Homework 35, due November 30

(1) (Problem 1, page 445) Two codewords were sent using the Hamming [7,4] code and were received as 0100111 and 0101010. Each contains at most one error. Correct the errors.

(2) Find the ISBN numbers of three nearby books. Confirm that each is a valid ISBN number.

(3) (Problem 2, page 445) An ISBN number is incorrectly written as 0-13-116093-8. Show that this is not a correct ISBN number, and find two different valid ISBN numbers such that an error in one digit would give this number.