

CS/EE120B  
2004

## Quiz 1

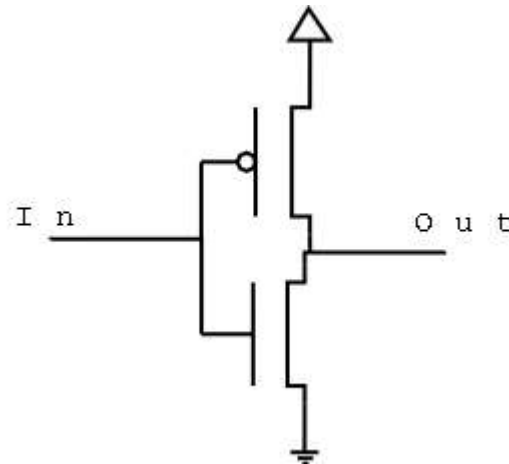
October 14,

Lecturer: Brian Grattan

Do not use any notes or calculators

Name: Solutions UCR ID: \_\_\_\_\_

1. (1 point) Using PMOS transistors and NMOS transistors, draw an inverter.



2. (1 point) Which components have outputs that are a function of current inputs only?

a) **Combinational** b) Digital c) Sequential d) General Purpose e) Wombat  
All the other answers depend on current and previous inputs, or are furry creatures found mainly in the southern hemisphere.

3. (8 points) For the following FSMD, create a datapath. Don't worry about making the FSM. The value "OUT" should be stored in a register. Be sure to create and label all necessary connections. Do not optimize. Here

