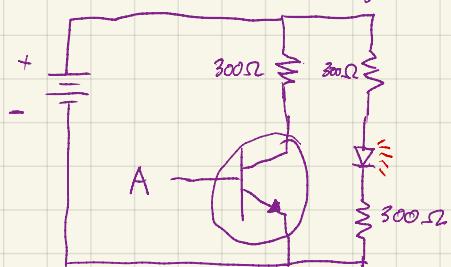
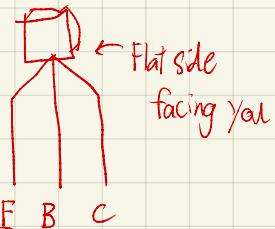
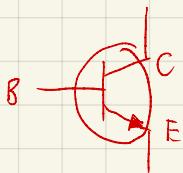



Inverter

- Need light to turn on by default
- but if Base gets Voltage, current must route around the light



A	Y
0	1
1	0

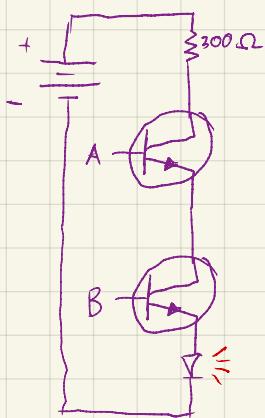


Emitter Base Collector

if base gets around 0.6V, the switch between C and E is closed

And

- Need to turn A and B on to let current flow into LED

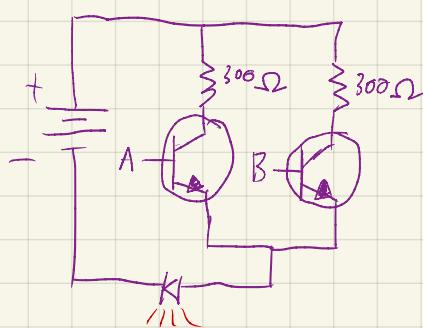


A	B	Y
0	0	0
0	1	0
1	0	0

Or

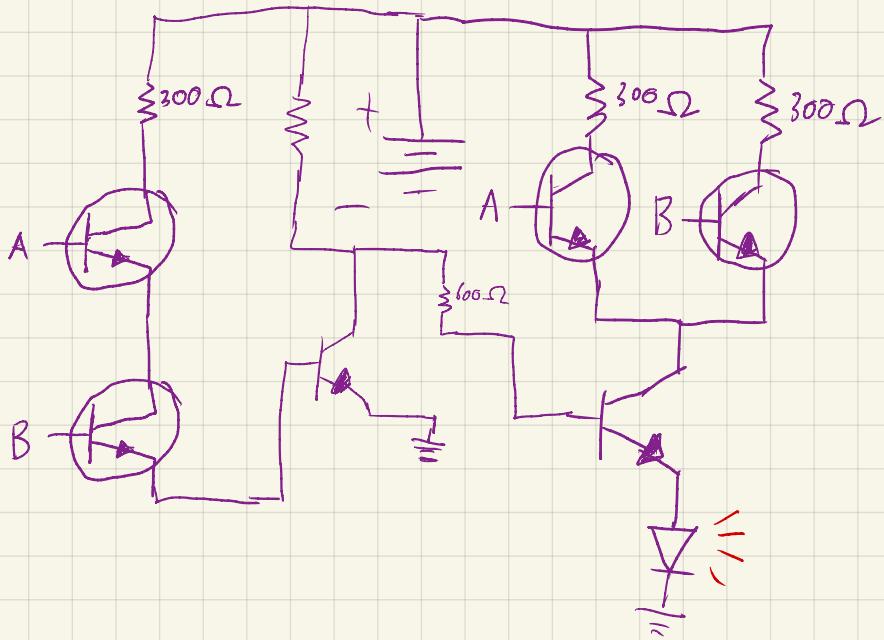
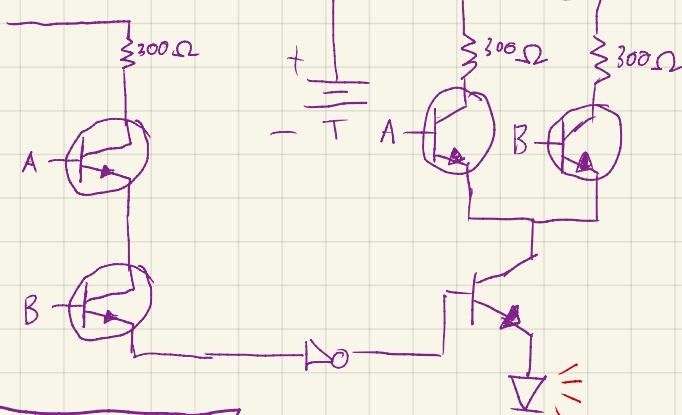
Needs to turn on as long as any/all gates are on

A	B	Y
0	0	0
0	1	1



xor
Probably need to combine And and Or.

