

EE421 / ECG 621

Digital IC Design



Nov. 21, 2018

Lecture 23

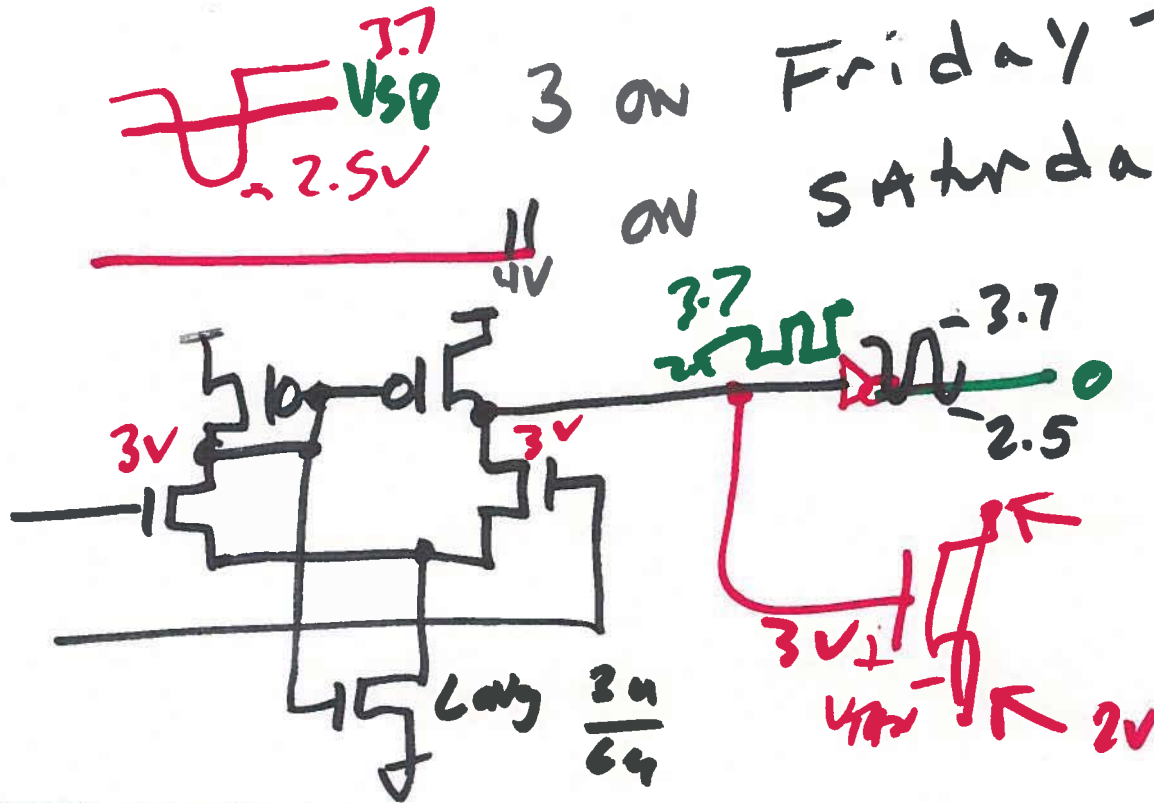
3 on Friday

on Saturday

TBE B350

TBE ~~B350~~

