CS 241: HW8

Andrew Brandt

1.

a. OR gates: 7432

b. XOR gates: 7486 74386

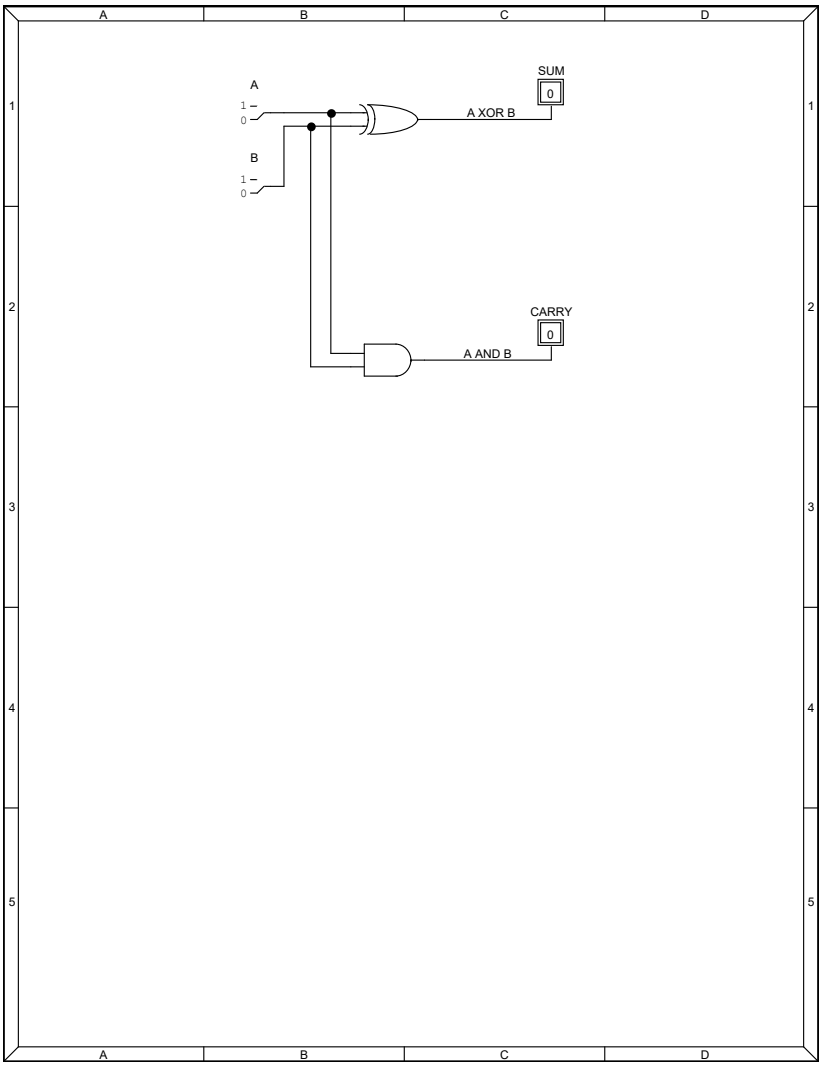
c. NOT gates: 7404

d. NOR gates: 7402

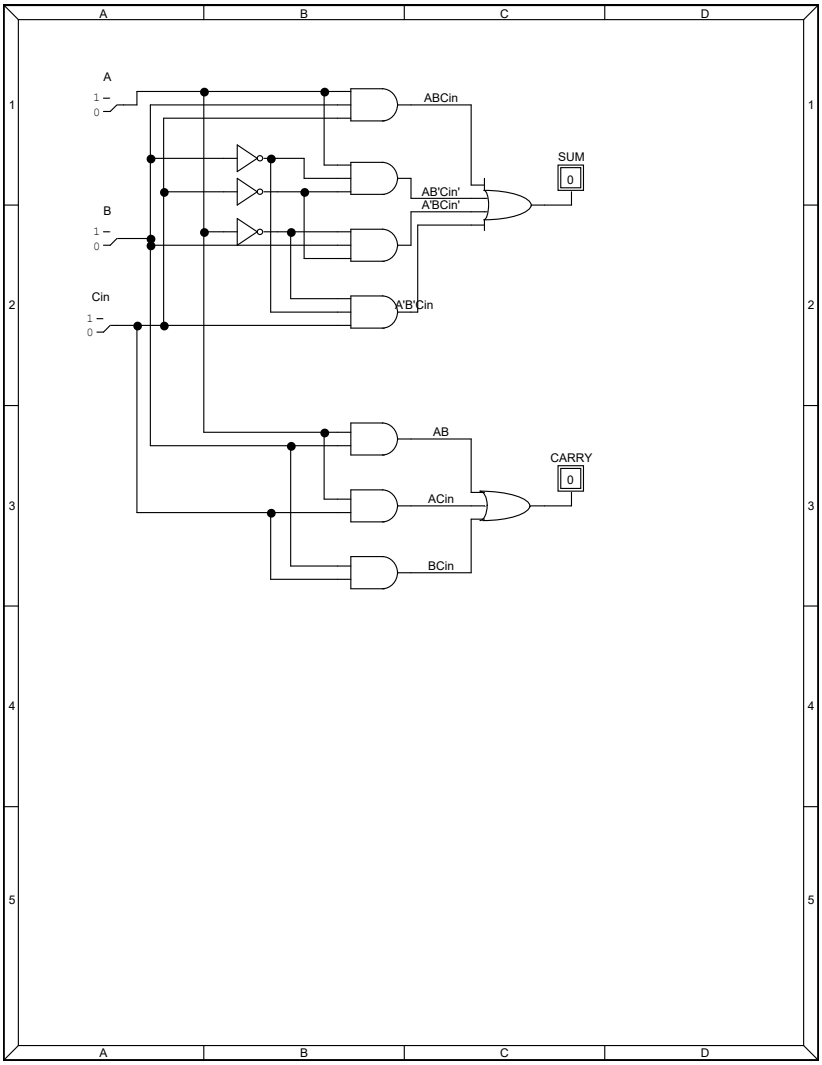
