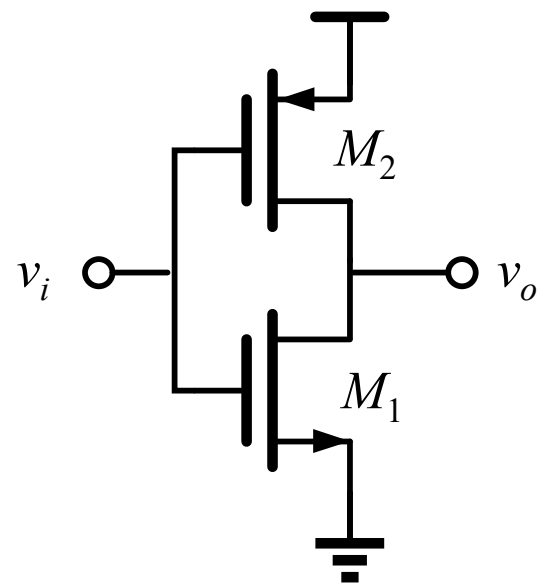
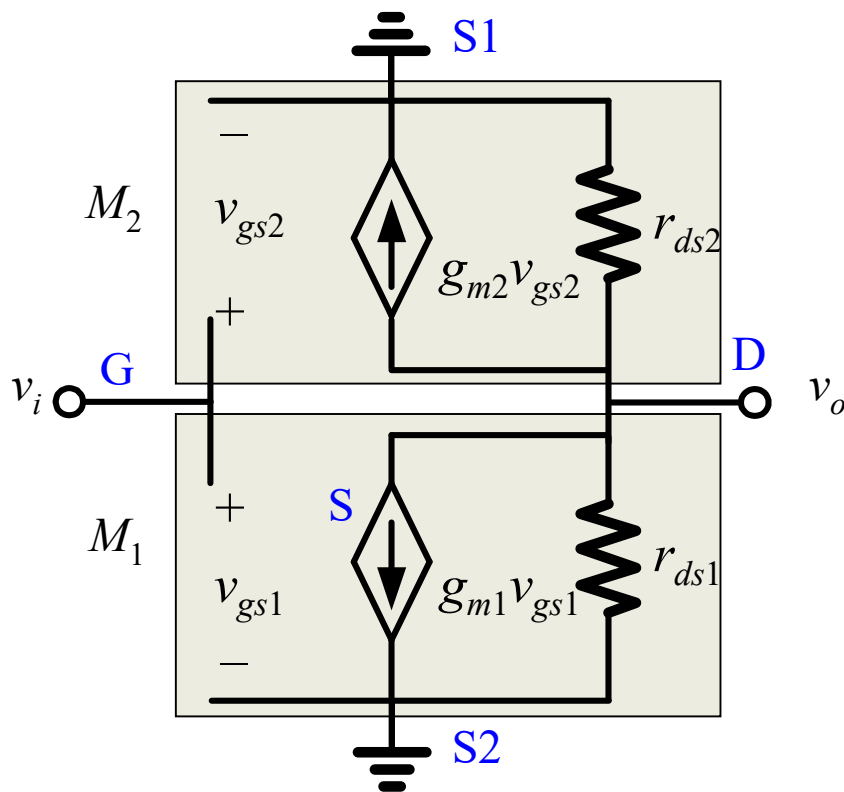


