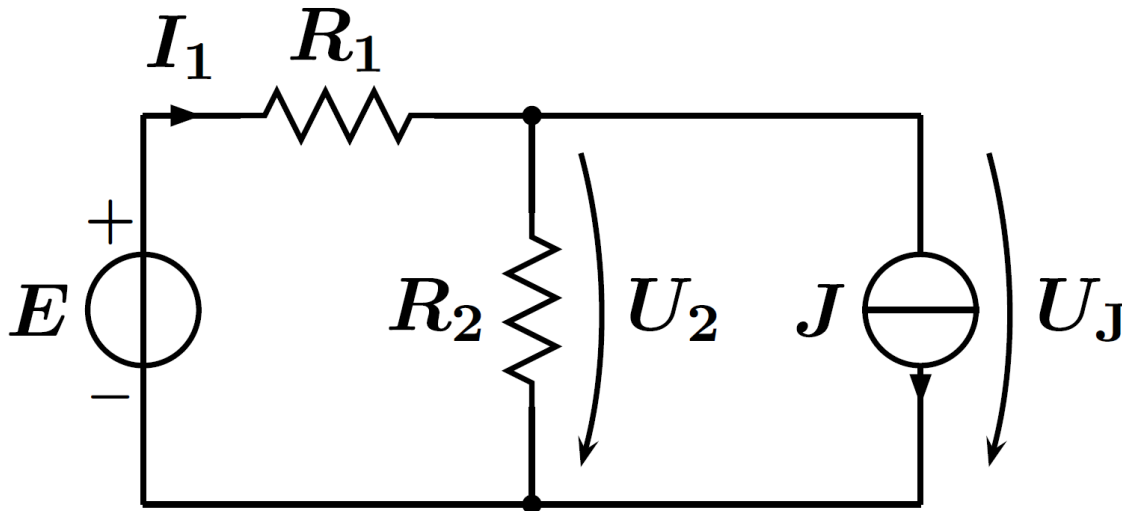
$$E = 4 \text{ V}, J = 2 \text{ mA}$$

$$R_1 = R_2 = 1 \text{ k}\Omega$$

$$U_2 = 1 \text{ V}, I_1 = 3 \text{ mA}$$

Quiz 2-3

How much power [mW] is consumed at resistance R_2 ?



$$E = 4 \text{ V}, J = 2 \text{ mA}$$

$$R_1 = R_2 = 1 \text{ k}\Omega$$

$$U_2 = 1 \text{ V}, I_1 = 3 \text{ mA}$$

Answers

- 0-1: 3 kOhm
- 0-2: $\frac{4}{3}$ kOhm
- 1-1: two nodes
- 1-2: 2 V
- 1-3: 2 mA
- 1-4: 1 mA
- 2-1: 3 mA
- 2-2: 12 mW
- 2-3: 1 mW