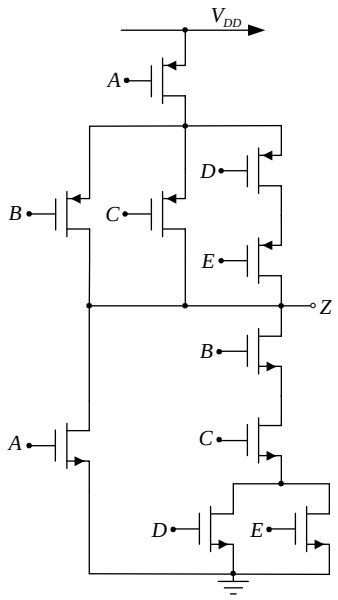
REŠENJA ZADATAKA

2. a)



b) $\tau_{pu} = 3 \cdot r_{dsPMOS} \cdot C = 750\text{ps}$

$\tau_{pr} = 3 \cdot r_{dsNMOS} \cdot C = 300\text{ps}$

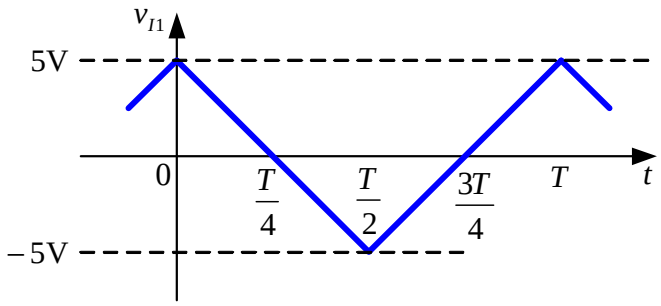
4.

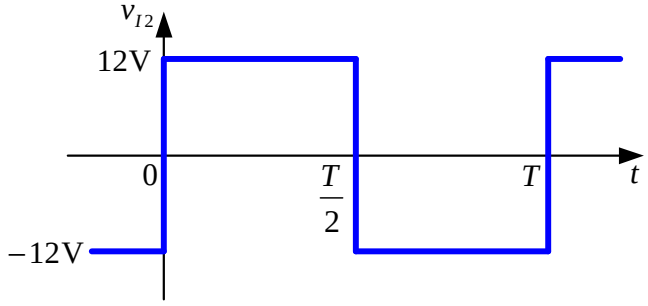
$$v_{I1} = \begin{cases} -2{,}4 \cdot 10^5 \cdot \left(t - \dfrac{T}{4} \right), & za \quad 0 \le t \le \dfrac{T}{2} \\ 2{,}4 \cdot 10^5 \cdot \left(t - \dfrac{3T}{4} \right), & za \quad \dfrac{T}{2} \le t \le T \end{cases}$$

, signal se dalje periodično ponaša.

$T = 83{,}33\mu\text{s}$,

$f = 12\text{kHz}$.





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