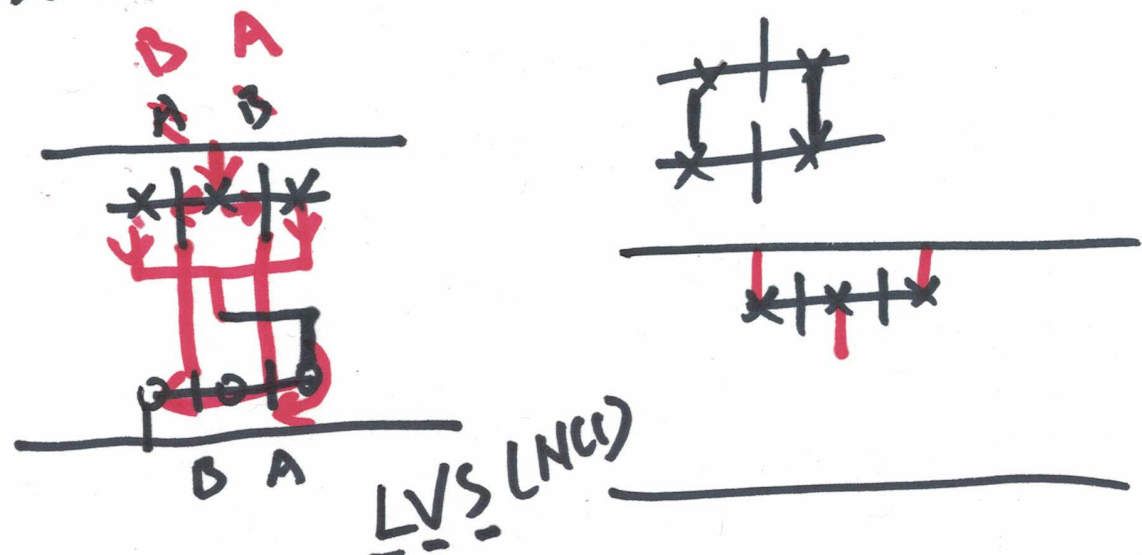
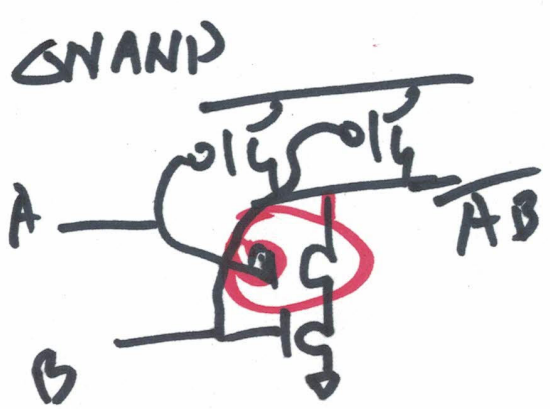
