Digital Logic Design
Quiz 02
2024/03/12

姓名:　　　　　學號:　　　　　系級:

1. Simplify the following Boolean expressions to a minimum number of literals: (30%)

   F(A, B, C) = A'B'C'+A'B'C+AB'C = B' (A'+C)

2. List the truth table in problem 1: (40%)

A	B	C	F
0	0	0	1
0	0	1	1
0	1	0	0
0	1	1	0
1	0	0	0
1	0	1	1
1	1	0	0
1	1	1	0

3. Simplify the following Boolean functions T1 and T2 to a minimum number of literals: (30%)

x	y	z	T_1	T_2
0	0	0	0	1
0	0	1	0	1
0	1	0	1	0
0	1	1	1	0
1	0	0	1	0
1	0	1	1	0
1	1	0	0	1
1	1	1	0	1

T_1 = x'y + xy'
T_2 = xy + x'y'