

CDA 3103 Computer Organization

Homework Ch. 3: Boolean Algebra and Digital Circuits

Assigned: Wednesday, Feb. 5, 2014

Due: Wednesday, Feb. 12, 2014, 11:59pm

1 Problems

For the following questions, the complement of x is written as x' .

1. Construct a truth table for:
 - a. $xy'z + (xy)'z + x(yz)'$
 - b. $(x + z')(y + z)(x' + y')$
2. Complete the following problems from your textbook: 4, 9, 11(c), 15(c), 21, 29, 32, 50, 59
 - a. For 15(c), check your work using a Karnaugh map
3. Complete these problems given in the Exercises on pages 192-193: 2 (a), 3 (a and c)
4. For fun: Exercise 28 from textbook

2 Submission Requirements

- Your solutions must be in a single file with a file name **yourname-hw3**
- If scanned from hand-written copies, then the writing must be legible, or loss of credits may occur. The interpretation of hand-written scanned copies rests ultimately with me.
- Acceptable file formats are: PDF, .doc, .docx
- *Only submissions in the designated location on Canvas are graded. Submissions in any other form will be ignored. To avoid submission issues, it is strongly recommended that you submit your work at least 24 hours before the submission deadline.*