Assignment # 2

Due Friday January 25th

Read Chapter 2 Section 3 and Section 5. Get more familiar with DesignWorks. This assignment will start the process.

1. Chapter 2 Exercise 2.3. This is the last exercise from last week. Now, draw the schematics in DesignWorks and turn in your drawings.
2. Chapter 2 Exercise 2.7 (a) and (b) (the first 8 laws are those listed page 51 of the text).
3. Chapter 2 Exercise 2.10 (a) and (b)
4. Write the complete truth table for the function
   F = A'B'C'D' + A'B'CD' + A'BC'D' + A'BC'D + AB'C'D'+ AB'C'D + AB'CD' with the additional fact that inputs A'B'C'D, AB'CD, and ABCD' can never occur (don't cares). Simplify using a Karnaugh map.
5. The function F is true (logic 1) for minterms m0, m1, m4, m5, m6, m10 and m11; don't care for minterms d2 and d14; and false otherwise. Simplify using a Karnaugh map (assume A, B, C, D as variables).
6. Chapter 2 Exercise 2.15 (b), (c) and (d). For part (b) use the $\Pi(M_i)$ notation.
7. Chapter 2 Exercise 2.18 (b) and (f)
8. Chapter 2 Exercise 2.24