

**COEN/ELEN 921c**  
**Homework 5**

Prob 1. Text Problem 3.12b (b only)

Prob 2. Text Problem 3.14 (a & b)

Prob 3. Text Problem 3.45 (a & b)

Prob 4. Text Problem 3.55

Prob 5.

Please indicate which of the following are or are not XOR or XNOR functions.  
For those functions that are XOR or XNOR, write their algebraic expression for that function.

- a.  $f(A,B,C) = \sum m(1,3,4,6)$
- b.  $f(A,B,C,D) = \sum m(0,2,5,7,8,13,15)$
- c.  $f(A,B,C,D) = \sum m(2,3,4,5,10,11,12,13)$
- d.  $f(A,B,C,D) = \sum m(1,3,4,6,8,10,13,15)$
- e.  $f(A,B,C) = \sum m(0,2,4,6)$

Prob 6. Text Problem 4.4

Prob 7. Text Problem 4.15