Name: Id#

## COE 360, Principles of VLSI Design, Term 032 Quiz# 4

Date: Tuesday, March 30

**Q1.** Assuming NMOS enhancement transistor threshold voltage  $V_{tn}$  of 1.0v, depletion transistor threshold voltage  $V_{td}$  of -2.0v, and PMOS enhancement transistor threshold voltage  $V_{tp}$  of -1.0 v, write down the voltages of the indicated nodes below. Assume that the body effect is negligible, and W/L=2 for all transistors.