A311



184/.64 P_{NO}

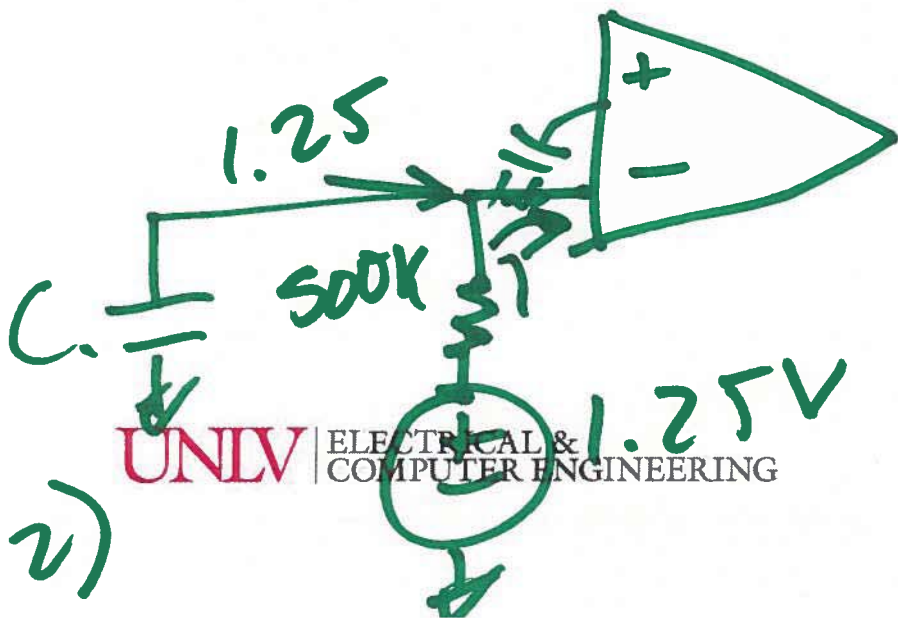
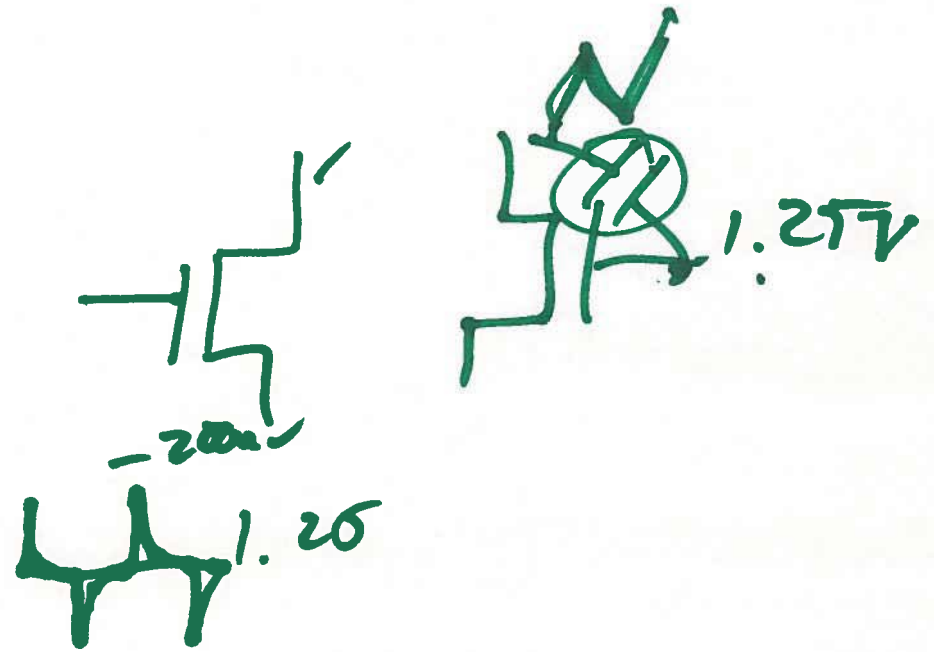
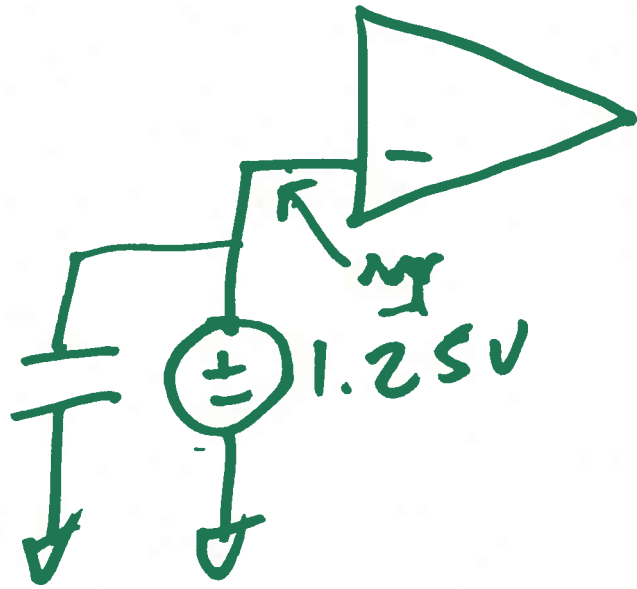
4V 129/.64

