

**ECE/CS 598NV**  
**Special Topics (Distributed Algorithms for Wired and Wireless Networks)**  
**Fall 2009**

**Homework 1**

Total points: 15

Due: 11:00 a.m. on September 8, 2009

1. (5 points) Problem 2.8 in the textbook. See errata provided by the textbook authors, for correction to Algorithm 2 in the textbook.
2. (5 points) Problem 3.3 in the textbook.
3. (5 points) Problem 3.6 in the textbook.

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**Recommended Exercises**

- Problem 2.12 in the textbook.
- Problem 3.5 in the textbook.
- Problem 3.10(a) and (b). Note that each processor needs to compute the AND of the input bits of all processors in the ring.
- Algorithm 6 elects the node with the smallest identifier as the leader. Using Algorithm 6 as a starting point, suggest an algorithm to elect the node with the largest identifier as the leader. What is the time and message complexity of your algorithm.