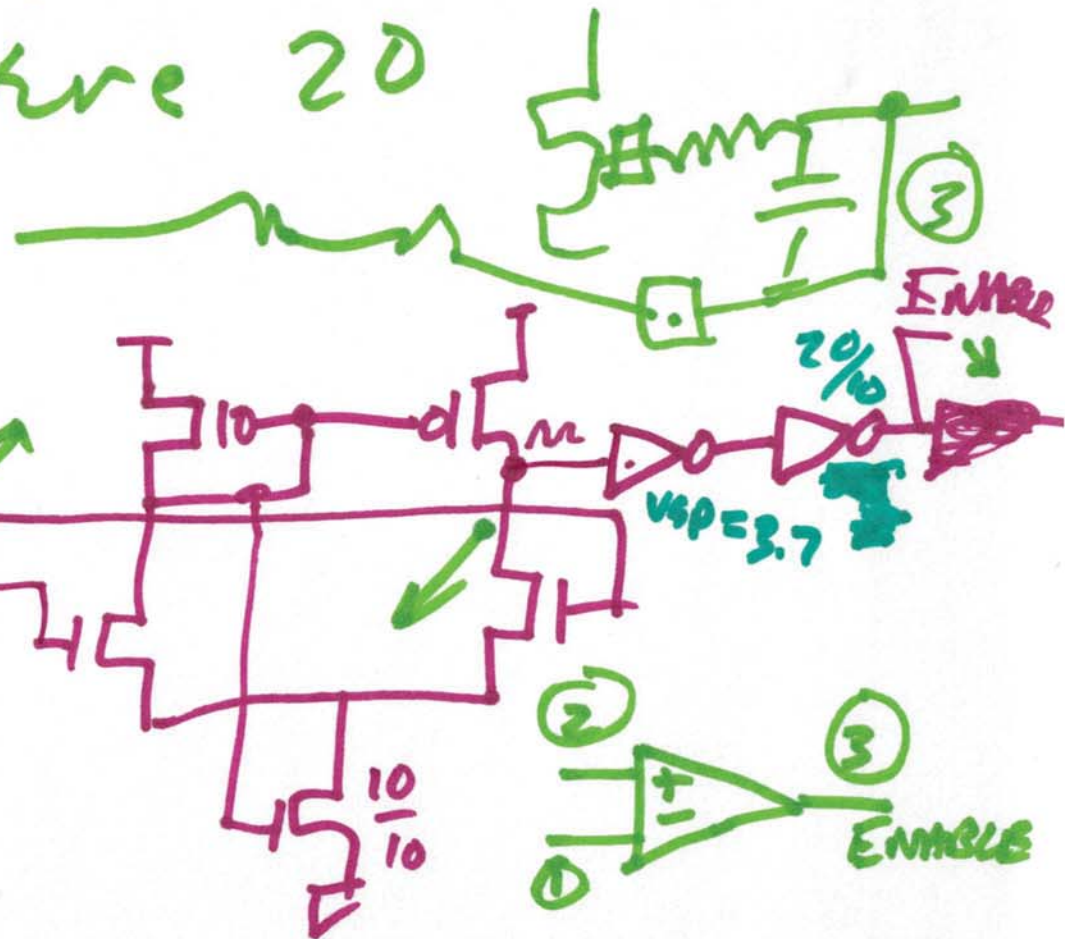
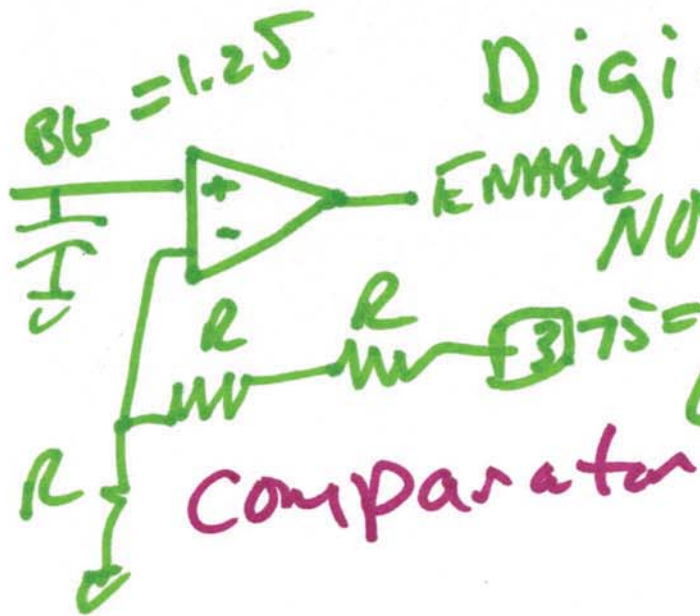


