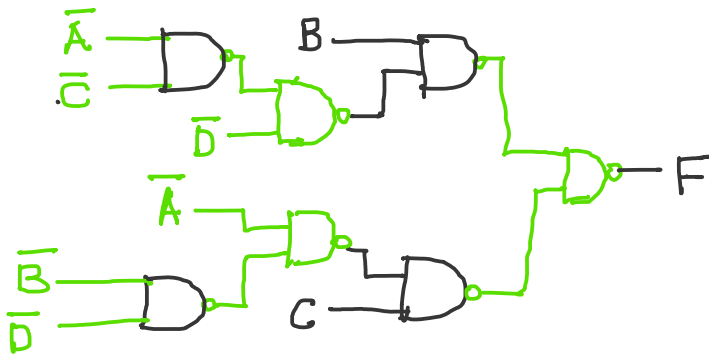
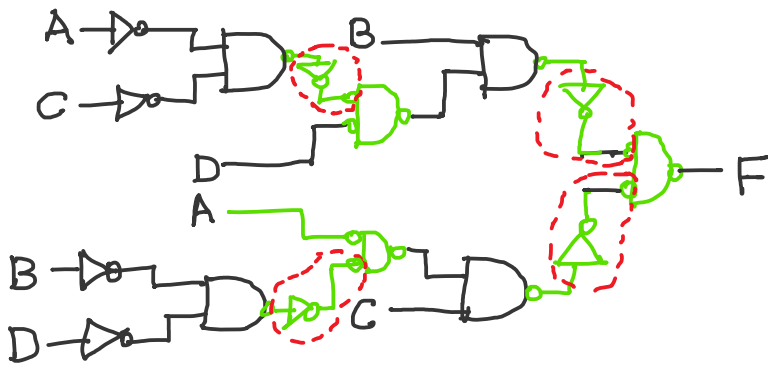
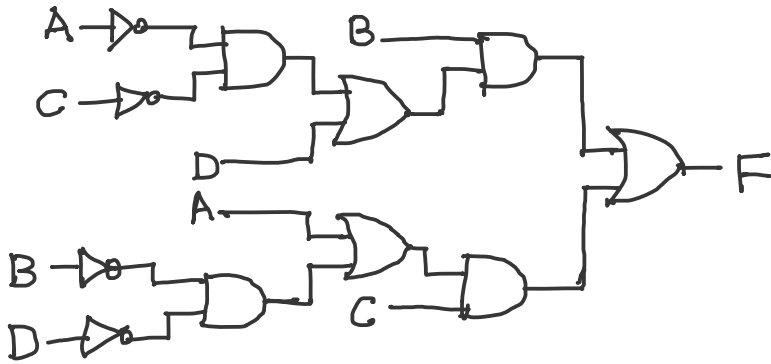


HW2 Solutions ECE2060 Sp 2022

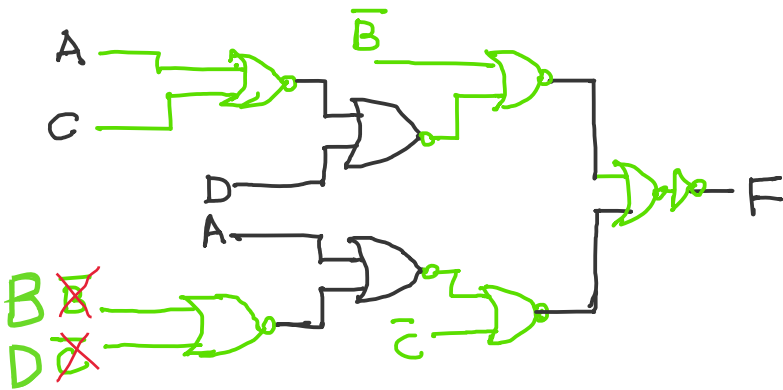
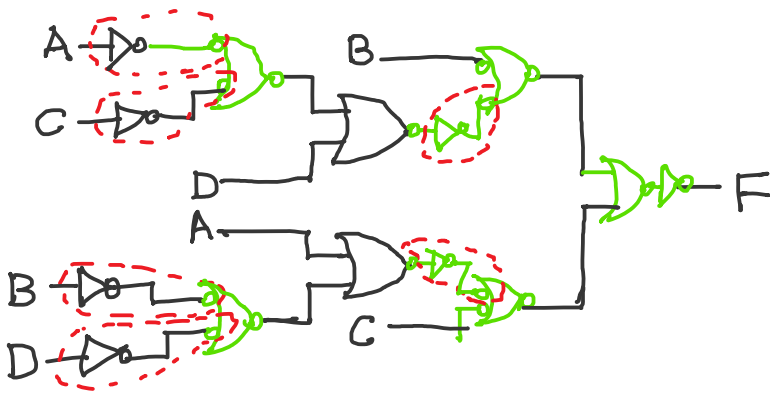
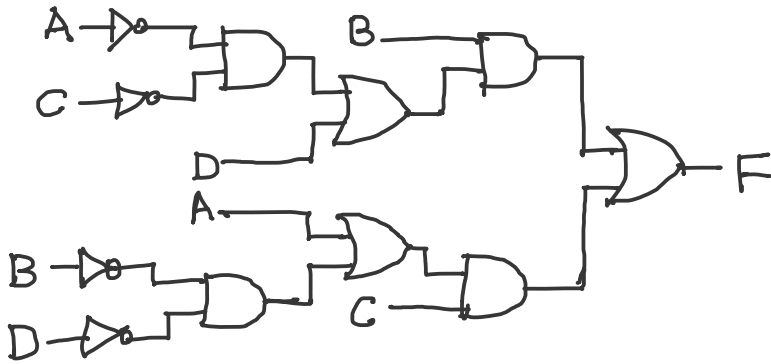
HW2_sol ECE2060 Page 2

