

H.W. #7 CpE 100 Spring 2021

Show your work for credit (!) and put a box around each of your answers!

1. Do book problems 2.1 and 2.5. (2 points each)
2. Simplify each of the following Boolean equations using Boolean theorems. (2 points)
 - a. $Z = \bar{A}\bar{B}C + A\bar{B}C$
 - b. $Z = ABC\bar{D} + \overline{ABCD} + \overline{(A + B + C + D)}$
 - c. $Z = AB + \bar{A}BC$
 - d. $Z = ABC\bar{B}$
3. Simulate the operation, showing all possible inputs, of the following logic function: $Z = AB + \bar{C}$. Verify, using a truth table, that your simulation is correct. (3 points)