EE 421 / ECG 621

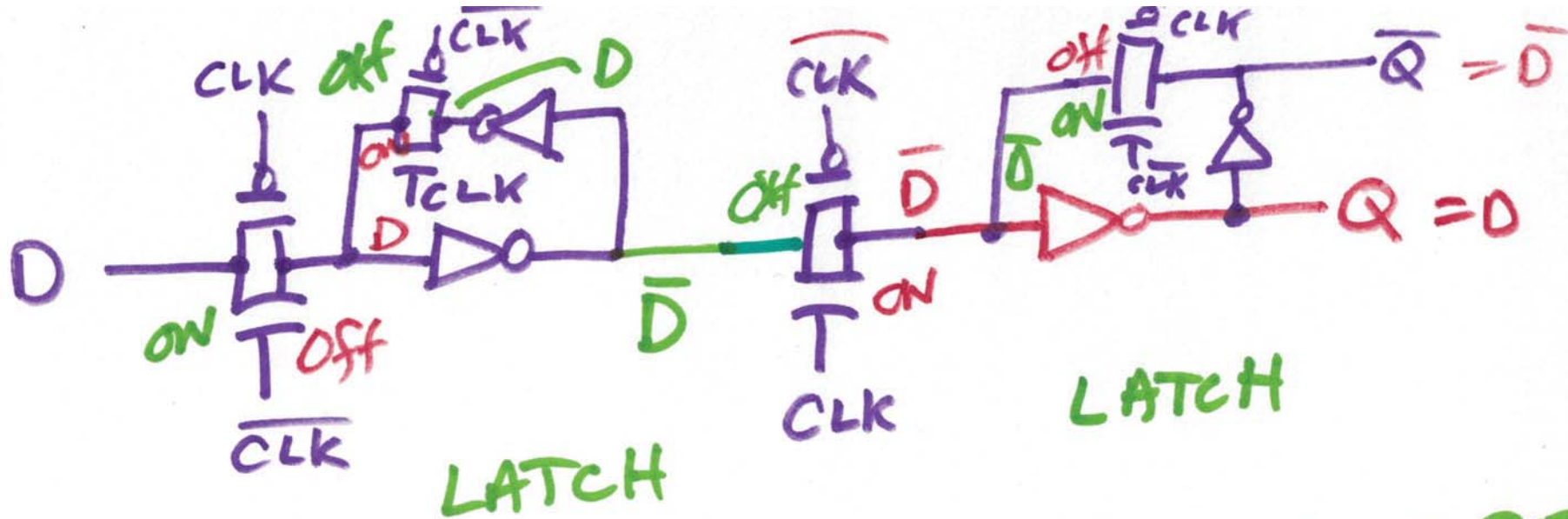
# Digital IC Design


NOV. 8, 2017

