1. **Simplify** the following boolean expression: (A + B) (A+B)(A+C)

2. **Find** the complement of the following expression:
   (x' + y + z')(x' + y')(x + z')

3. **Draw** the following functions using NAND gates only:
   F(A,B,C,D) = (A'B'CD' + A'D + (B+D'))
   NB: You can't simplify the above function. You have to draw based on the function given in question.

4. **Draw** the following functions using NOR gates only:
   F(A,B,C,D) = (AB'C'D' + AD + (B+D'))
   NB: You can't simplify the above function. You have to draw based on the function given in question.

Find out SOP and POS for the following: (Do not use truth table)

5. F(A,B,C) = AB+BC'
6. F(A,B,C,D) = A+ B'CD'
7. F(A,B,C,D,E) = AB+CDE