Math 5251 Homework 2 problem clarification

Due February 15, 2023

The following problem has been modified for clarity, and for a slight mathematical error. (100 in the original problem should be 101, a change reflected below.)

PG 4.05 (modified). What is the probability there is at least one error transmission of a word? Now add a parity-check bit, giving codewords 00, 101, 1100, 11101,11110. What is the probability that there is an error in transmission of a word that is not detected by the pairity-check bit?