

CSE 260M - Quiz 4

September 27, 2006

Name: _____

Student ID Number: _____

1. What range of signed numbers can be represented by a 16-bit two's complement number?

Give your answer in the form "-M to +N."

2. Simplify the following Boolean functions into SOP and POS forms using 4-variable Karnaugh Maps:

a. $F(W,X,Y,Z) = \Sigma_{W,X,Y,Z}(0,2,8,10,11)$

b. $F(W,X,Y,Z) = \Pi_{W,X,Y,Z}(1,3,4,5,6,7,9,12,13,14,15)$