

Name : _____
Section : _____
Date : ___/___/___

Introduction to Discrete Digital Logic and VHDL

Note: Follow the steps, fill in the blanks and turn it in the next session lab.

Part 1: Create a 2- Input NAND from a 3-Input NAND

Design a circuit for the function $F = (AB)'$ by using a 3-Input NAND gate.

1. Draw the 3-input gate truth table.

2. Implement this circuit on the breadboard. Ask your T.A to check your implementation and sign your report.

Part 2: A function with four variables (You can finish this part at home)

Simplify the function $F = A'B'D + BC'D + A'BC + ACD$ and design a circuit for the simplified function using any 7400 logic you wish.

1. Draw the function truth table.