# CMOS推挽(push pull)放大电路

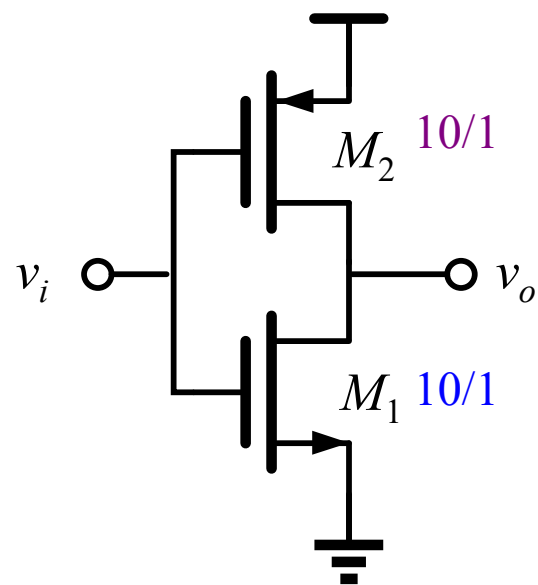
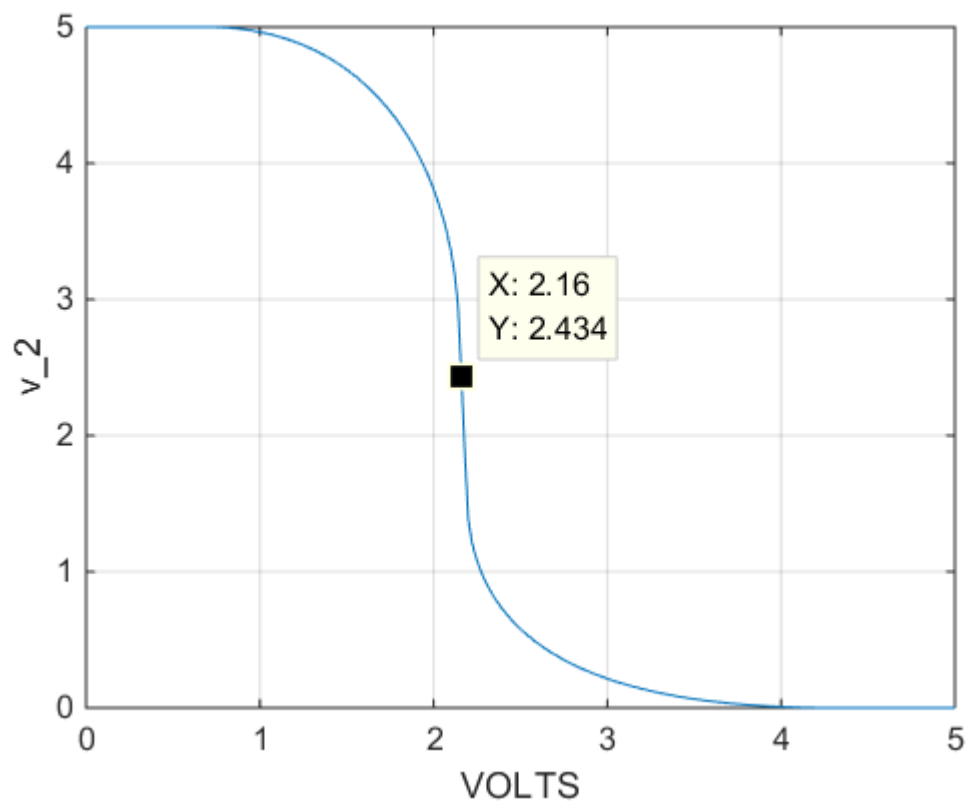
# 增益公式推导



