

Homework 10 – MOSFET operation

$$\beta = 2 \text{ mA/V}^2, V_{Th} = 3 \text{ V}$$

- What is the operating region of T for $v_i = 1.5 \text{ V}$? Justify your answer.
- What is the operating region of T for $v_i = 5 \text{ V}$? Justify your answer. Compute I_D and V_{DS} .
- Find a value for v_i for which T works in extreme conduction (exc). Prove that T works in the desired region.

