

# Introduction to Networking

## Homework 4

Handed out: Friday, March 1, 2002

Due back: Friday, March 15 (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 5-3
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, <http://www.cs.ucr.edu/~ehwang/courses/cs120a/hamming.pdf>, [http://www-math.cudenver.edu/~wcherowi/courses/m6221/moons\\_over\\_my\\_hamming\\_code.pdf](http://www-math.cudenver.edu/~wcherowi/courses/m6221/moons_over_my_hamming_code.pdf), [http://www.4i2i.com/reed\\_solomon\\_codes.htm](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.