## Introduction to Networking

## Homework 4

Handed out:Monday, November 13, 2000Due back:Wednesday, November 29, 2000 (at the start of class)Notes:To be done individuallyIf you don't have the textbook, please see us for a copy of the problems

- 1. Textbook problem 5-3
- 2. Textbook problem 5-4
- 3. Textbook problem 5-12
- 4. Textbook problem 5-14
- 5. Textbook problem 5-19
- 6. Textbook problem 5-22

Extra Credit Problem

Read about Hamming codes and block codes such as Reed-Solomon codes (RS codes are used to encode compact discs, btw). There are many resources on the web (for example, <u>http://www.cs.ucr.edu/~ehwang/courses/cs120a/hamming.pdf, http://www-math.cudenver.edu/~ehwang/courses/m6221/moons\_over\_my\_hamming\_code.pdf, http://www.4i2i.com/reed\_solomon\_codes.htm). Explain why it might make sense for a wireless network adaptor, such as a Wave LAN or Blue Tooth adaptor, to use such codes when sending and receiving data. Using such codes is known as forward error correction.</u>