

CS 422 (Spring 2008)
Homework #6 (**Practice homework**)

This homework will *not* be graded and you don't have to turn it in. It is provided as a chance for you to practice the materials covered in class. The answers will be reviewed during the 4/22/2008 lecture.

1. K & R Chapter 4, R21, R25, P18, P22, P24, P26.

2. K & R Chapter 5, R9, P7, P14, P15.

3. CSMA/CD and token passing are two possible MAC protocols. Discuss the relative performance advantage of one over the other under (a) expected high network contention, and (b) expected low network contention.

4. "A hub is a physical level device." Explain what this means and discuss its implications when a hub is used to connect multiple LAN segments.

5. Suppose the message to transmit is M and the check pattern is P . Show how the CRC checksum R is calculated by the sender as a function of M and P . Show how a receiver can use R to determine if M has been corrupted during transmission.