Homework 2 Christopher Chapline

# Chapter 2

## Problem 5

 $11010111111010111111\mathbf{0}1010111111\mathbf{0}110$ 

## Problem 11

If the two erroneous bits are not in the same column, then the parity byte at the end of the frame will have an incorrect number based on the count of 1s in those columns. If they occur in the same column, then the parity bits at the end of each byte will reveal a mismatched number of 1s in the bytes that the errors occurred in.

### Problem 43a

A will have a 63% chance to win the race. If the backoff time for A is  $0 \times T$ , then A will win under any circumstance except for when the backoff time for B is also  $0 \times T$ . If the backoff time for A is  $1 \times T$ , then A will win as long as the backoff time for B is either  $2 \times T$  or  $3 \times T$ .

# Chapter 3

Problem 13

Problem 17

Chapter 5

Problem 9

Chapter 6

Problem 16