

Name: \_\_\_\_\_

Hwk 3

ESE 346

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1. Consider a 1 bit error correcting Hamming code. Let the codeword be 7 bits and the message 1100. Find the codeword – show all work – use a diagram like in the book.

2. Consider a CRC code used at a receiver. Let  $G(x)=10011$  and  $R(x)=1011000$  where  $G(x)$  is the generator and  $R(x)$  is the received codeword. Is there an error in the received codeword? Note: since this is a receiver problem the check bits are in  $R(x)$ , you do not have to calculate them.