

CprE 489

Homework 1

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1)

(a) 00011 00101 00110 01001 01010
01100 10001 10010 10100 11000

(b) # of undetectable errors = # codewords - 1

With data length of n, # of possible errors = $2^n - 1$

Thus, FUE = $\frac{\#codewords-1}{2^5-1} = \frac{10-1}{2^5-1} = 9/31 = .29$

(c)

2)