Wireless Networks Prof. Zygmunt J. Haas

Spring 2013

Homework # 7: Chapter 9 (including MAC Protocols)

- Rules: 1. Due by Friday, April 26, 2013
 - 2. Solve all the problems below for 100 points independent work only.
 - 3. Show full solution to the problems do not skip steps.

Solve the following problems (textbook, starting on page 488):

- 1. Problem 9.7
- 2. Problem 9.8
- 3. Calculate the propagation delay in packet transmission times, if a 1.92 [Mbps] channel data rate is used and each packet contains 256 [bits]. Assume that the maximum distance between the transmitter and the receiver is 10 [km]. If slotted ALOHA is used, what is the maximal packet size that will maximize the throughput?
- 4. **Problem 9.12**
- 5. Problem 9.13
- 6. Problem 9.14