Lecture 20



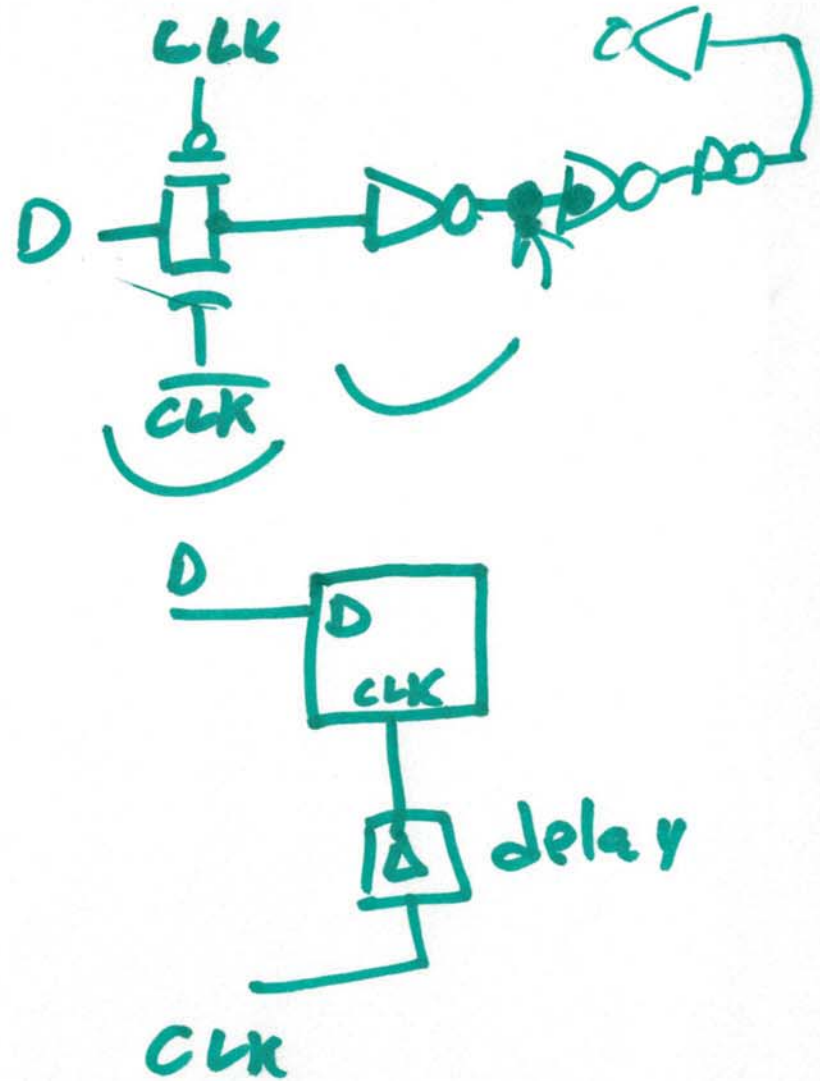
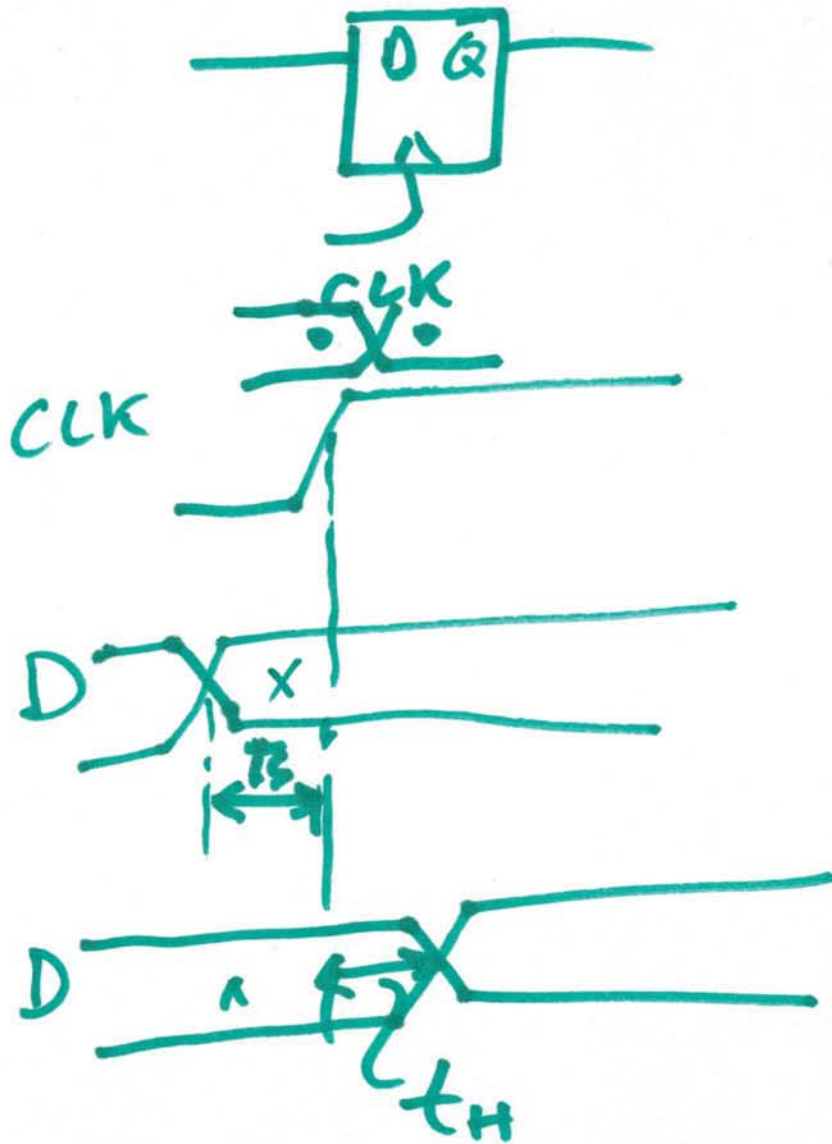
1)



