

1.a)

i.

$$Y = (AB + CD)$$

ii.

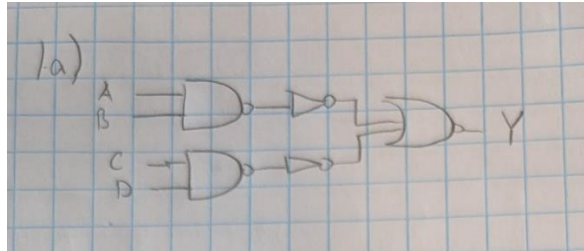
$$A = 1 / A' = 2$$

$$B = 1 / B' = 2$$

$$C = 1 / C' = 2$$

$$D = 1 / D' = 2$$

iii.



1.b)

i.

$$Y = (B + CD)$$

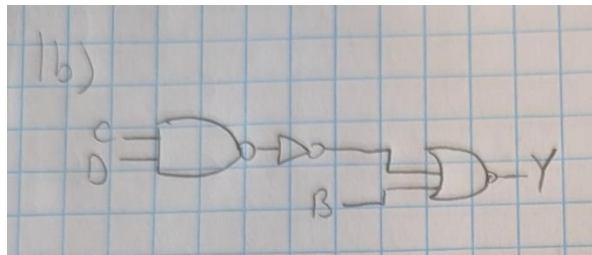
ii.

$$B = 2 / B' = 2$$

$$C = 1 / C' = 2$$

$$D = 1 / D' = 2$$

iii.



1.c)

i.

$$Y = (DE + AB + AC)$$

ii.

$$A = 1 / A' = 2$$

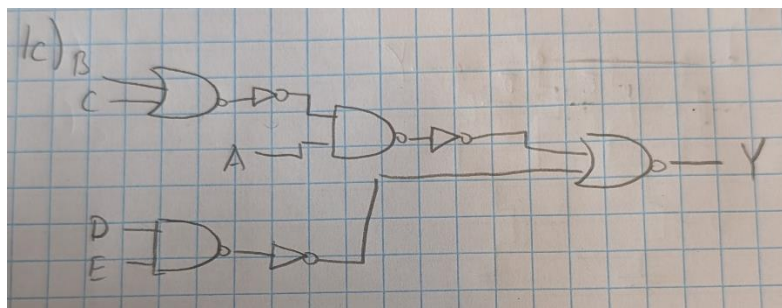
$$B = 1 / B' = 1$$

$$C = 1 / C' = 1$$

$$D = 1 / D' = 2$$

$$E = 1 / E' = 2$$

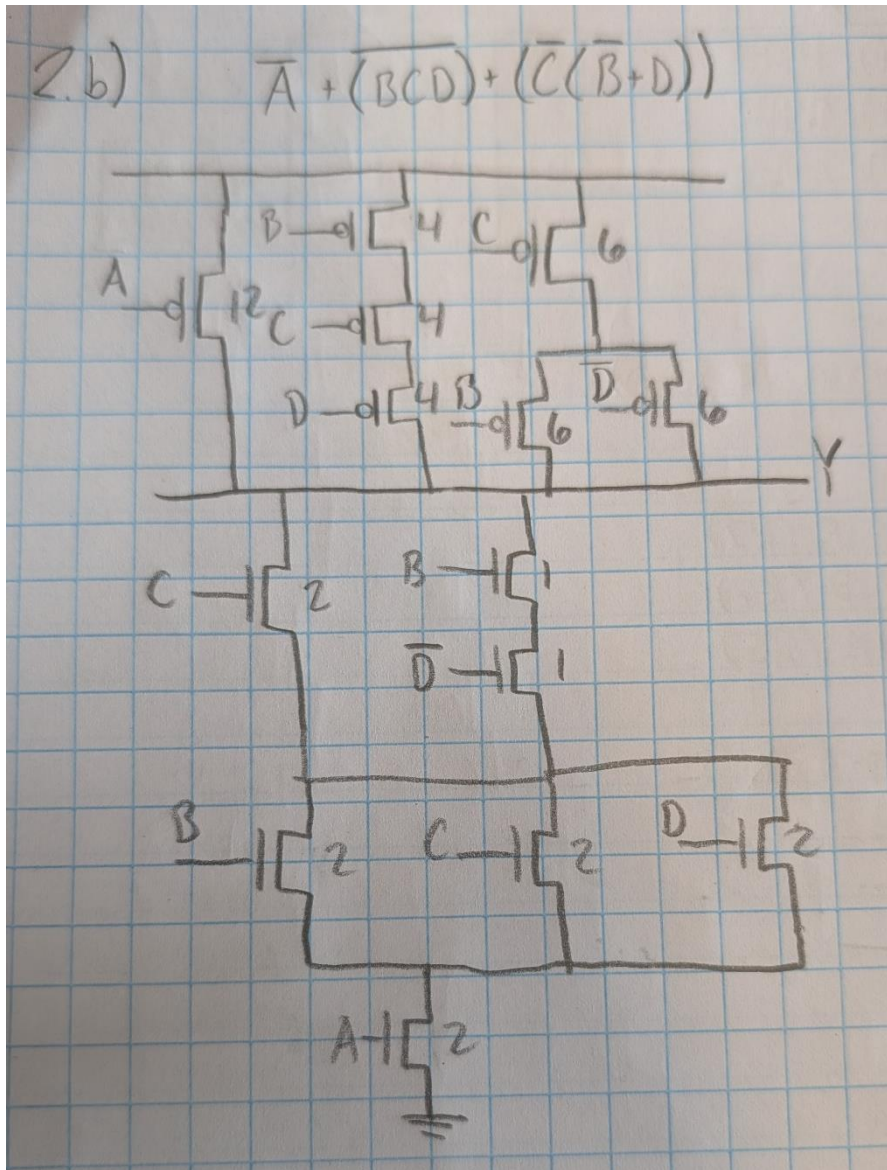
iii.



