

PRELIMINARY WORK-LAB 1

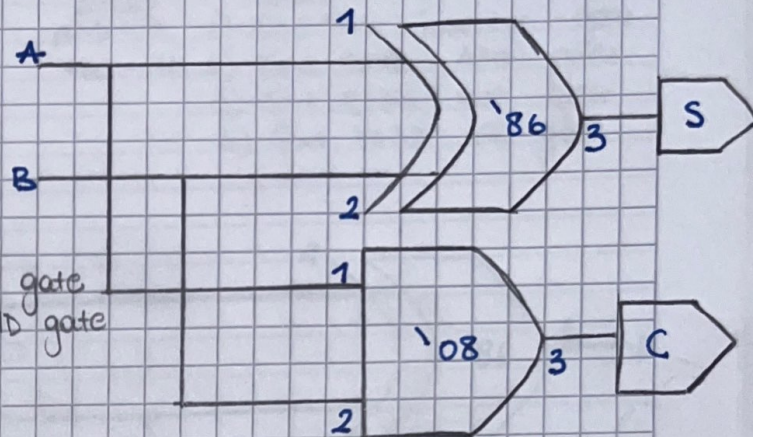
YASEMIN AKW
22101782
CS223-SECTION 6

HALF ADDER CS

7486
GND - 7
Vcc (+5V) - 14

7408
GND - 7
Vcc (+5V) - 14

- ICs
- 1) One 7486 quad 2-input XOR gate
 - 2) One 7408 quad 2-input AND gate



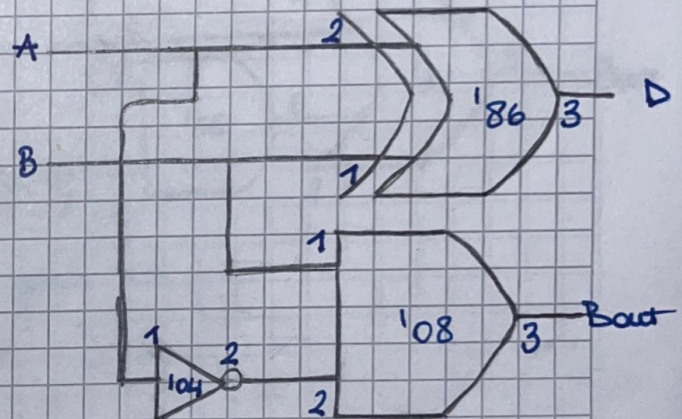
HALF SUBTRACTOR CS

7486
GND (0V) - 7
Vcc (+5V) - 14

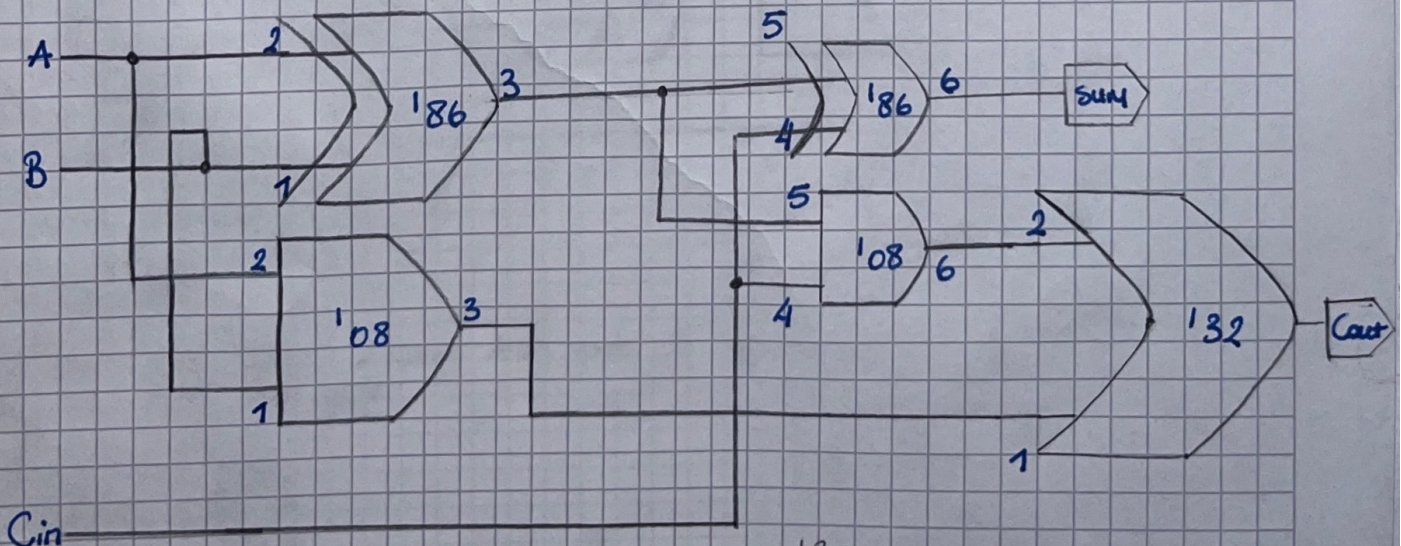
7408
GND - 7
+5V - 14

7404
GND - 7
Vcc - 14

- ICs
- 1) One 7486 quad 2-input XOR gate
 - 2) One 7408 quad 2-input AND gate
 - 3) One 7404 inverter gate



