

EE43/EE100 — PRELAB #9
Digital Logic

Name: _____

TA: _____

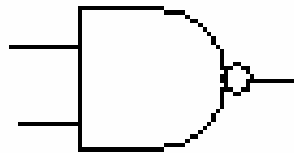
Section: _____

Problem 1:

Consider the truth table for the NAND gate:

A	B	F
0	0	1
0	1	1
1	0	1
1	1	0

How can you implement an inverter from a NAND gate? Show how you would alter the NAND gate below:



Problem 2:

Consider the truth table for the XOR gate:

A	B	F
0	0	0
0	1	1
1	0	1
1	1	0

Determine the sum-of-products form for the XOR function F above.

Problem 3:

The NAND-gate implementation of an XOR gate is shown in the schematic below. Write the expressions for the output of each NAND gate.