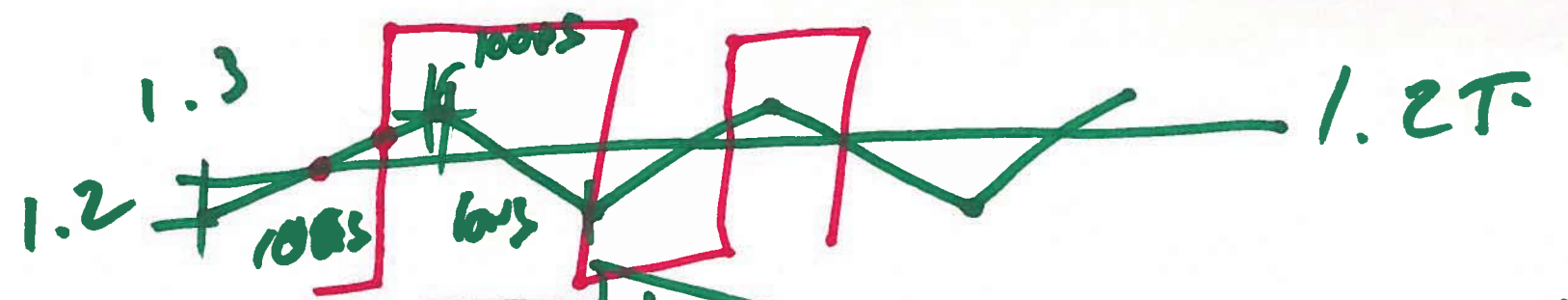
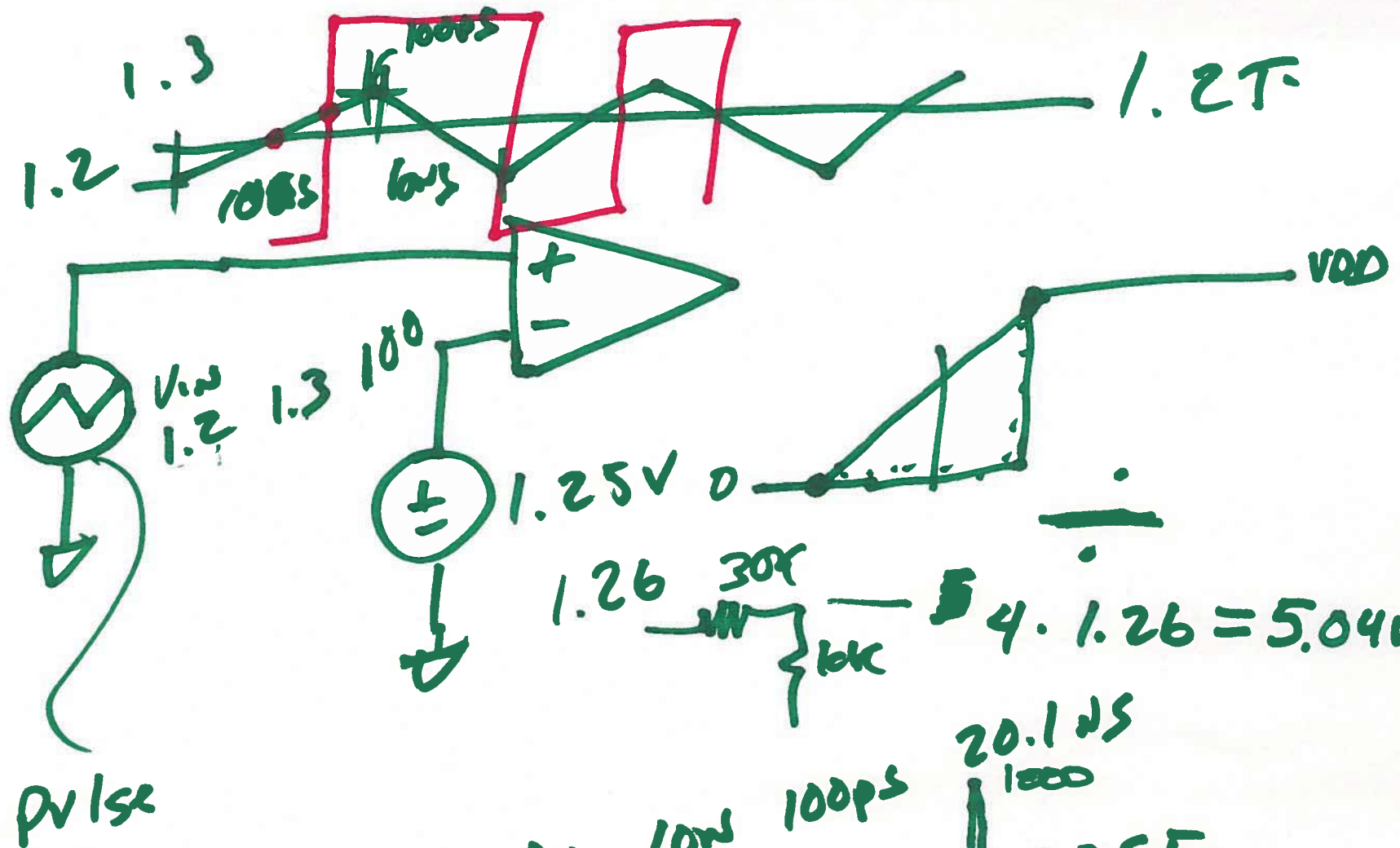
V_{SP} = 2

