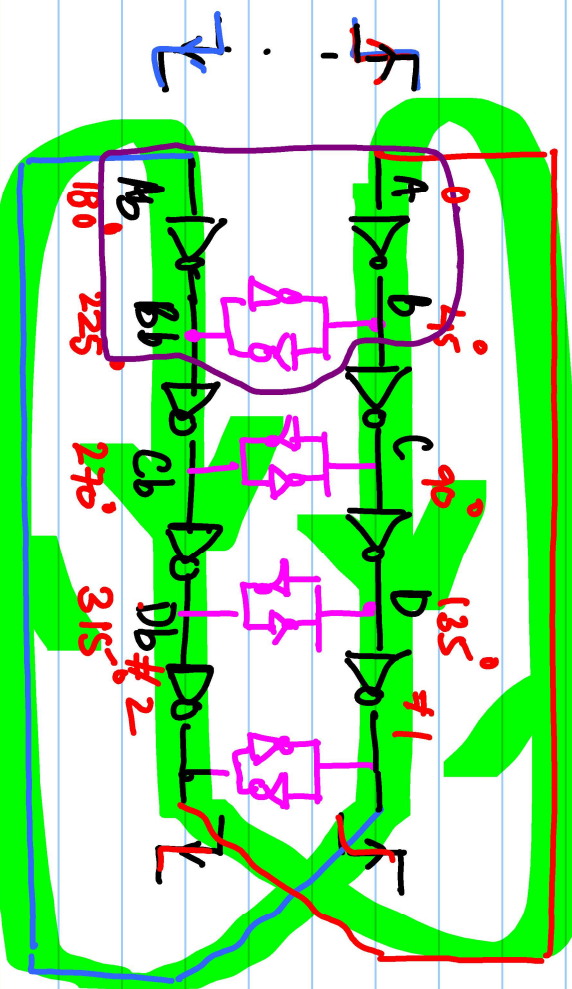
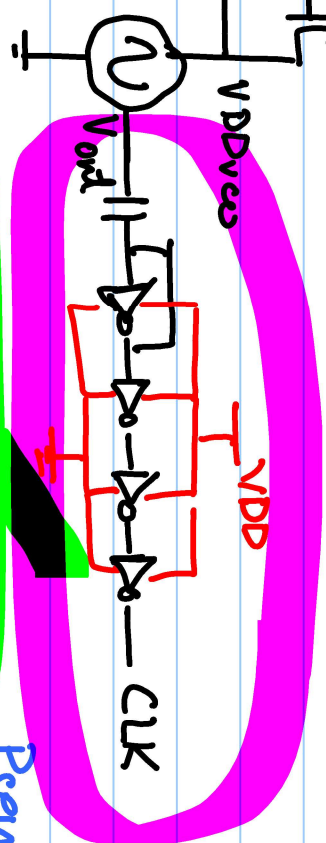
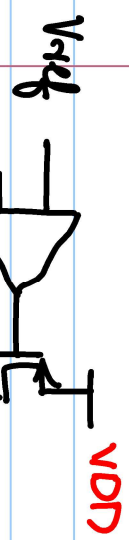
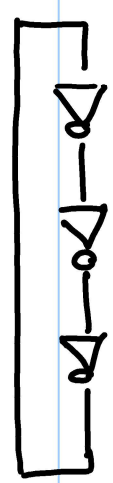


Lecture #30



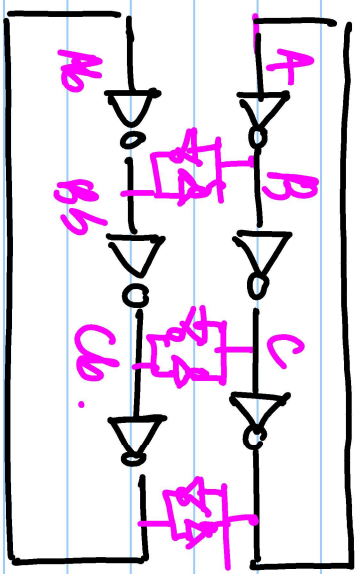
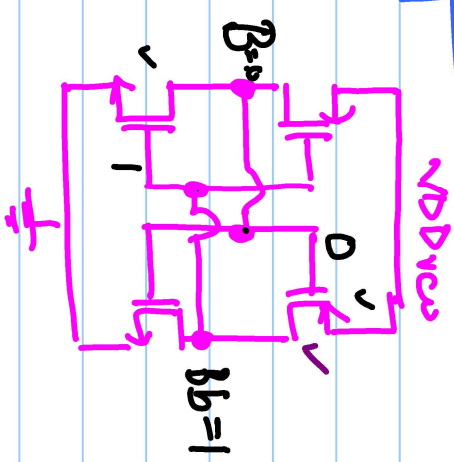
$T = 8t_1 \rightarrow 360^\circ$