A	B	Y
0	0	0
0	1	1
1	0	1

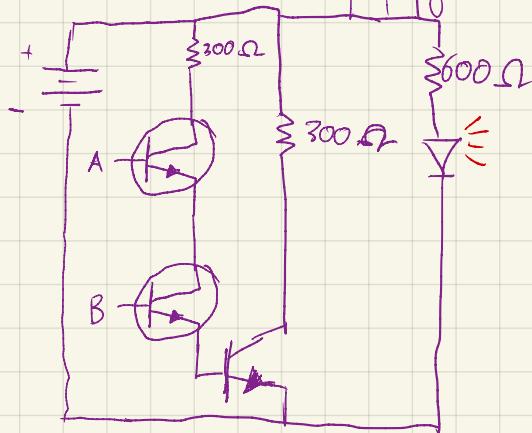


▷

NAND

- Attach inverter
to AND

A	B	Y
0	0	1
0	1	0
1	0	0
1	1	0



XNOR

A	B	Y
0	0	1
0	1	0
1	0	0
1	1	1

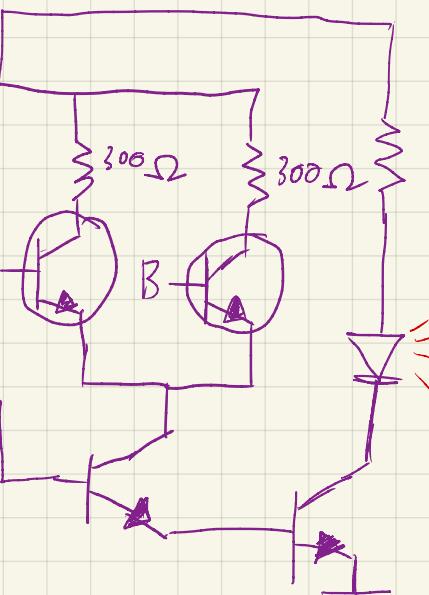
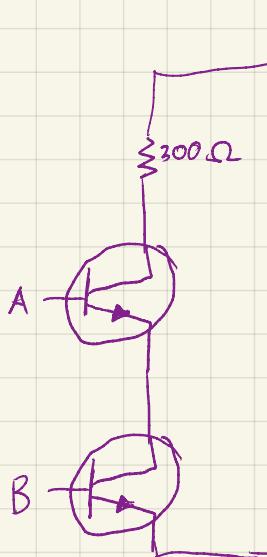
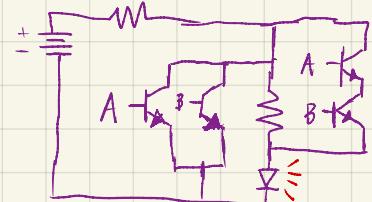
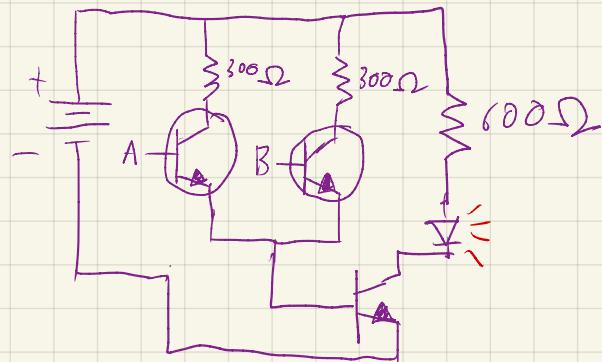
- You combine NOR + AND
- or invert XOR

