Name: Id#

COE 202, Term 131

Digital Logic Design

Quiz# 4

Date: Tuesday, Nov. 25

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**Q1**. Design a circuit that accepts two 2-bit unsigned numbers A = A1A0 and B = B1B0. The circuit produces A – B when A > B, and produces A + B otherwise. Find the following:

1. The number of outputs produced by the circuit.
2. The truth table of the circuit.
3. The minimal product-of-sums expression for each output.

# **Q2**. Convert the AND/OR/NOT logic diagram shown below to a NAND logic diagram:

