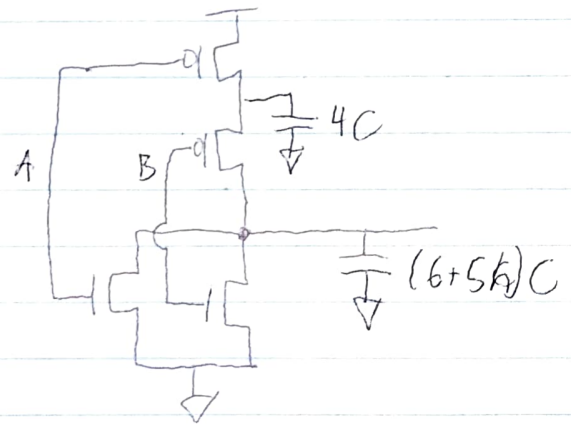
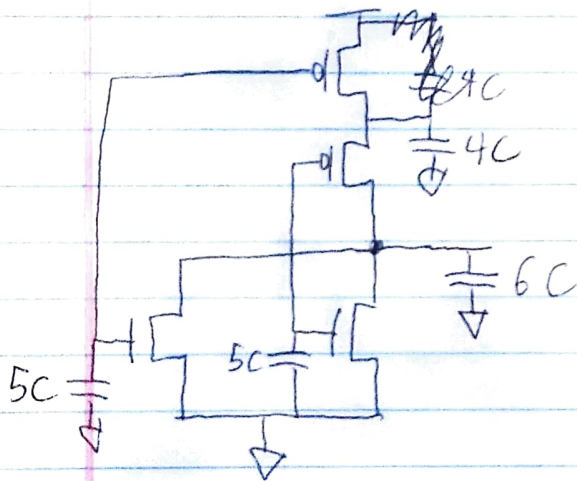
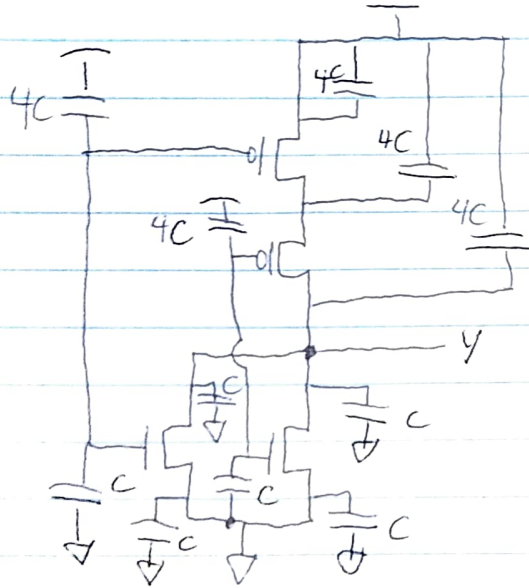
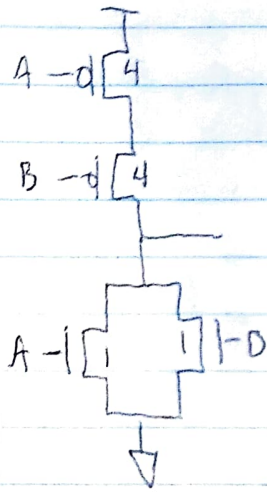


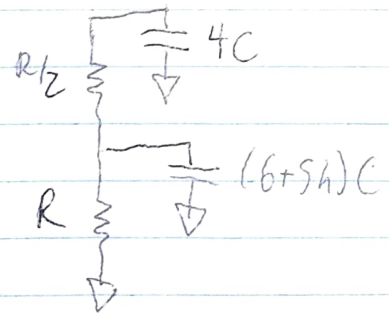
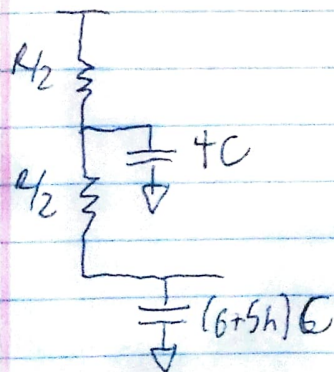
NOR 2



Case AB

Case 00

Case 01



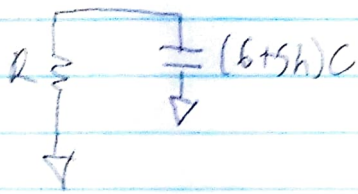
$$t = \frac{R}{2} (6+5h)C + \frac{R}{2} (4C)$$

$$= (5 + \frac{5}{2}h)C$$

$$t = \frac{3R}{2} (4C) + (6+5h)RC$$

$$= (12+5h)RC$$

Case 10



$$t = (6+5h)RC$$

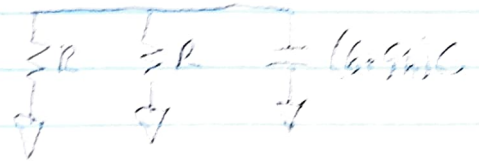
$$t_{pdr} = (5 + \frac{5}{2}h)RC$$

$$t_{pdf} = (12 + 5h)RC$$

$$t_{cdr} = (5 + \frac{5}{2}h)RC$$

$$t_{cdf} = (3 + \frac{5}{2}h)RC$$

Case 11



$$t = (6+5h)C \cdot \frac{R}{2}$$

$$= (3 + \frac{5}{2}h)RC$$

Using  $h=0$ ,  $3RC = 60ps \Rightarrow RC = 20ps$

$$t_{pdr} = 100ps$$

$$t_{pdf} = 70ps$$

$$t_{cdr} = 100ps$$

$$t_{cdf} = 50ps$$