2.a)

$$Y = A(B+C+D)(C+BD')$$

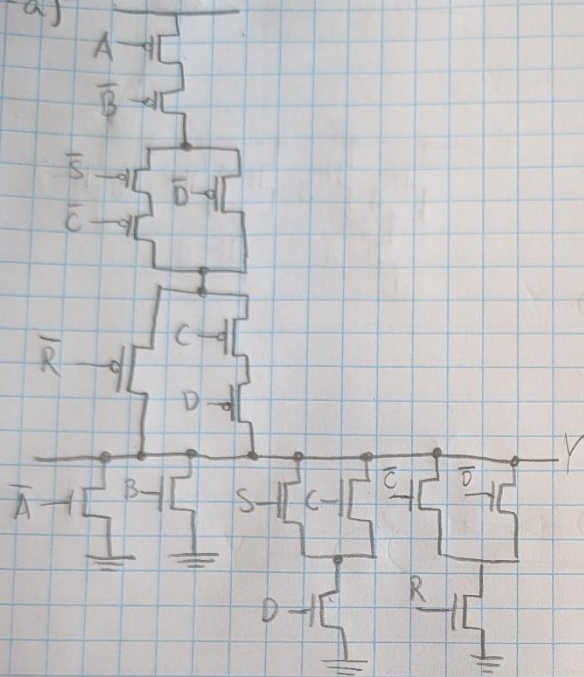
2.b+c)



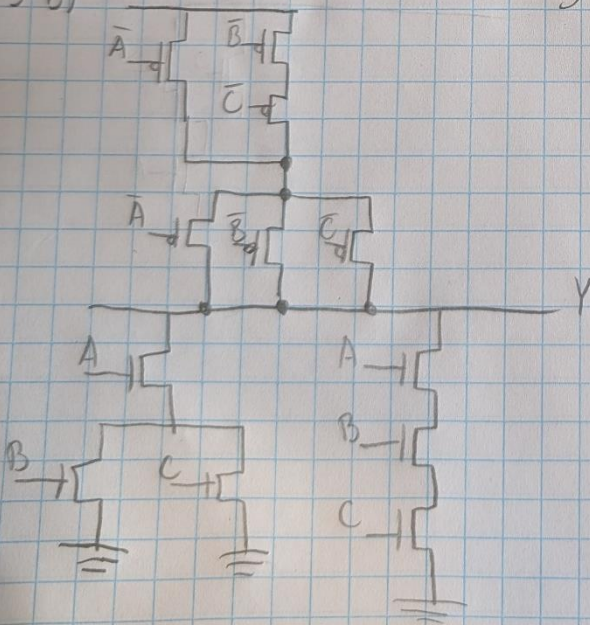
The sizes for part C are also in there

3.

3-a)



3-b)



3-c)