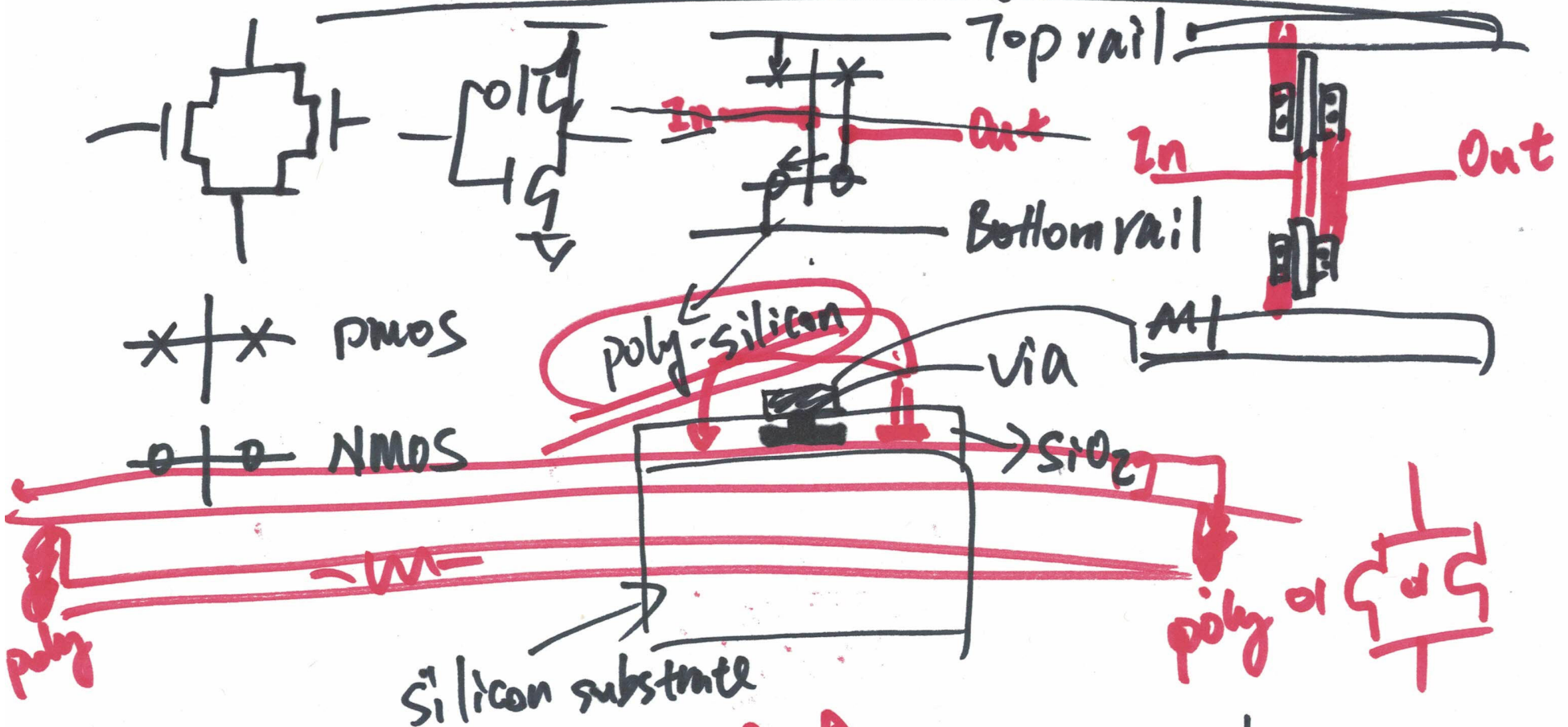
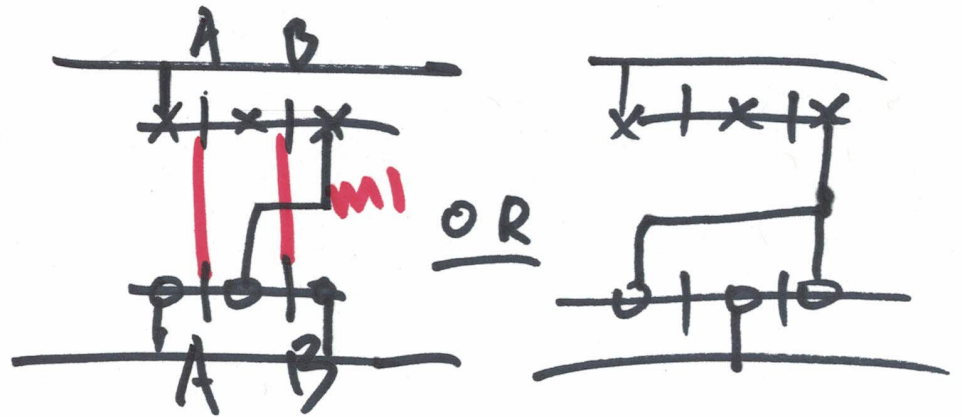
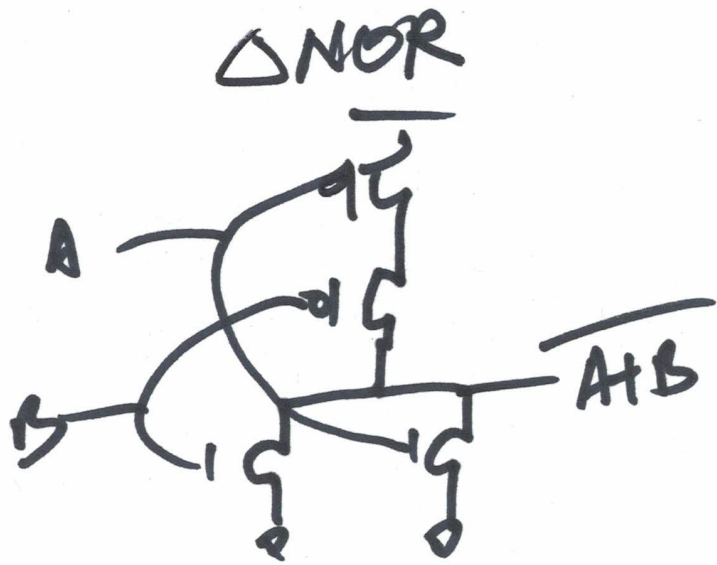
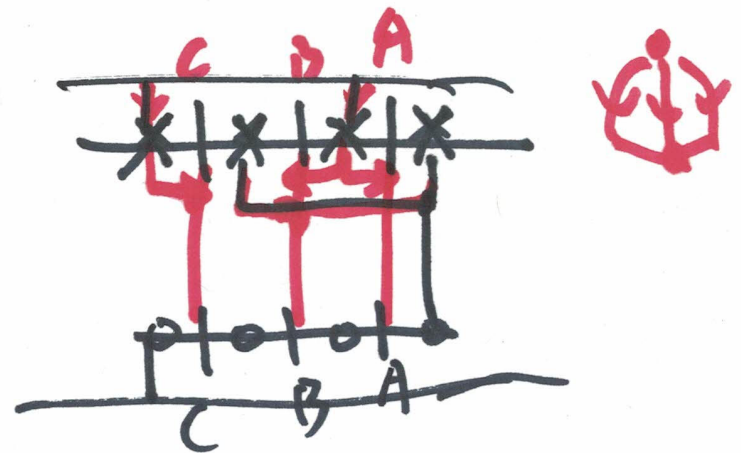
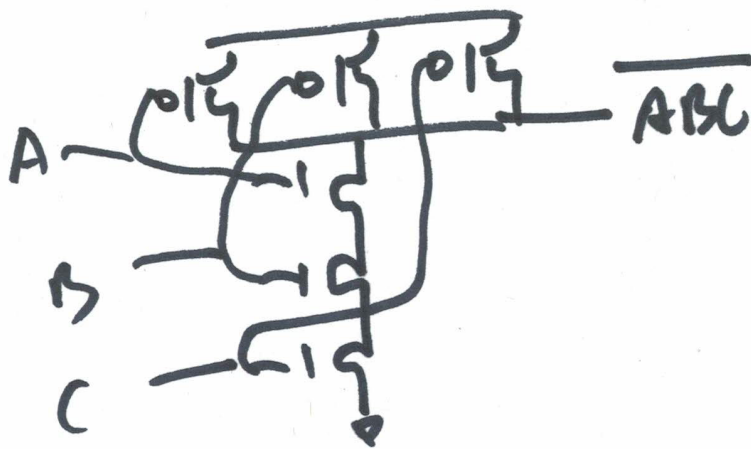


More stick diagrams



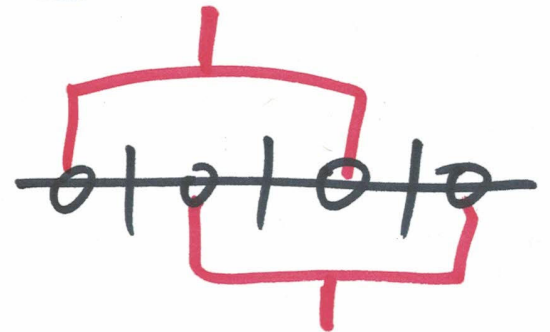
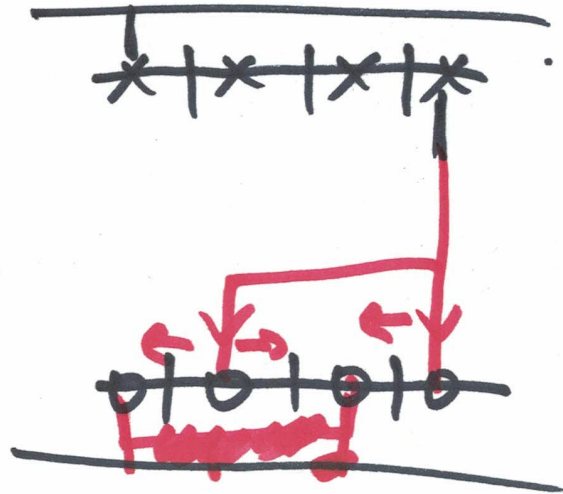
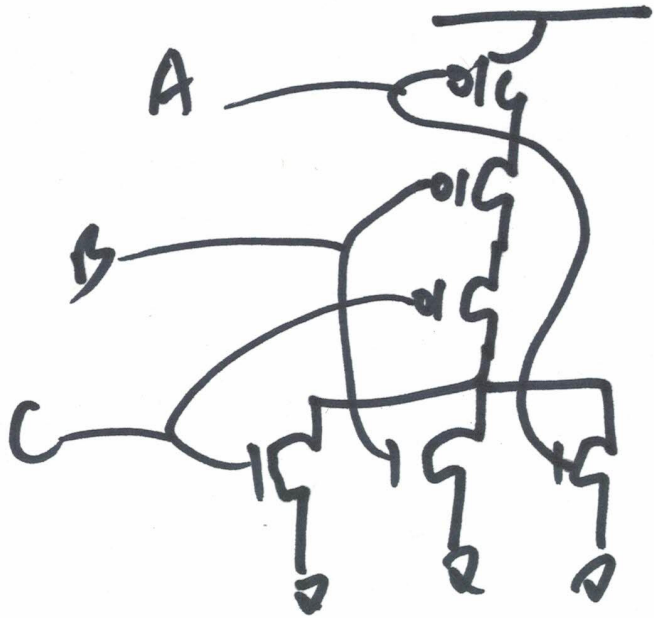


Δ 3 input NAND



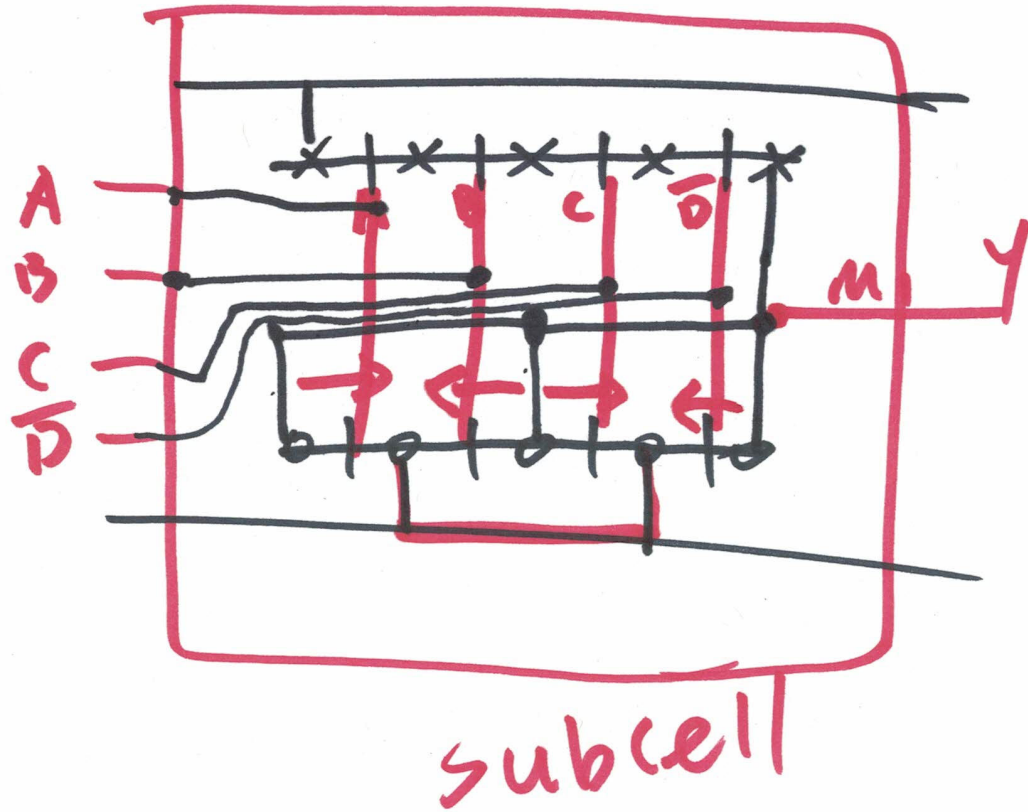
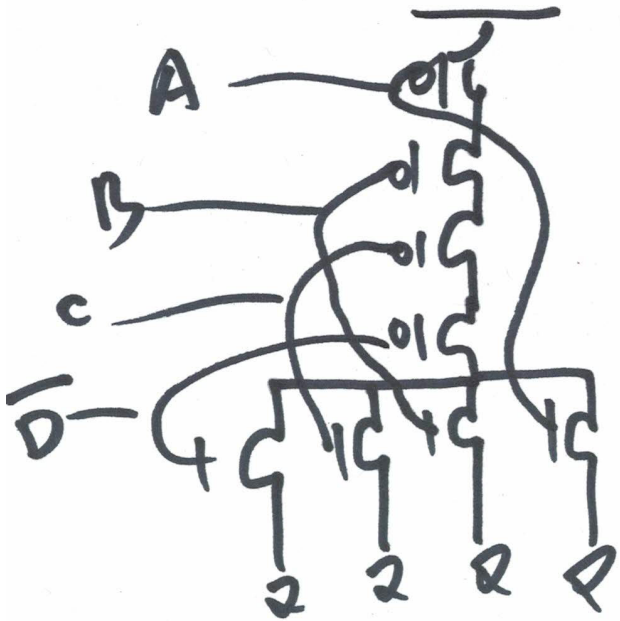
(2)

3-input NOR



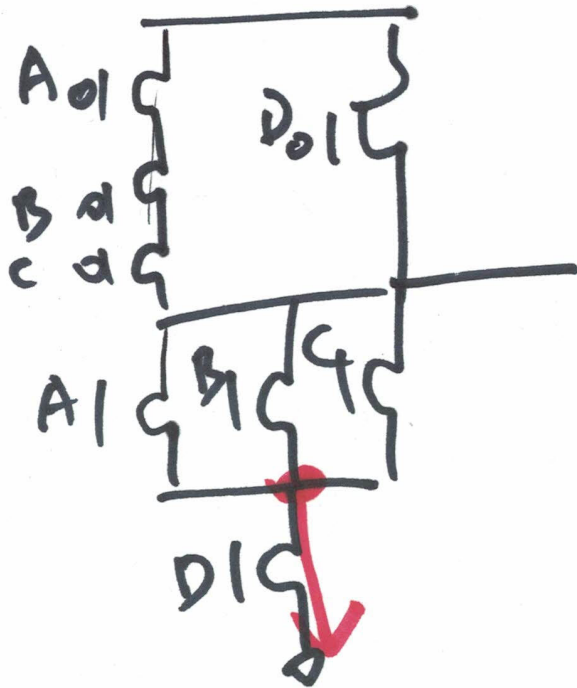
3

$$\Delta Y = \overline{(A+B+C)} \cdot D = \overline{\overline{(A+B+C)} \cdot D} = (A+B+C) + \overline{D}$$

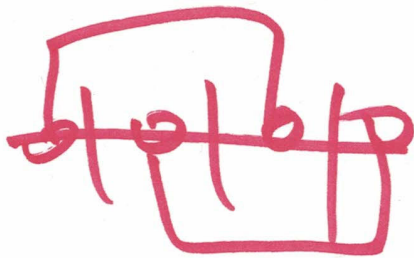
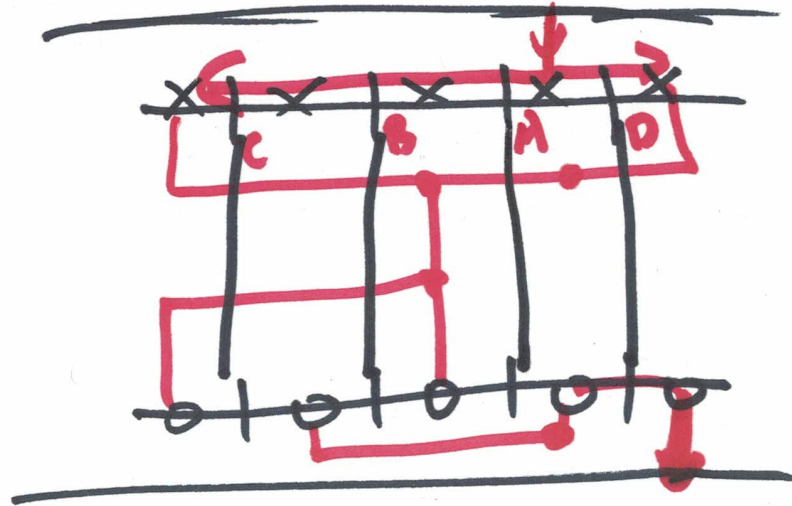


(4)

$$\Delta Y = (A+B+C) \cdot D$$

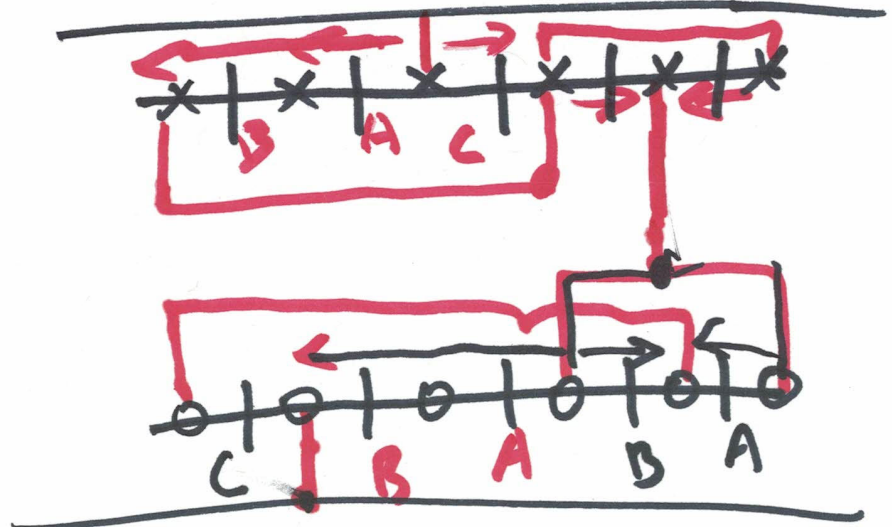
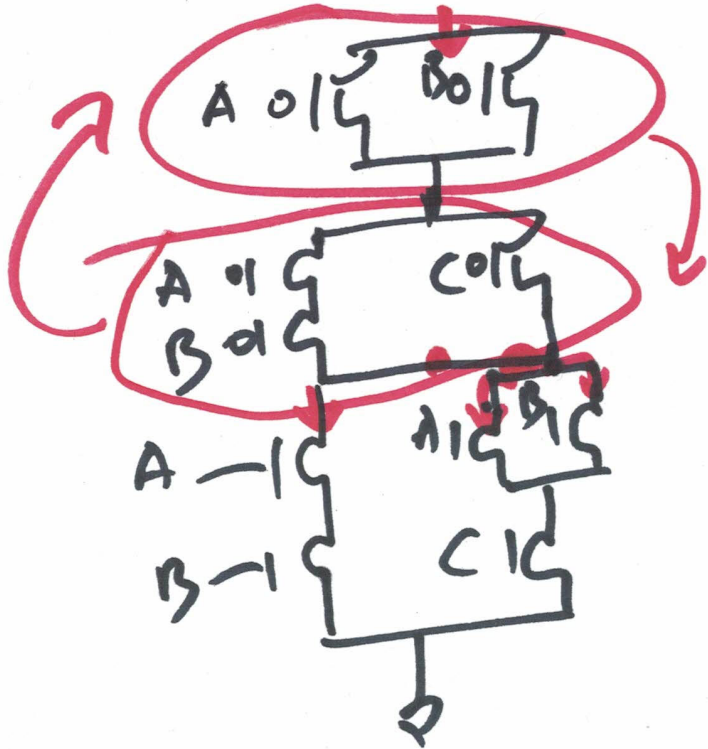


complex CMOS logic



5

$$\Delta Y = \overline{AB + AC + BC} = \overline{AB} + \overline{(A+B)C}$$



(6)