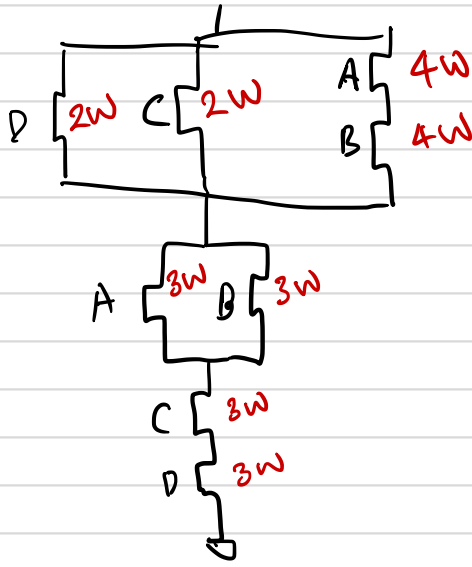


2. a)  $F = \overline{(A+B)CD}$



b) Worst case:

$$t_{pHL} \Rightarrow (A, B, C, D)$$

$$(1, 1, 1, 0) \Rightarrow (1, 1, 1, 1)$$

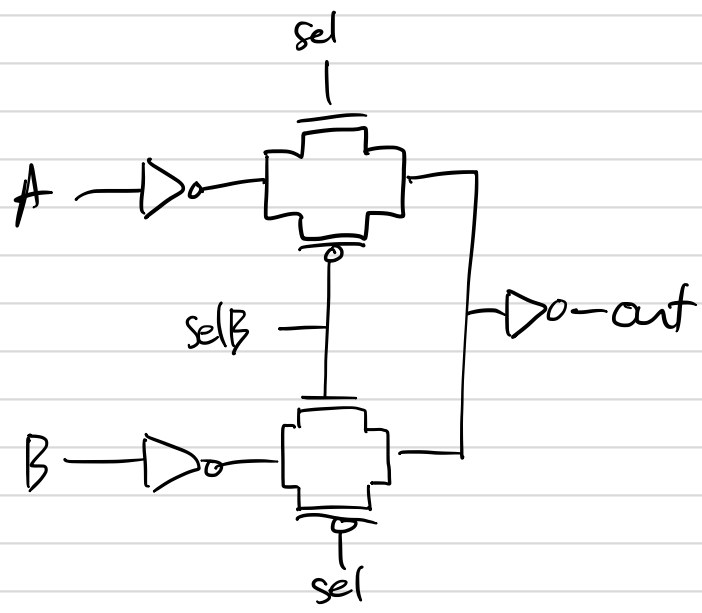
$$t_{pLH} \Rightarrow$$

$$(1, 1, 1, 1) \Rightarrow (1, 1, 1, 0)$$

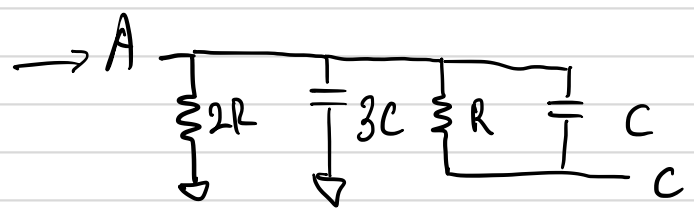
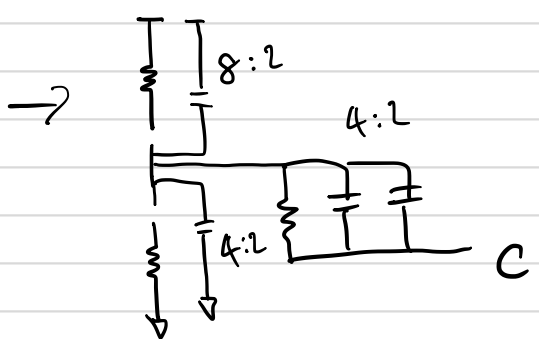
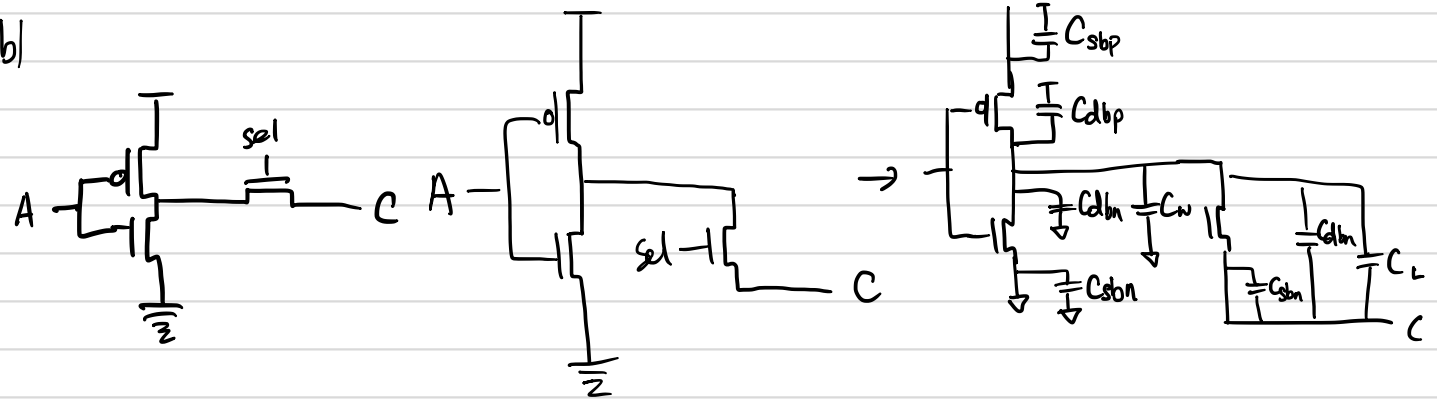
a)

$$F = A[\bar{A}(sel + \overline{sel}B) + \bar{B}(\overline{sel} + selB)]$$

A	B	sel	selB	C	F
0	0	0	0	1	0
0	0	0	1	1	0
0	0	1	0	1	0
0	0	1	1	1	0
0	1	0	0	1	0
0	1	0	1	0	1
0	1	1	0	1	0
0	1	1	1	1	0
1	0	0	0	1	0
1	0	0	1	1	0
1	0	1	0	0	1
1	0	1	1	1	0
1	1	0	0	0	1
1	1	0	1	0	1
1	1	1	0	0	1
1	1	1	1	0	1



$$C_L = C_o$$



c)

$$2R(3C) + R(C)$$