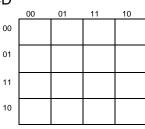
1. The SOP of : $F(A,B,C,D) = \sum m(1,2,3,5,6,9) + \sum d(7,10,11,12,13)$

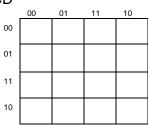




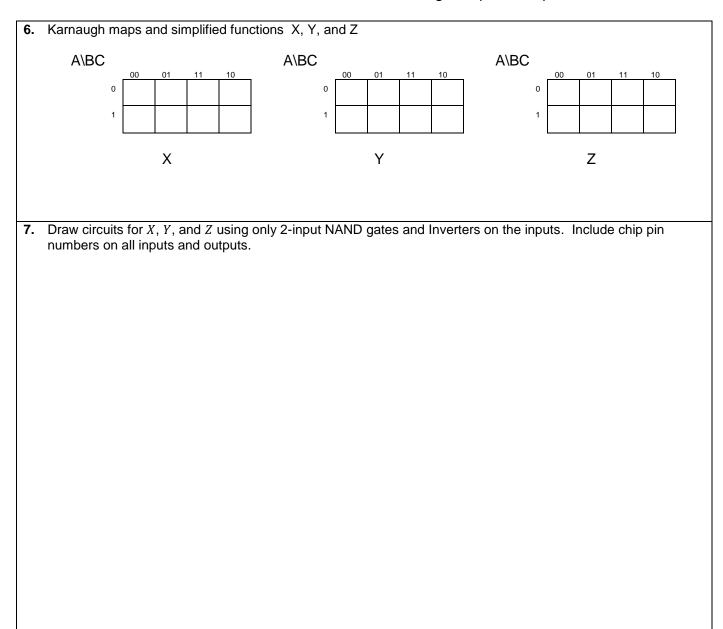
2. The circuit that represents the SOP of F(A,B,C,D) using OR gates, AND gates and inverters (on main inputs).

3. The POS of : $F(A,B,C,D) = \sum m(1,2,3,5,6,9) + \sum d(7,10,11,12,13)$

AB\CD



- **4.** Draw the POS form of the circuit using OR and AND gates (plus inverters on the main inputs.)
- Re-draw the circuit using only 2-input NOR gates (plus inverters on the main inputs.) Include pin numbers.



Finally, write a list of things that you learned in doing this pre-lab: