

CS1203 Assignment 5

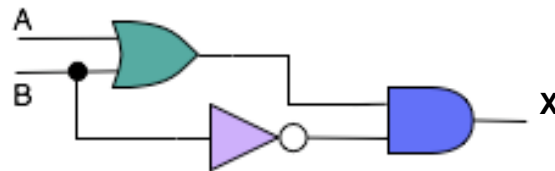
Fall 2020

Due **Monday October 19th** before **4pm Atlantic** in the Desire2Learn dropbox.

Note: All answers need to be contained in a single document using a word processor. You may choose to **draw the diagrams and/or truth tables by hand** (this is recommended especially for the logic diagrams) and take a picture or scan your work and insert the image into the document in the correct order (your answers need to be labelled with the question number and appear in the correct order). Make sure all handwritten work can be easily read. The first page of the document must be a title page (see sample posted in D2L). Once you have finished your document, save the document as a PDF file. **Submit the PDF file** to the appropriate drop box on Desire2Learn. Name your document as follows: **CS1203_YourName_A5**

1. For the boolean expression $X = (A + B)' \oplus (C \cdot A)$
 - a. Draw the logic diagram.
 - b. Draw the truth table for the expression.

2. Given the logic diagram:
 - a. Write the boolean expression.
 - b. Draw the truth table for the expression.



3. Given the following logic diagram:
 - a. Write the boolean expression.
 - b. Write the boolean expression for an equivalent circuit.
 - c. Draw a logic diagram for the Boolean expression from part b.