1) Simplified Problem 7.35 (a-i): $F = B(A'C' + D) + (A + B'D')C$

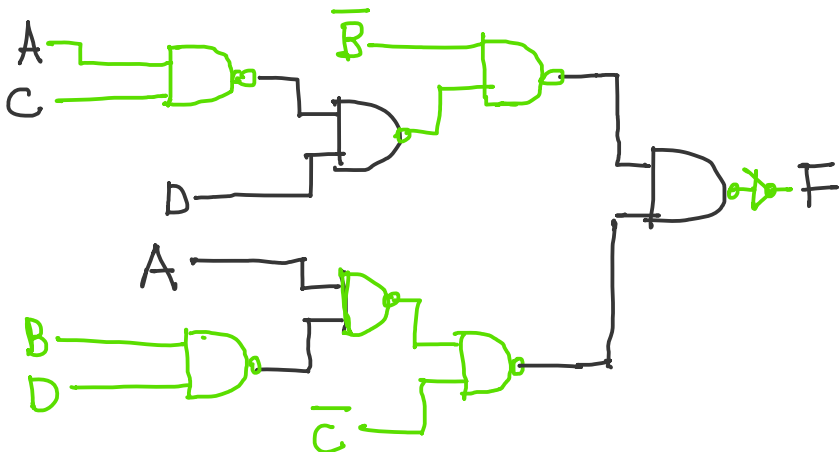
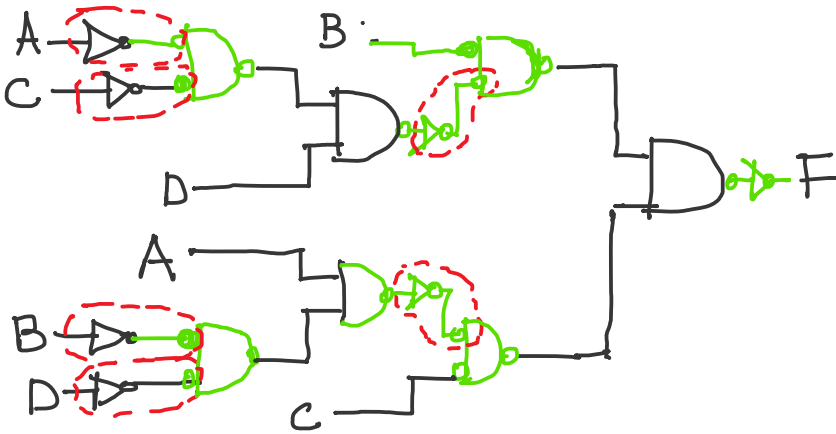
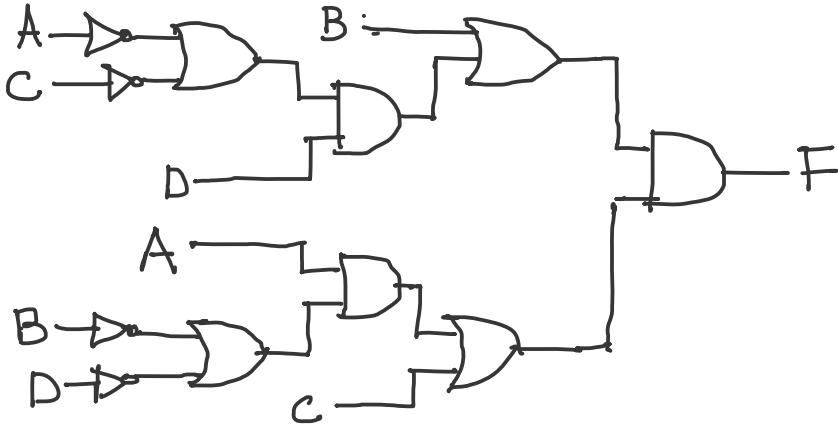