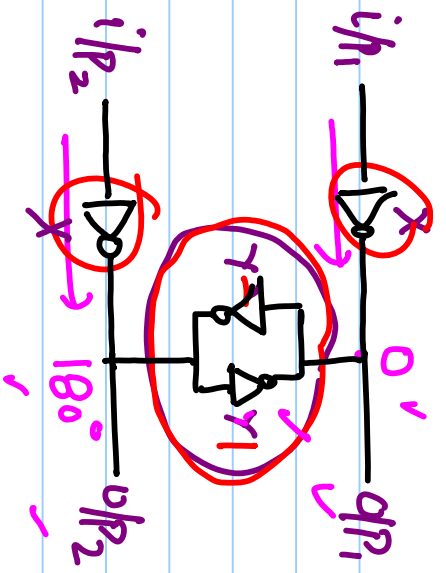
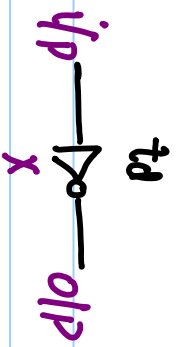
$t_d \rightarrow \frac{360^\circ}{8} = 45^\circ$



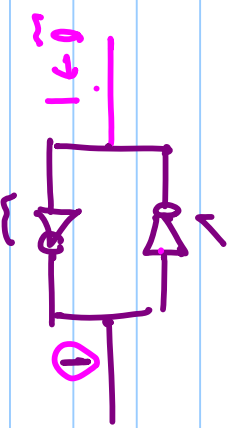
$\Delta\phi = \frac{360^\circ}{2N}$

Pseudo-differential





$X \ll Y$

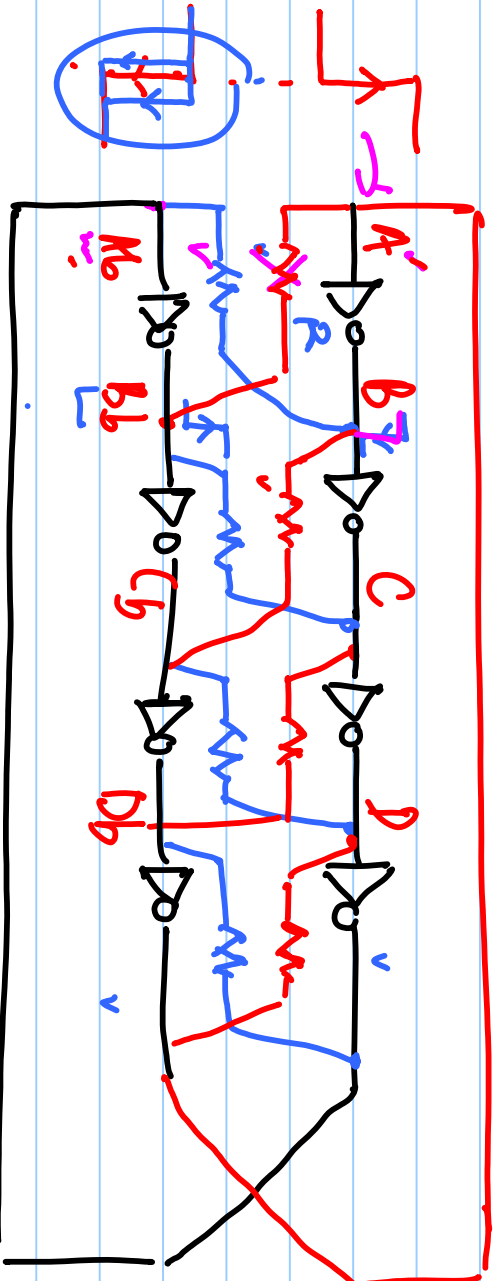


$X = 4Y$ ✓
 $X = 2Y$ ✓

— Power

$\frac{Y}{X} \uparrow$

- Mismatch in complimentary phases
- Max. oscillator freq.



$R \rightarrow \infty \Rightarrow$ $f_{max} \rightarrow \text{max.}$
 $R \rightarrow 0$

