

ИСПИТ ИЗ ОСНОВА ЕЛЕКТРОТЕХНИКЕ 1

13. 02. 2013. - Рјешења

1.

$$R_2 = 4\varepsilon_r R_1 / 3 = 6 \text{ mm.}$$

2.

a)
$$V_0 = \frac{Q}{4\pi\varepsilon_0} \left(\frac{1}{a} - \frac{1}{b} + \frac{1}{c} \right).$$

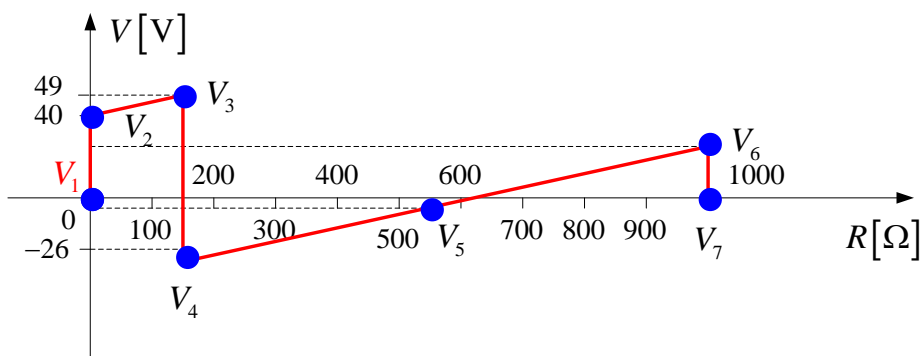
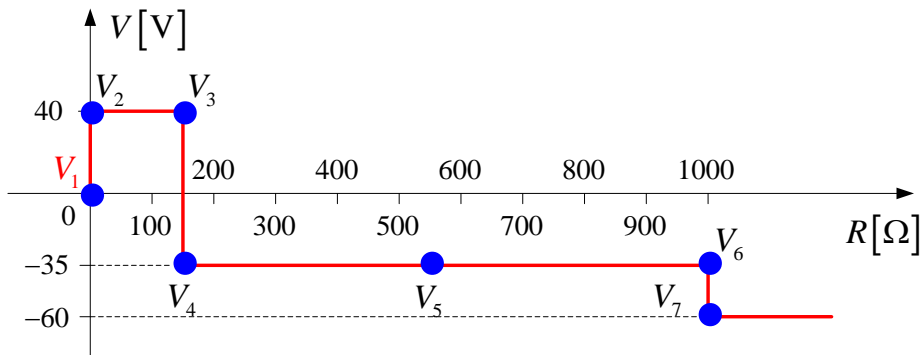
б)
$$Q_{Lj} = Q, V_{Lj} = \frac{Q}{4\pi\varepsilon_0 c}.$$

3.

a) $U' = 80 \text{ V.}$

б) $U'' = 120 \text{ V.}$

4.



5.

$$U_1 = 20 \text{ V.}$$

6.

$$C = 1,11 \text{ }\mu\text{F.}$$