

CSE 260M - Quiz 3

September 20, 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 expression using only the Boolean theorems in the notes to a minimum number of literals. Hint: You must use the theorems and show your work to receive credit, but you can use a K-Map to check your answer or to help you see what steps are needed.

$$F = A'BC'D + A'BCD + ABC'D + ABCD$$