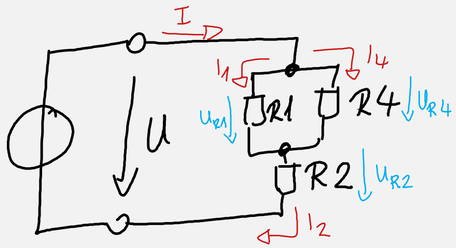
DOMA?



D. najdi:

ADATOK: 1983.11.25.

R1 = R2 = 25Ω

R4 = 11Ω

U = 19,83V ÷100

1.) $R_e = (R1 \times R4) + R2$

$R_e = (25 \times 11) + 25$

$R_e = \left(\frac{25 \cdot 11}{25+11}\right) + 25$

$R_e = \frac{275}{36} + 25$

$R_e = 7,63 + 25$

$R_e = \underline{32,64\,\Omega}$

2.) $I = \frac{U}{R_e} = \frac{19,83V}{32,64\Omega} = \underline{0,61A}$

3.) $U_{R2} = R2 \cdot I = 25\Omega \cdot 0,61A = \underline{15,19V}$

4.) $U_{R1} = U_{R4} = U - U_{R2} = 19,83V - 15,19V = \underline{4,64V}$

5.) $I_1 = \frac{U_{R1}}{R1} = \frac{4,64V}{25\Omega} = \underline{0,19A}$

6.) $I_4 = \frac{U_{R4}}{R4} = \frac{4,64V}{11\Omega} = \underline{0,42A}$

7.) $P = U \cdot I = 19,83V \cdot 0,61A = \underline{12,05W}$

$P1 = U_{R1} \cdot I_1 = 4,64V \cdot 0,61A = \underline{0,86W}$

...stb...