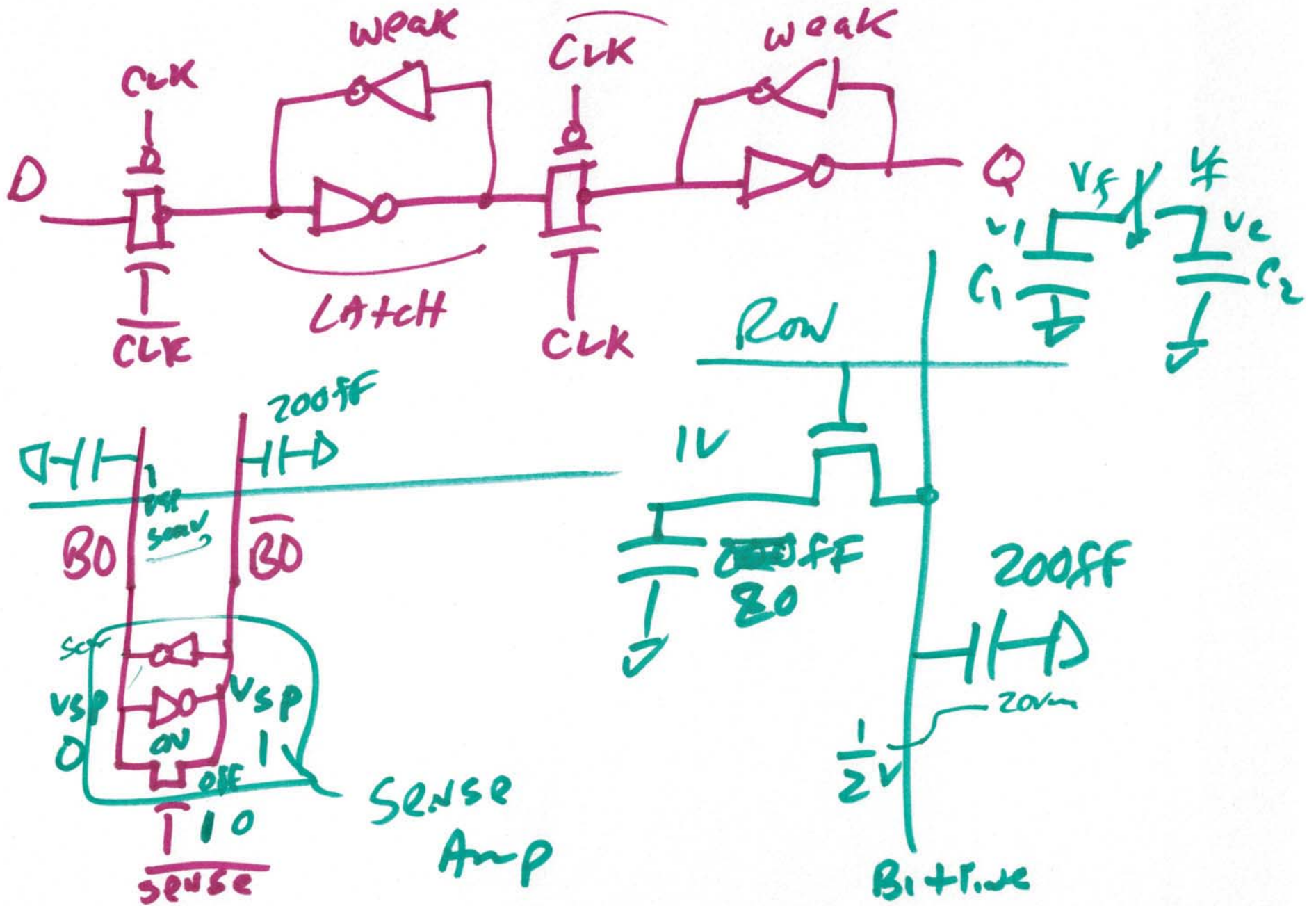
$CLK = 0$    
 $CLK = 1$

Edge-triggered DFF

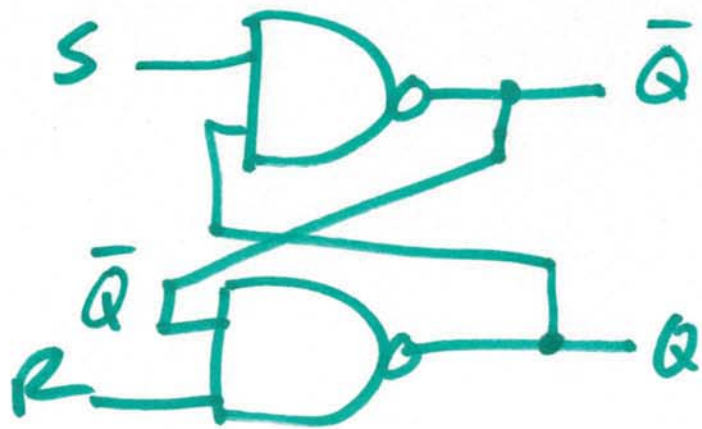
# Setup & hold times



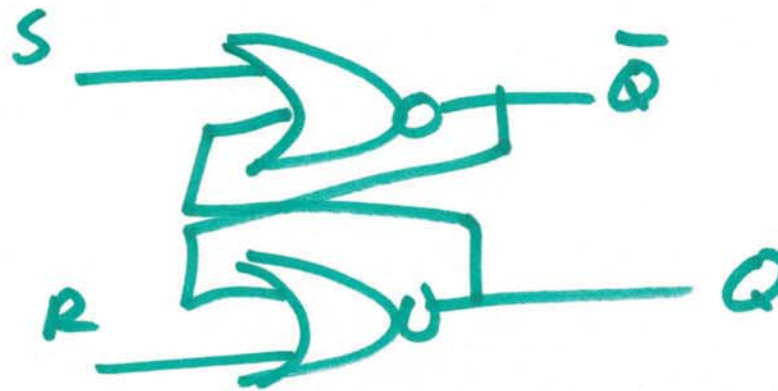
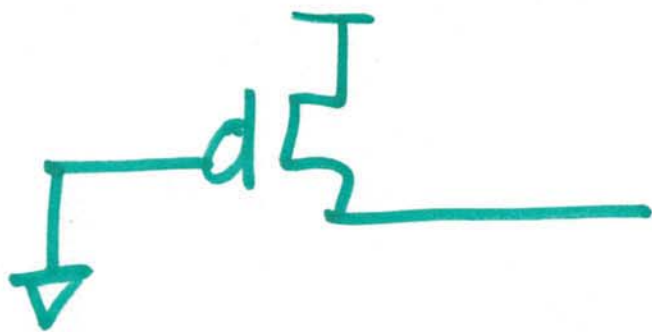




5)



S	R	Q	$\bar{Q}$
0	0	1	1
0	1	0	1
1	0	1	0
1	1	$\bar{Q}$	$Q$



S	R	Q	$\bar{Q}$
0	0	Q	$\bar{Q}$
0	1	0	1
1	0	1	0
1	1	0	0

6)

# ARBiter

