

## HW3 ECE2060 Sp 2022

**Lectures Covered: Lessons 10, 14, 15, 18 and 19**

Show all relevant steps. Don't just write down the answers.

Show your work on these pages, attach additional pages if necessary.

Your Last Name \_\_\_\_\_ Your First Name \_\_\_\_\_

Your OSU email \_\_\_\_\_

Problems start from next page. **5 problems will be graded**, each graded problem is worth 2 points.

## HW3 ECE2060 Page 2

The problem numbers are from your text book (both the 6th and 7th edition will work)

- 1) Problem 9.4 a, b (do not use any NOT gates). Use the truth table shown on page 2 of Lesson 10 (on our website) for the full adder. This truth table also defines the meaning of the variables X, Y and Z. . Connect X, Y, Z inputs to the inputs a, b, c respectively of the decoder shown in Fig. 9-17 of the book.

Note1: Realizing a full adder means implementing a full adder.

Note2: Use X, Y, Z and connect them to a, b, c exactly as asked in this question. If you mix these variables up then answer will be considered wrong.

From Page 2 of Lesson 10

1) continued

The problem numbers are from your text book (both the 6th and 7th edition will work)

2) Problem 11.7

The problem numbers are from your text book (both the 6th and 7th edition will work)

3) Problem 11.8a

The problem numbers are from your text book (both the 6th and 7th edition will work)

4) Problem 11.9

The problem numbers are from your text book (both the 6th and 7th edition will work)

5) Problem 11.19a

The problem numbers are from your text book (both the 6th and 7th edition will work)

6) Problem 11.21



The problem numbers are from your text book (both the 6th and 7th edition will work)

7) Problem 11.24