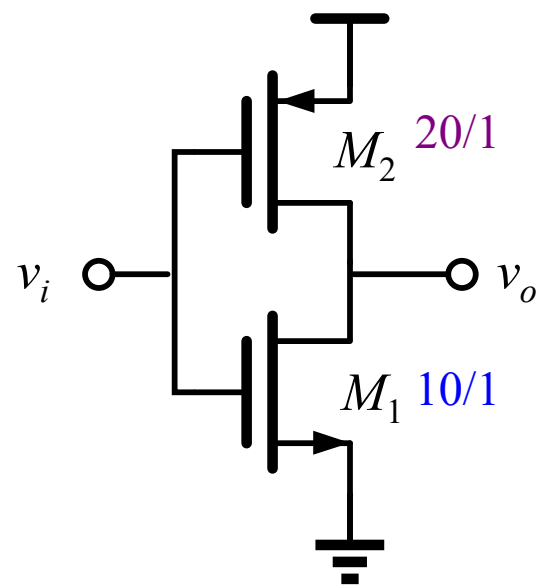
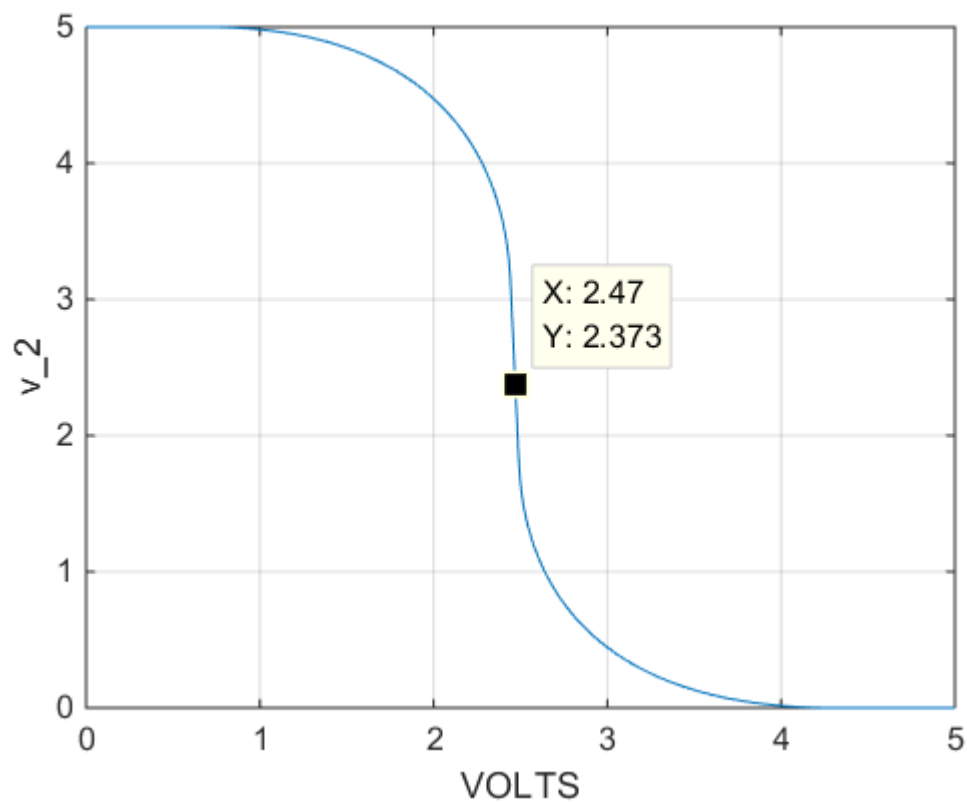
$$v_o = -\left(g_{m1}v_{gs1} + g_{m2}v_{gs2}\right)\left(r_{ds1} \parallel r_{ds2}\right) = -\left(g_{m1}v_i + g_{m2}v_i\right)\left(r_{ds1} \parallel r_{ds2}\right)$$

