


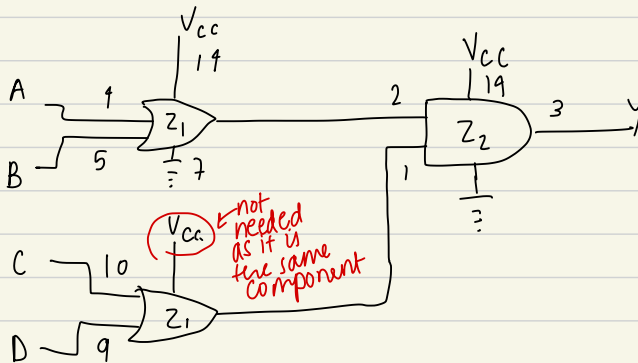
L3



- V_{CC} = voltage at common collector (aka +ve supply voltage)
- V_{EE} = voltage at common emitter (aka -ve supply voltage)
- GND = grounding
- V_{CC} & GND are necessary to power chips (electrical supply)
- 7404 is a hex not (6 not from pin n to $n+1$)
- 7408 is a quad n (4 and from $n, n+1$ to $n+2$)
- pin 1 can be identified by a little dot
- circuit diagram will specify the component as well as the I/P O/P pins and must also show power supply

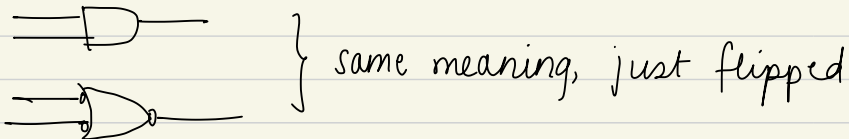
L3 practice

2. $(A+B)(C+D)$



IEEE symbols

- & : all inputs (all are 1 then $O/P = 1$) □
- 1 : one input (is 1 then $O/P = 1$) buffer
- ≥ 1 : at least 1 I/P (is 1 then $O/P = 1$) ▷
- =1 : exactly one input (is 1 then $O/P = 1$) 2-input XOR gate



visual rep of demorgans :
 → add bubble where
 → remove bubble where
 → change symbol if it is