64 μMOS

34
.64

1)



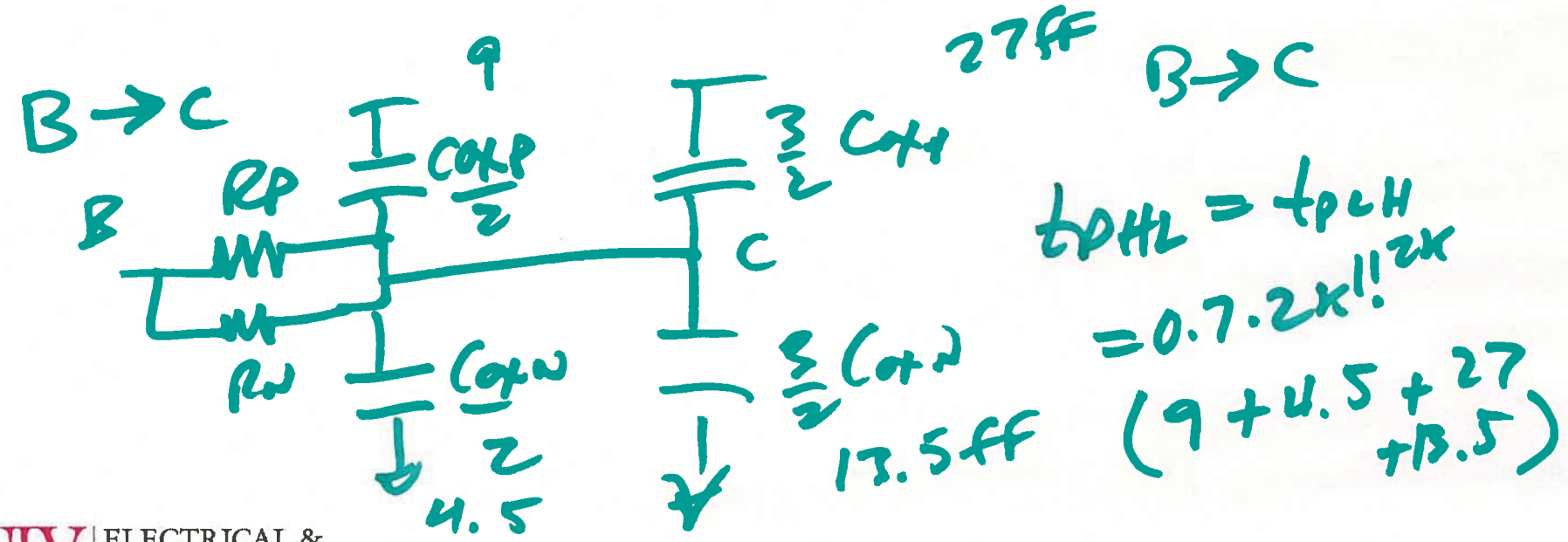
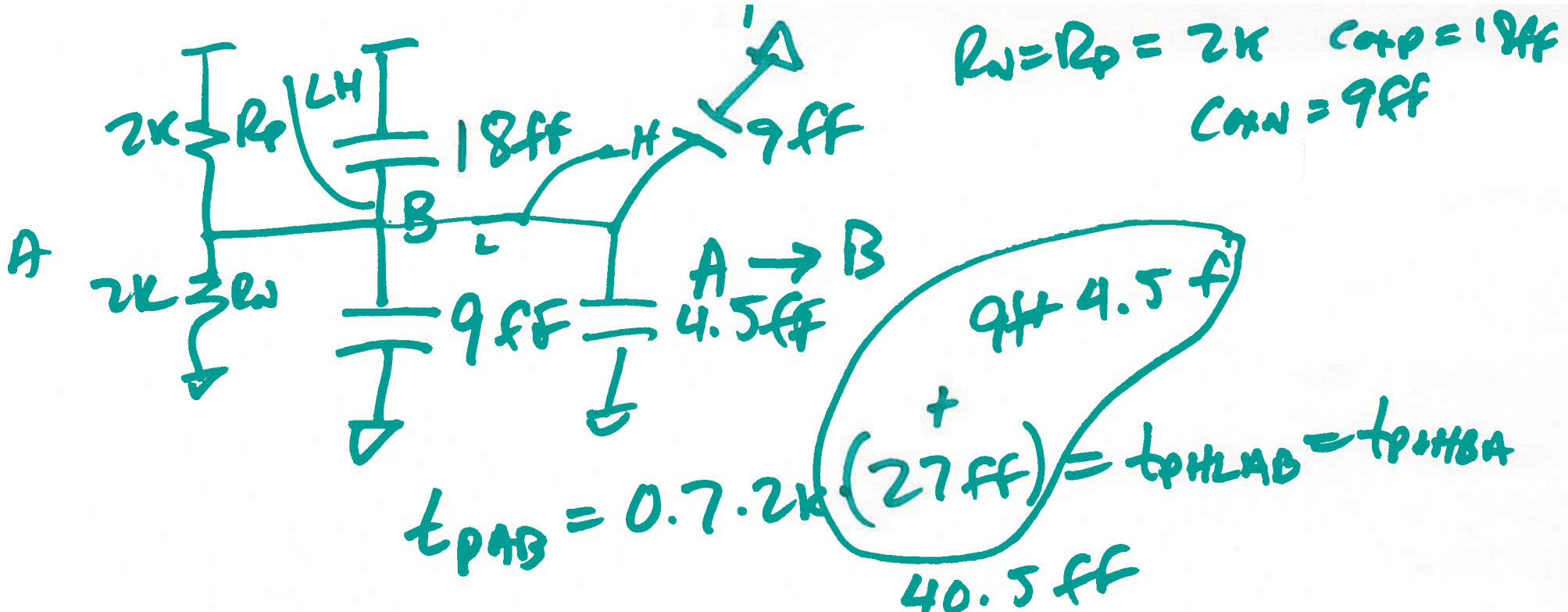


