## **Introduction to Networking**

## Homework 4

Handed out: Thursday, Febuary 27, 2003

Due back: Friday, March 14 (at the start of class)

Notes: To be done individually

If you don't have the textbook, please see us for a copy of the problems

1. Textbook problem 5-2

2. Textbook problem 5-12

3. Textbook problem 5-14

4. Textbook problem 5-16

5. Textbook problem 5-18

6. Textbook problem 5-21

## 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, <a href="http://www.cs.ucr.edu/~ehwang/courses/cs120a/hamming.pdf">http://www.cs.ucr.edu/~ehwang/courses/cs120a/hamming.pdf</a>, <a href="http://www-math.cudenver.edu/~ehwang/courses/m6221/moons\_over\_my\_hamming\_code.pdf">http://www-math.cudenver.edu/~ehwang/courses/m6221/moons\_over\_my\_hamming\_code.pdf</a>, <a href="http://www.4i2i.com/reed\_solomon\_codes.htm">http://www.4i2i.com/reed\_solomon\_codes.htm</a>). 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.