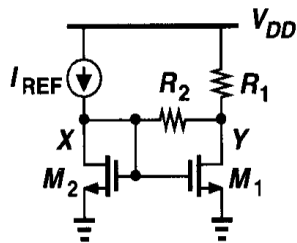
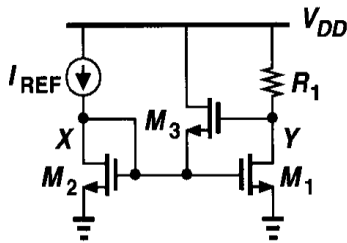


Assignment-3	EE204 Analog Circuits	14 th Feb 2019
Submission Deadline-17.00 22 nd Feb, 2019	Submission Protocol: Notebook submission. Plots through Moodle	Comment: None

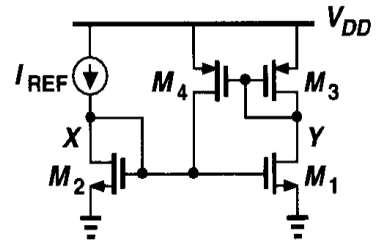
1. For each circuit shown below, sketch V_x and V_y as a function of I_{REF} .



(a)

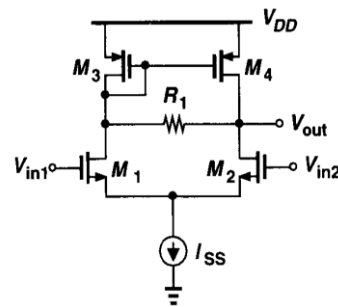


(b)

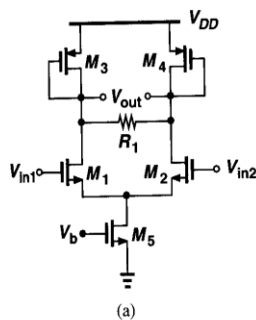


(c)

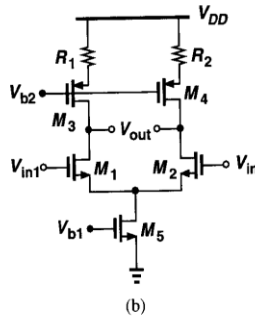
2. Due to a manufacturing defect, a large parasitic resistance, R_1 , has appeared in the circuit as shown below. Calculate the gain of the circuit.



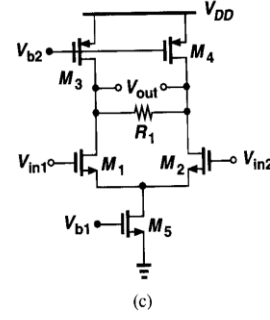
3. Assuming all of the circuits shown in figure below are symmetric, sketch V_{out} as (a) V_{in1} and V_{in2} vary differentially from zero to V_{DD} , and (b) V_{in1} and V_{in2} are equal and they vary from zero to V_{DD} .



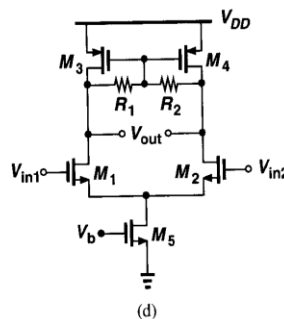
(a)



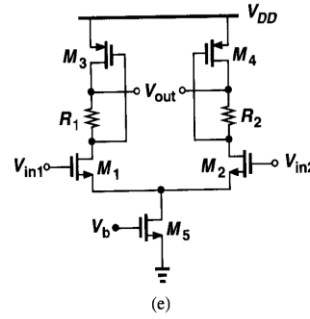
(b)



(c)



(d)



(e)