Invert to OR

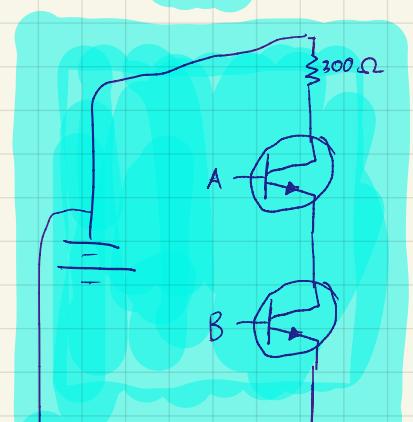
NOR

- Attach inverter
to OR

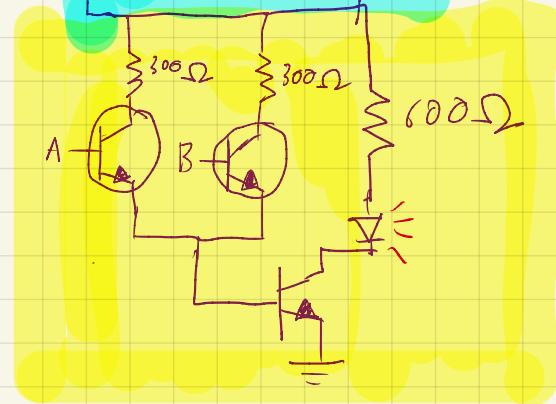
A	B	Y
0	0	1
0	1	0
1	0	0
1	1	0

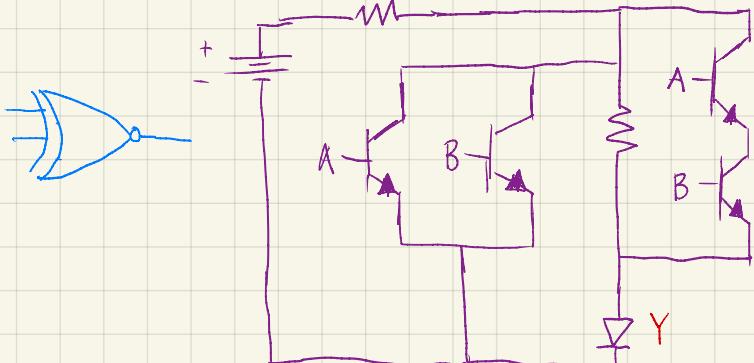
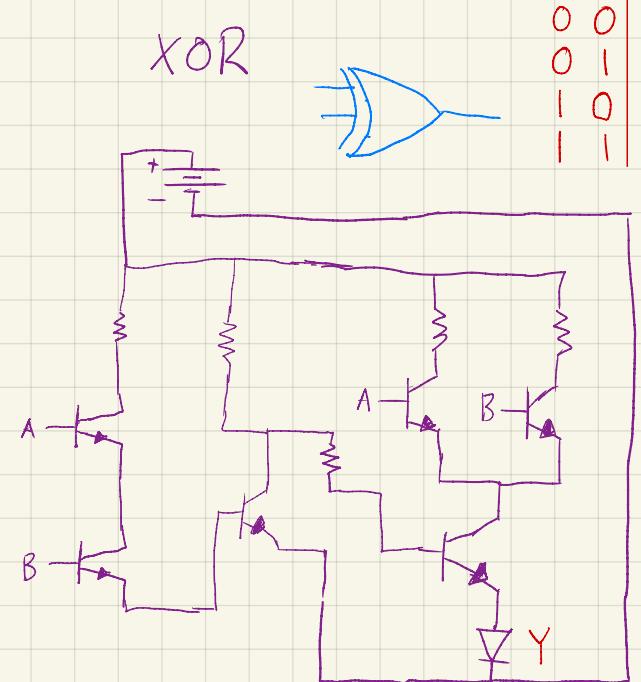
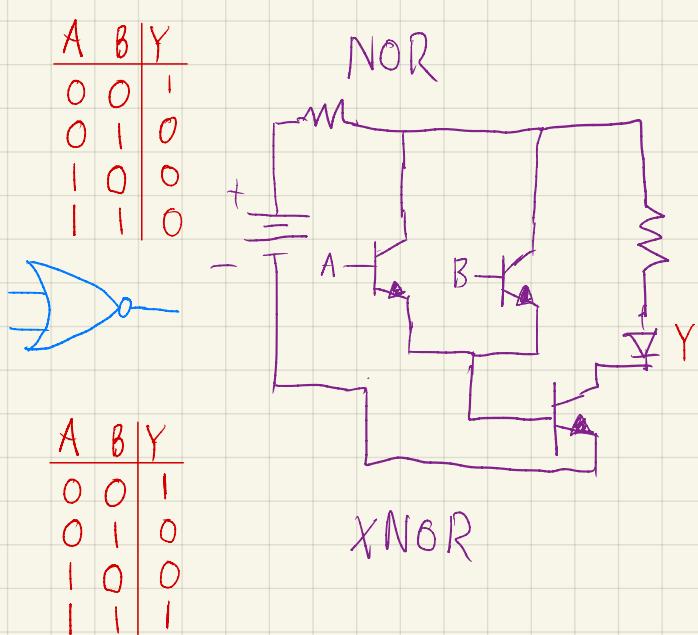
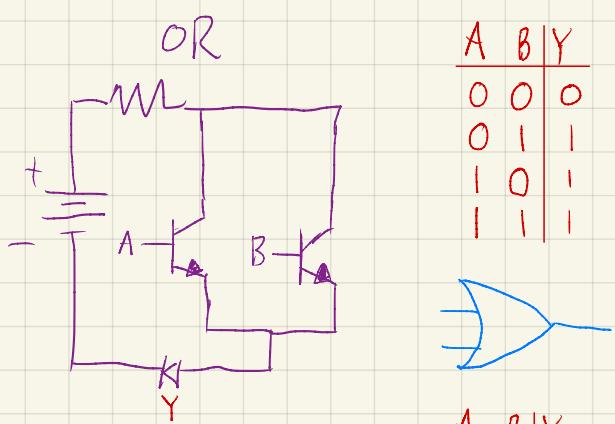
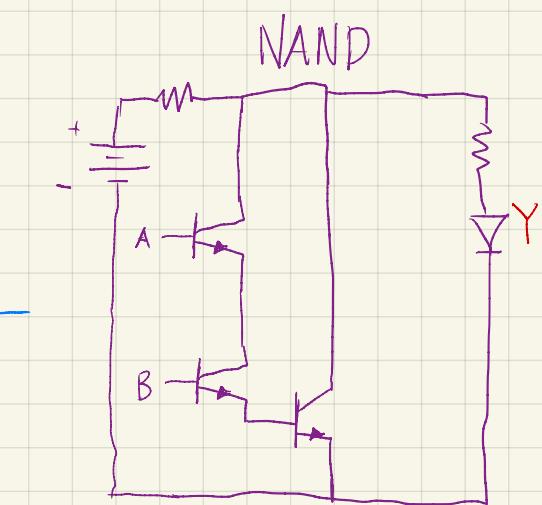
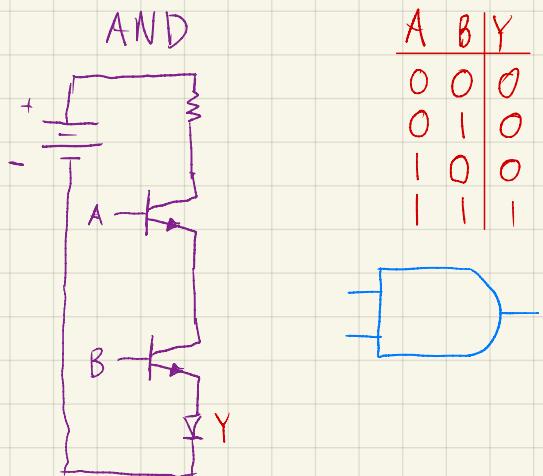
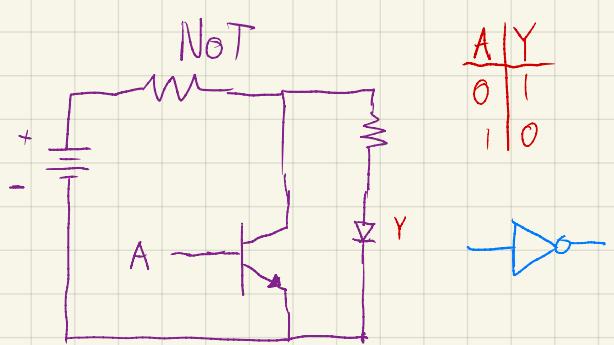


