

REŠENJA ZADATAKA

1. a) $I_{D1} = I_0 = 1\text{mA}$; $I_{D2} = I_0 = 1\text{mA}$.

b) $a_{d1} = \frac{v_{i1}}{v_d} = -\frac{g_{m1} \left(R_D \parallel \frac{R_p}{2} \right)}{2 + g_{m1} R_S} = -2.083$.

c) $a_{s1} = \frac{v_{i1}}{v_s} = 0$.

4.

$v_I[\text{V}] = 0$, za $-5\text{V} \leq v_G \leq 0$ (IOP- lin. režim, D_1 -ON, Q_1 -OFF);

$v_I[\text{V}] = -5v_G[\text{V}]$, za $0 \leq v_G \leq 2.88\text{V}$ (IOP-lin. režim, D_1 -OFF, Q_1 -DAR);

$v_I[\text{V}] = -14.4\text{V}$, za $2.88\text{V} \leq v_G \leq 5\text{V}$ (IOP-neg. zasićenje, D_1 -OFF, Q_1 -DAR).