$$A_v = -\left(g_{m1} + g_{m2}\right)\left(r_{ds1} \parallel r_{ds2}\right)$$

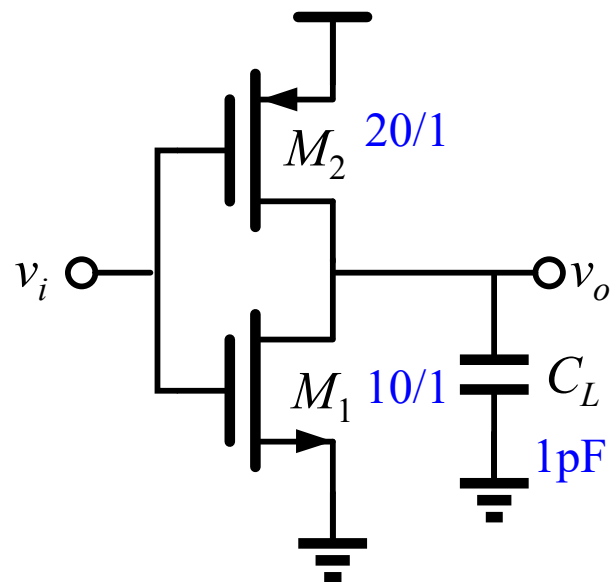
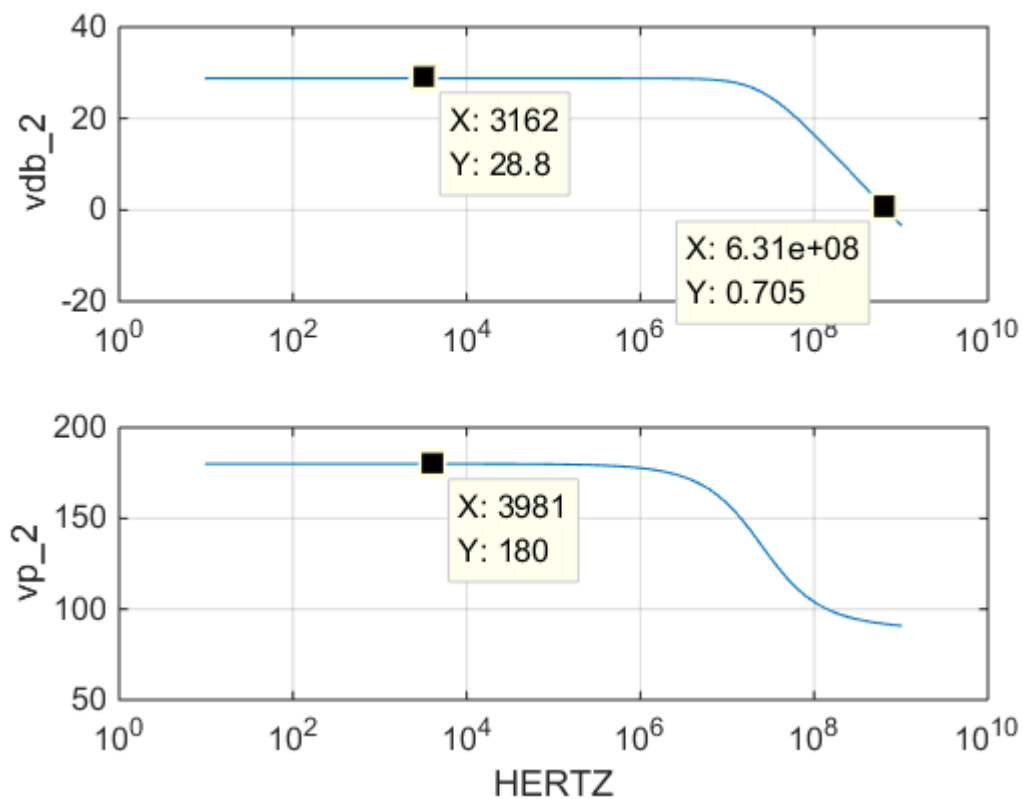
# 直流扫描仿真



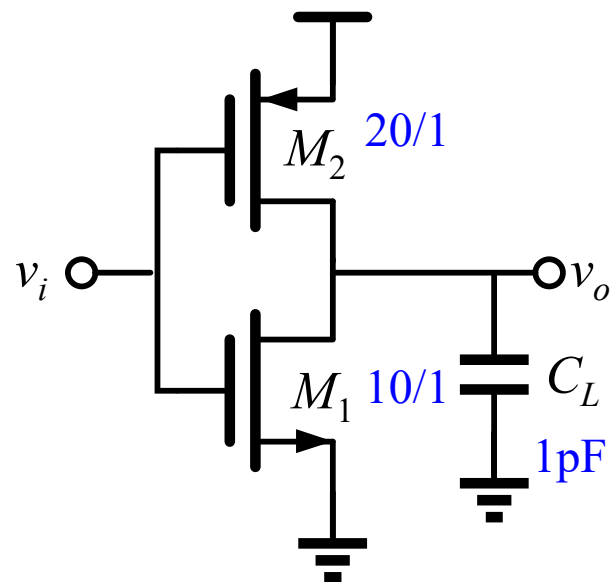
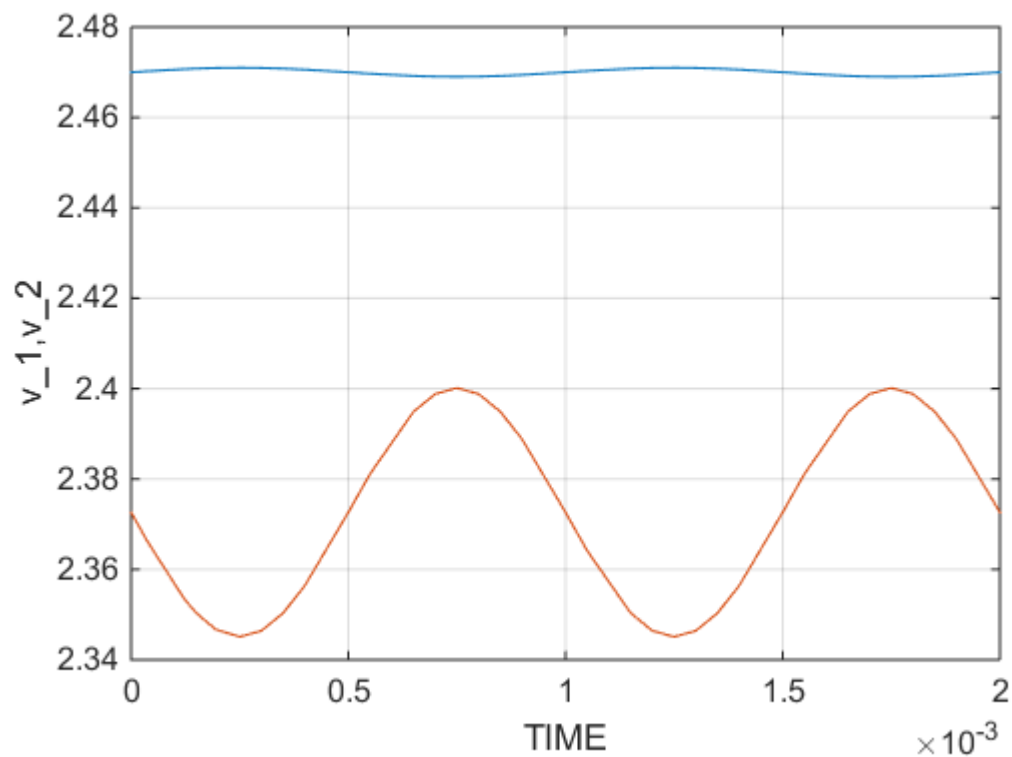
# 直流扫描仿真



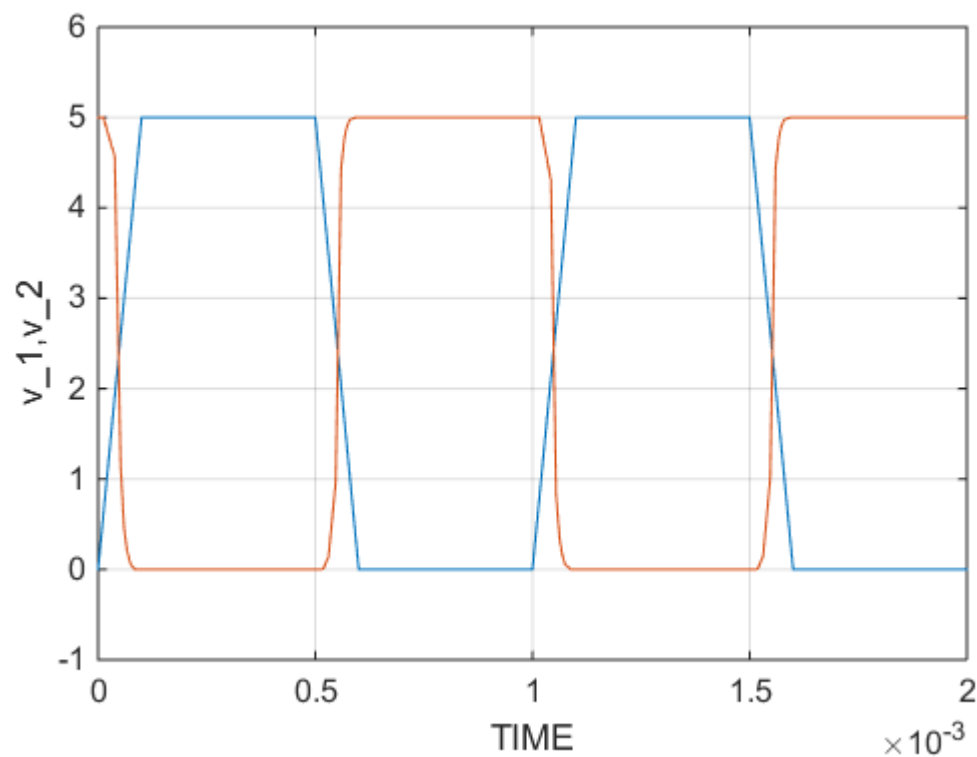
# AC仿真



# 瞬态仿真 (小信号)



# 瞬态仿真 (大信号)



反相器 (非门)

