Analog Electronic Circuits
Department of Electrical and Computer Engineering
Seoul National University

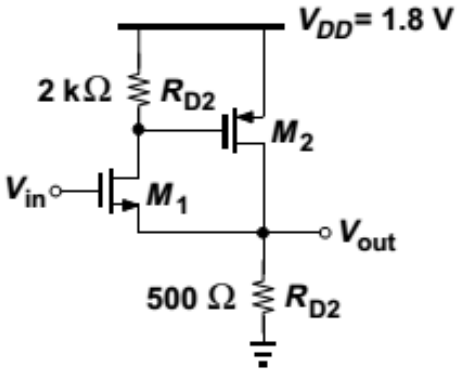
2014 Fall D.K. Jeong

PSPICE Assignments #3

- Due: 2014/11/05(Wed) 3:30 PM
- Submit a hardcopy report.
- For any questions, send an e-mail to jhlee88@isdl.snu.ac.kr

1. Solve the textbook problem 12.81. Use the provided spice library, "Midterm.lib".
   Assume $\mu_n C_{ox} = 500\mu A/V^2$, $\mu_p C_{ox} = 200\mu A/V^2$, W=20μm, L =0.18μm, λ=0, V_{DD}=3.3V, $V_{TN,n} = |V_{TN,p}|$ =0.8V, $V_{in,offset}$=1.5V.

* use V_{DD} = 3.3V for the Pspice simulation



a) Setting the operation point ($V_{in,offset}$=1.5V) [3 point]
b) Calculating the open-loop gain [3 point]
c) Calculating the closed-loop gain and comparing it with the simulation result [4 point].

<End of PSPICE Assginments #3>