e. NAND gates: 7400, 7410, 7420

f. D Flip Flops: 7473, 7473A, 7474, 74109, 74113

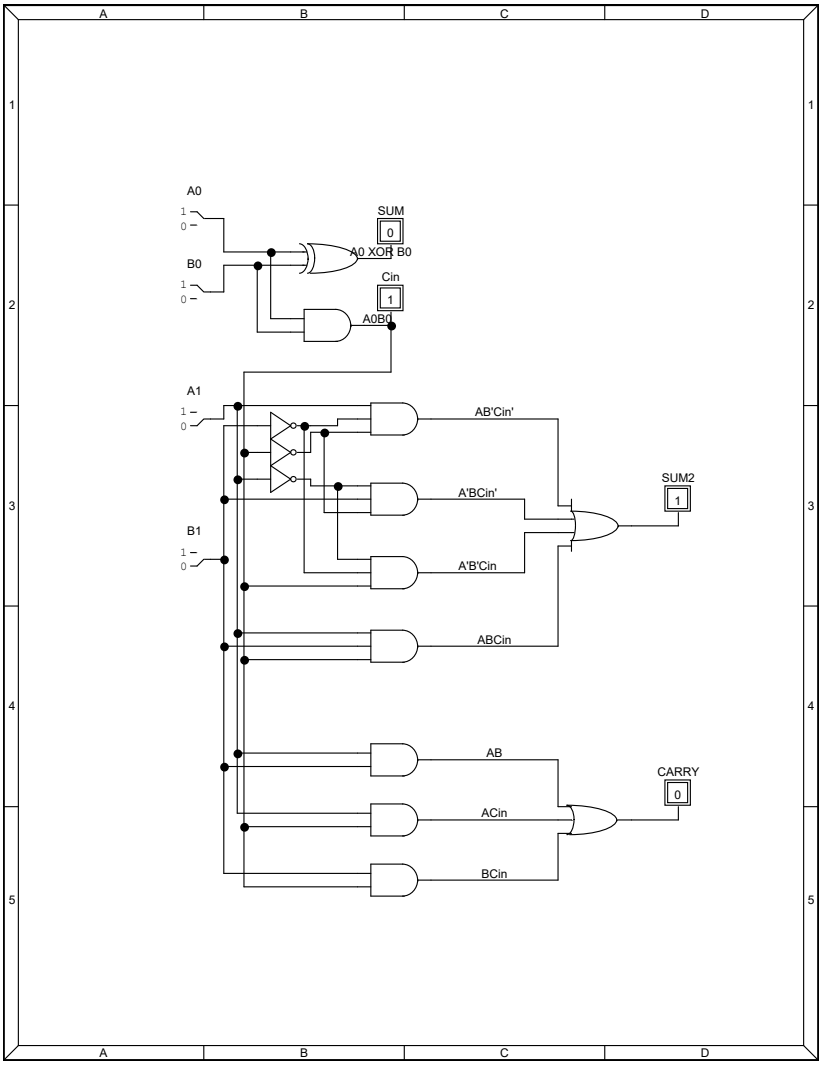
2. Half Adder



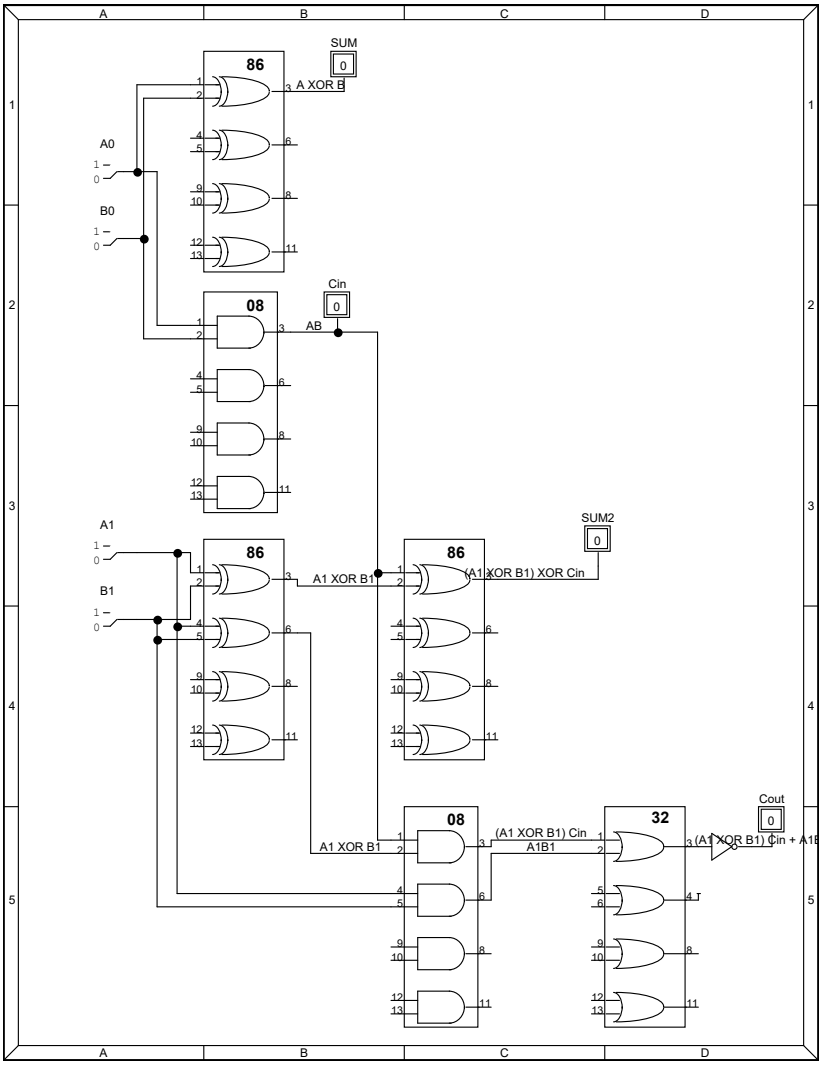
3. Full Adder



5. 2 Bit Adder No IC



6. 2 Bit Adder IC


A
B
C
D
1
2
3
4
5
86
SUM
0
A XOR B
A0
B0
Cin
08
AB
A1
B1
SUM2
(A1 XOR B1) XOR Cin
A1 XOR B1
32
Cout
(A1 XOR B1) Cin
A1B1