NOR + AND

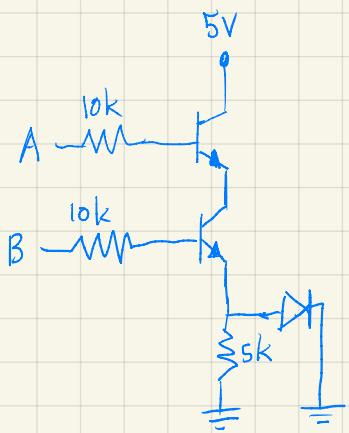


NOT AND OR NAND NOR XOR XNOR



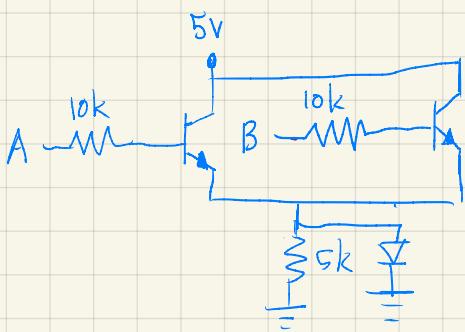


AND

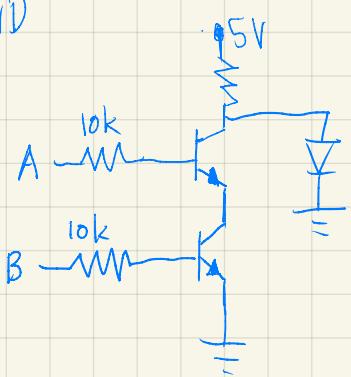


works Properly

SR



NAND



NR