HW2_sol ECE2060 Page 3

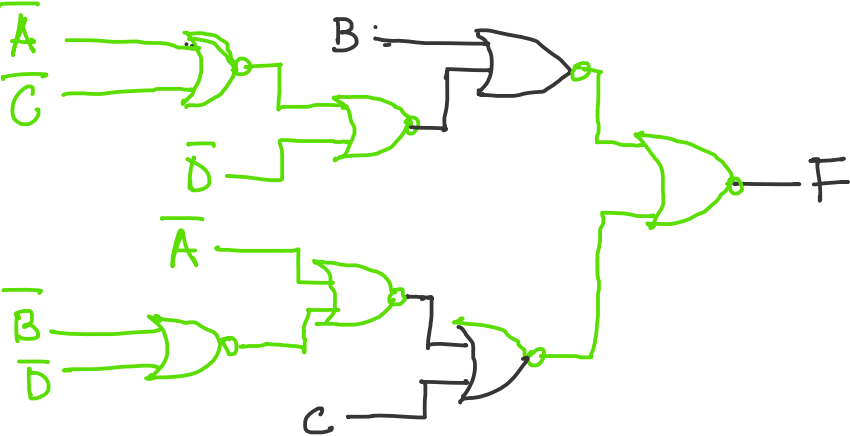
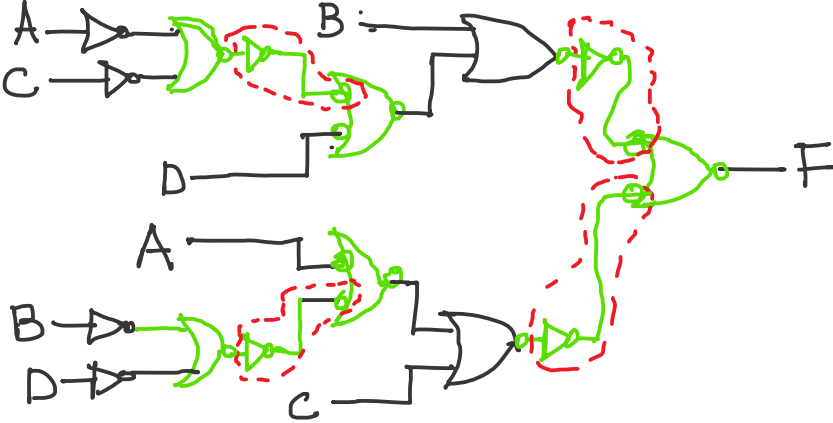
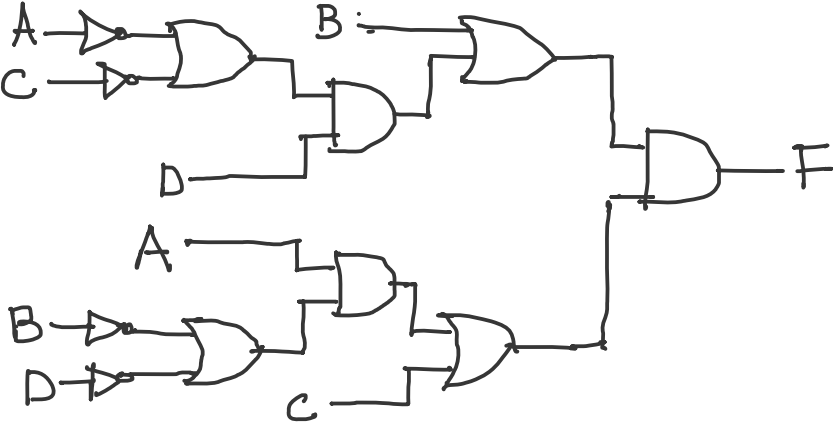
Simplified Problem 7.35 (a-ii): Repeat the previous problem by using only
 1) two-input NOR gates. Add inverters where necessary



3) Simplified Problem 7.36 (b): Realize the following function using only two-input NAND gates. Add inverters where necessary
 $F = (B + (A' + C')D) (A(B' + D') + C)$



4) Simplified Problem 7.36 (c): Repeat the previous problem by using only two-input NOR gates



5) Problem 7.37: Realize the following function using NOR gates. Add inverters where necessary $Z = A[BC' + D + E(F' + GH)]$