FULL ADDER CS



7408
GND - 7
Vcc - 14

7486
GND - 7
Vcc - 14

7432
GND - 7
Vcc - 14

- ICs
- 1) One 7486 XOR gate
 - 2) One 7408 AND gate
 - 3) One 7432 OR gate

Yasemin Akin
22101782FULL SUBTRACTOR CS7404

GND - 7

Vcc(+5V) - 14

7408

GND - 7

+5V - 14

7486

GND - 7

+5V - 14

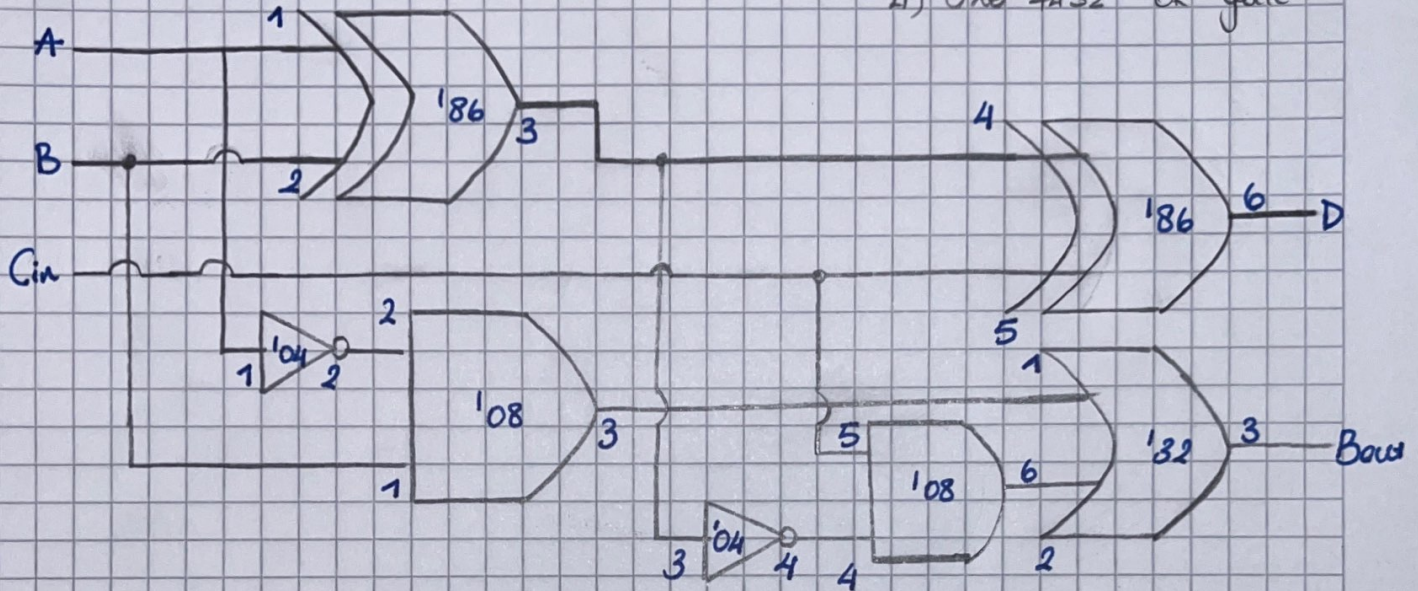
7432

GND - 7

Vcc - 14

ICs

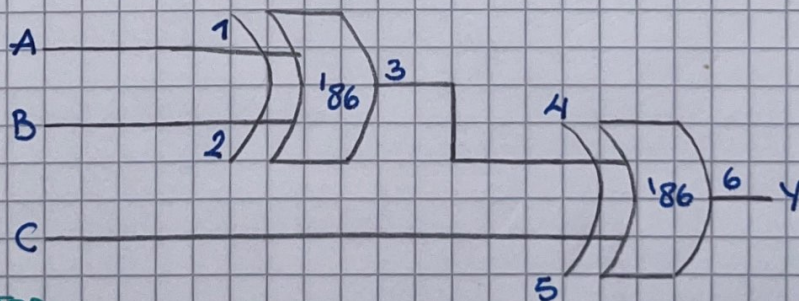
- 1) One 7404 inverter gate
- 2) One 7408 AND gate
- 3) One 7486 XOR gate
- 4) One 7432 OR gate

1-3 input XOR gates using 2 input XOR gates CS7486

GND - 7

+5V - 14 (Vcc)

IC → One 7486 XOR gate

LAB CALCULATORICs used

- 1) One 7408 quad 2 input AND gate
- 2) One 7486 XOR gate

7408

GND - 7

Vcc - 14

7486

GND - 7

Vcc - 14

