



ИСПИТ ИЗ ОСНОВА ЕЛЕКТРОТЕХНИКЕ 1

02. 09. 2013. - Рјешења

1.

$$\vec{E} = (11,51\vec{i} - 4,32\vec{j}) \text{ kV/m.}$$

2.

$$\rho = 937,5 \text{ nC/m}^3.$$

3.

$$W_e^{PO} = \frac{1}{8\pi\epsilon_0} \left(\frac{Q_1^2}{a} + \frac{Q_2^2}{b} \right).$$

$$W_e^{PZ} = \frac{(Q_1 + Q_2)^2}{8\pi\epsilon_0 (a+b)}.$$

4.

$$I_A = 0,625 \text{ A}, \quad U_V = 0.$$

5.

$$I_5 = 20 \text{ mA.}$$

6.

a) $R \approx 50 \Omega.$

б) $W_{e1} = 0$ и $W_{e2} = 17,7 \text{ mJ}.$