

REŠENJA ZADATAKA

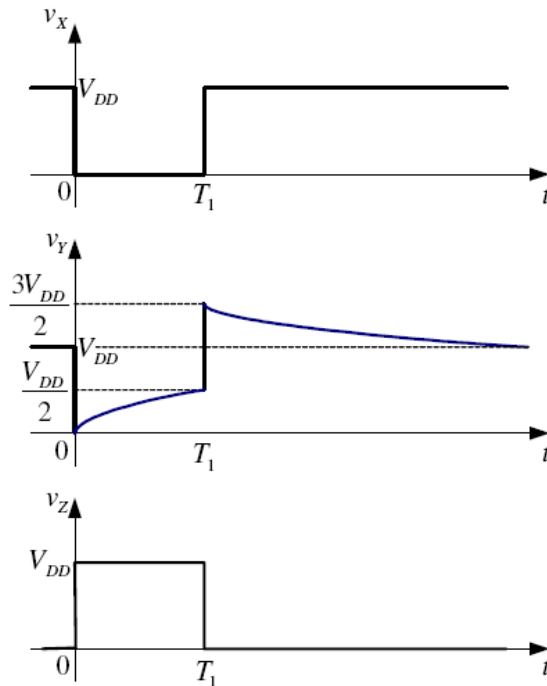
3.

$$v_Y(t) = 5V = const, v_X(t) = 5V = const, v_Z(t) = 0 = const \text{ za } t < 0,$$

$$v_Y(t) = 5V \cdot (1 - e^{-1000t}), v_X(t) = 0 = const, v_Z(t) = 5V = const \text{ za } 0 < t < T_1,$$

$$v_Y(t) = 5V + 2,5V \cdot e^{-1000(t-T_1)}, v_X(t) = 5V = const, v_Z(t) = 0 = const \text{ za } t > T_1.$$

$$T_1 = 0,001 \cdot \ln 2 = 0,693ms$$



Kolo obavlja funkciju monostabilnog multivibratora.

4.

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

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

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

