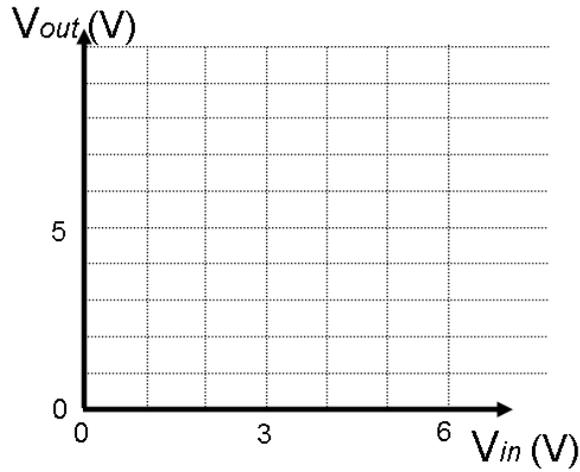
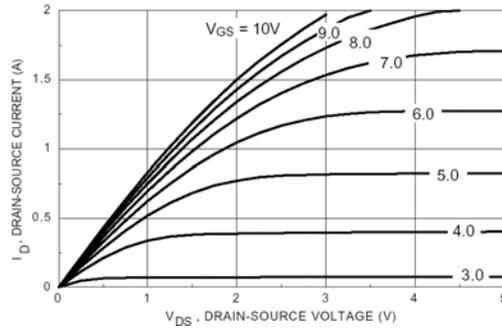
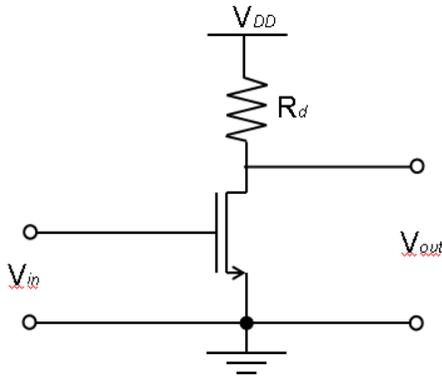


Name: _____
 Student ID: _____
 Section: _____
 Date: _____

UNIVERSITY OF CALIFORNIA, BERKELEY
EE40: Introduction to Microelectronic Circuits
CS Amplifier Prelab

1. Given the I-V Characteristic graph shown below, use the load-line analysis technique to determine how the output voltage of a common-source amplifier changes with input (gate bias) voltage ($R_d = 10 \text{ ohm}$, $V_{DD}=5V$)



2. Identify the range of input voltages for which high voltage gain (large change in output voltage for a given change in input voltage) is achieved. Estimate the best DC operating point (V_{in} , V_{out}).