$4 \cdot 1.26 = 5.04V$

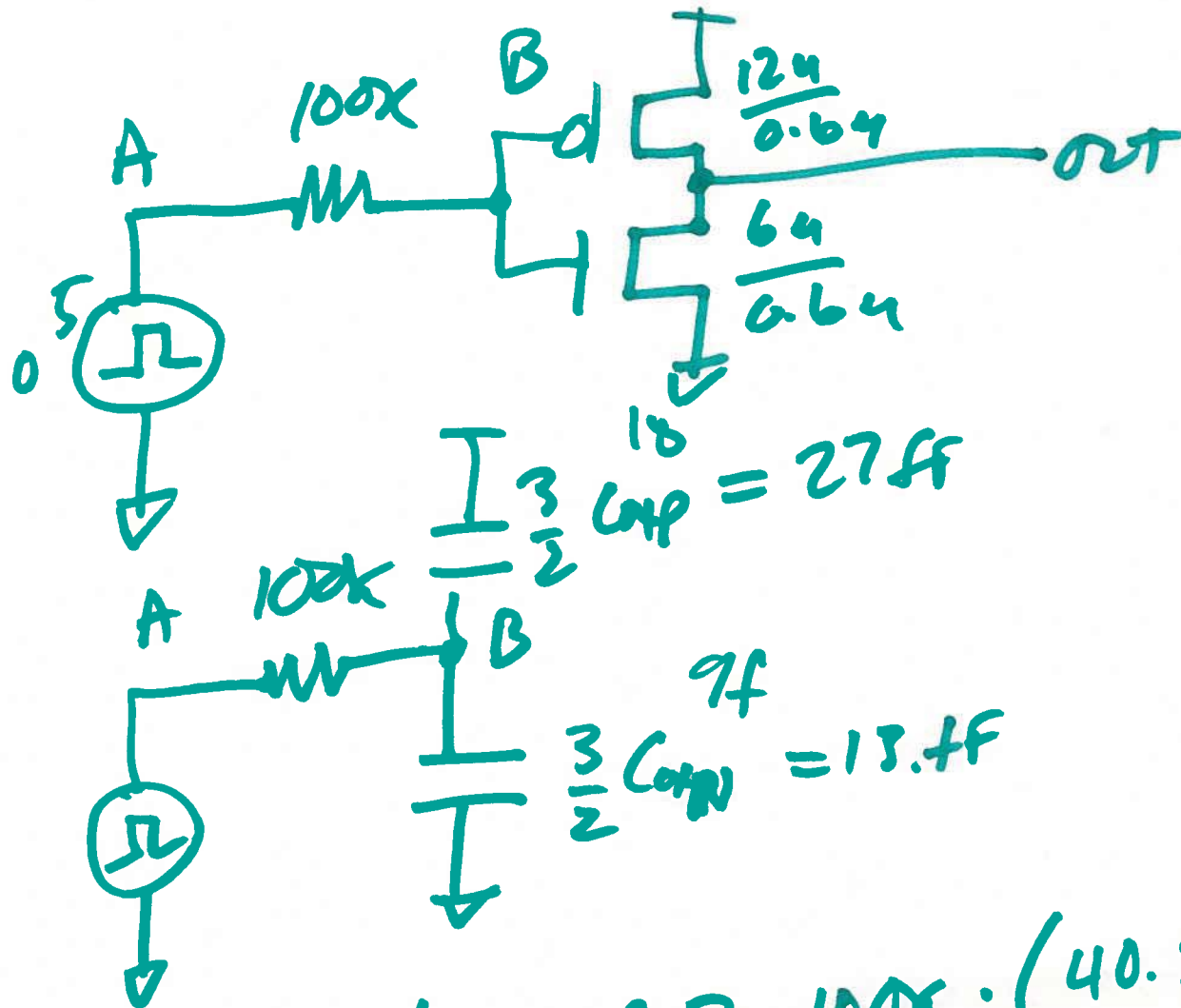


$\frac{1V}{1.255 - 1.250} = \frac{1}{.005} = 200$

3)

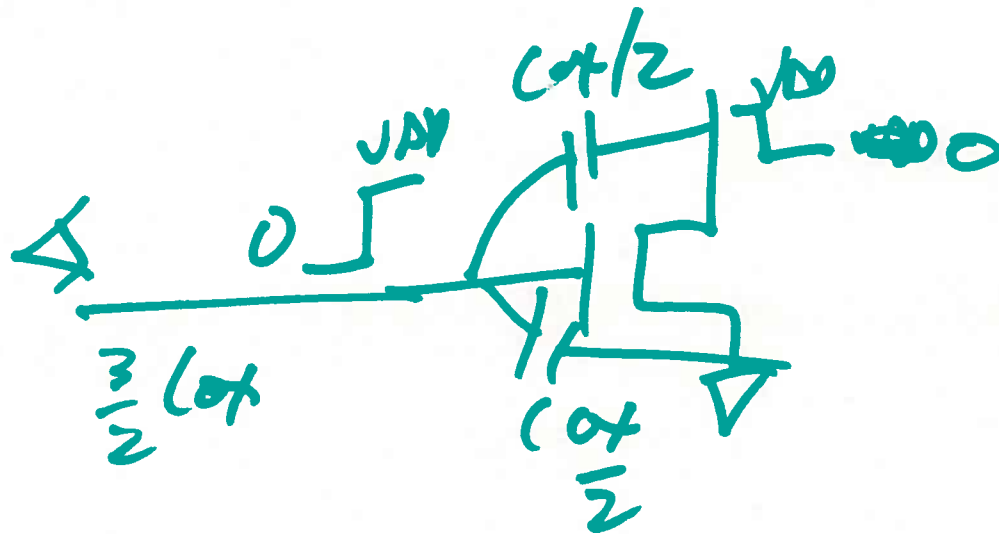
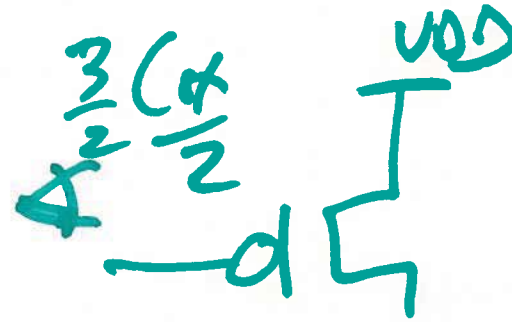


6)



$$\begin{aligned}
 t_0 &= 0.7 \cdot 100k \cdot (40.5f) \\
 &= \underline{\underline{2.835\ \mu s}}
 \end{aligned}$$

7)



8)