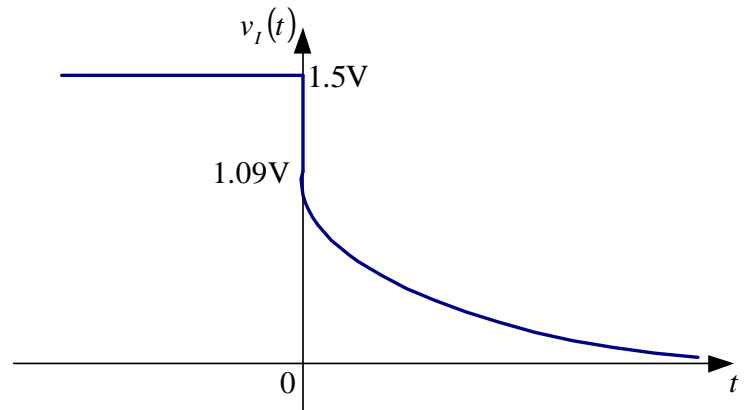


REŠENJA ZADATAKA

$$2. v_I(t) = \begin{cases} 1.5V = const, & \text{za } t < 0 \\ 1.09V \cdot e^{-\frac{t}{366.67\mu s}}, & \text{za } t > 0 \end{cases}$$

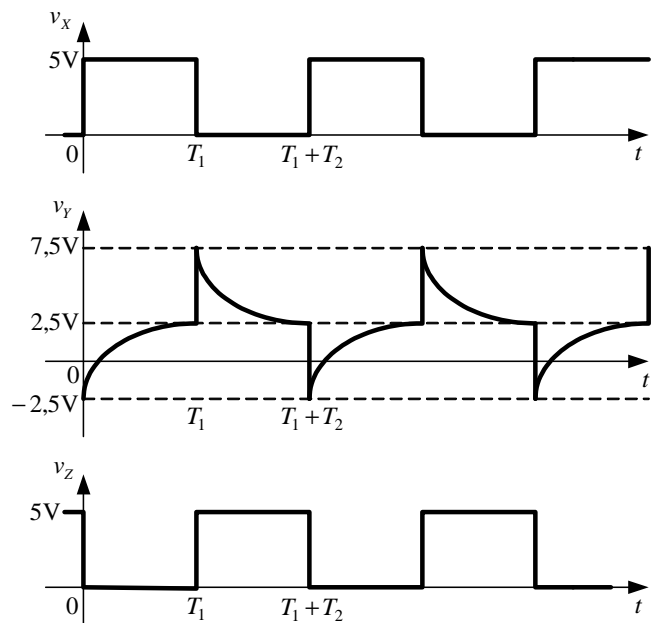


4. a)

$$v_Y(t) = 5V - 7,5V \cdot e^{-2000t}, \text{ za } 0 < t < T_1$$

$$v_Y(t) = 7,5V \cdot e^{-2000(t-T_1)}, \text{ za } T_1 < t < T_1 + T_2$$

$$f = \frac{1}{T_1 + T_2} = 910,25\text{Hz}$$

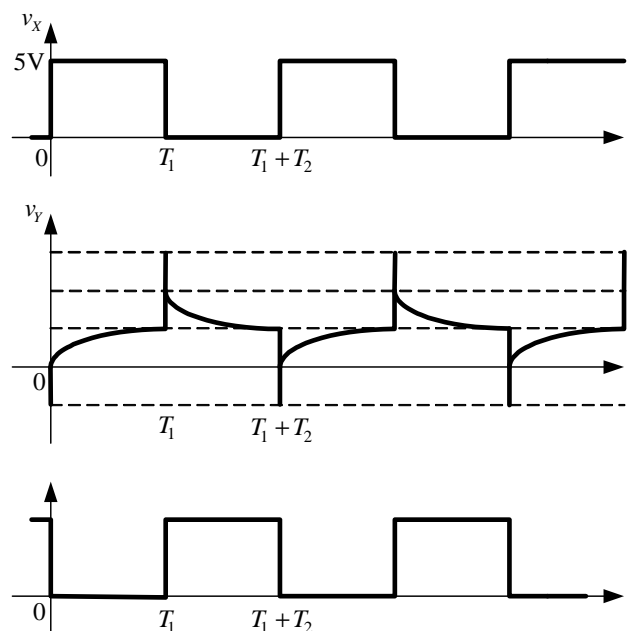


b)

$$v_Y(t) = 5V - 5V \cdot e^{-2000t}, \text{ za } 0 < t < T_1$$

$$v_Y(t) = 5V \cdot e^{-2000(t-T_1)}, \text{ za } T_1 < t < T_1 + T_2$$

$$f = \frac{1}{T_1 + T_2} = 1443\text{Hz}$$



6. a) Prekidač je zatvoren za  $Q_i = 0$ , a otvoren za  $Q_i = 1$ .

b)  $R_D = 10\text{k}\Omega$        $R_0 = 90\text{k}\Omega$        $R_1 = 40\text{k}\Omega$        $R_2 = 15\text{k}\Omega$        $R_3 = 2,5\text{k}\Omega$

c)  $R_{bo} = 12,5\text{k}\Omega$        $V_{MAX} = 3,5\text{V}$        $V_{MIN} = -4\text{V}$