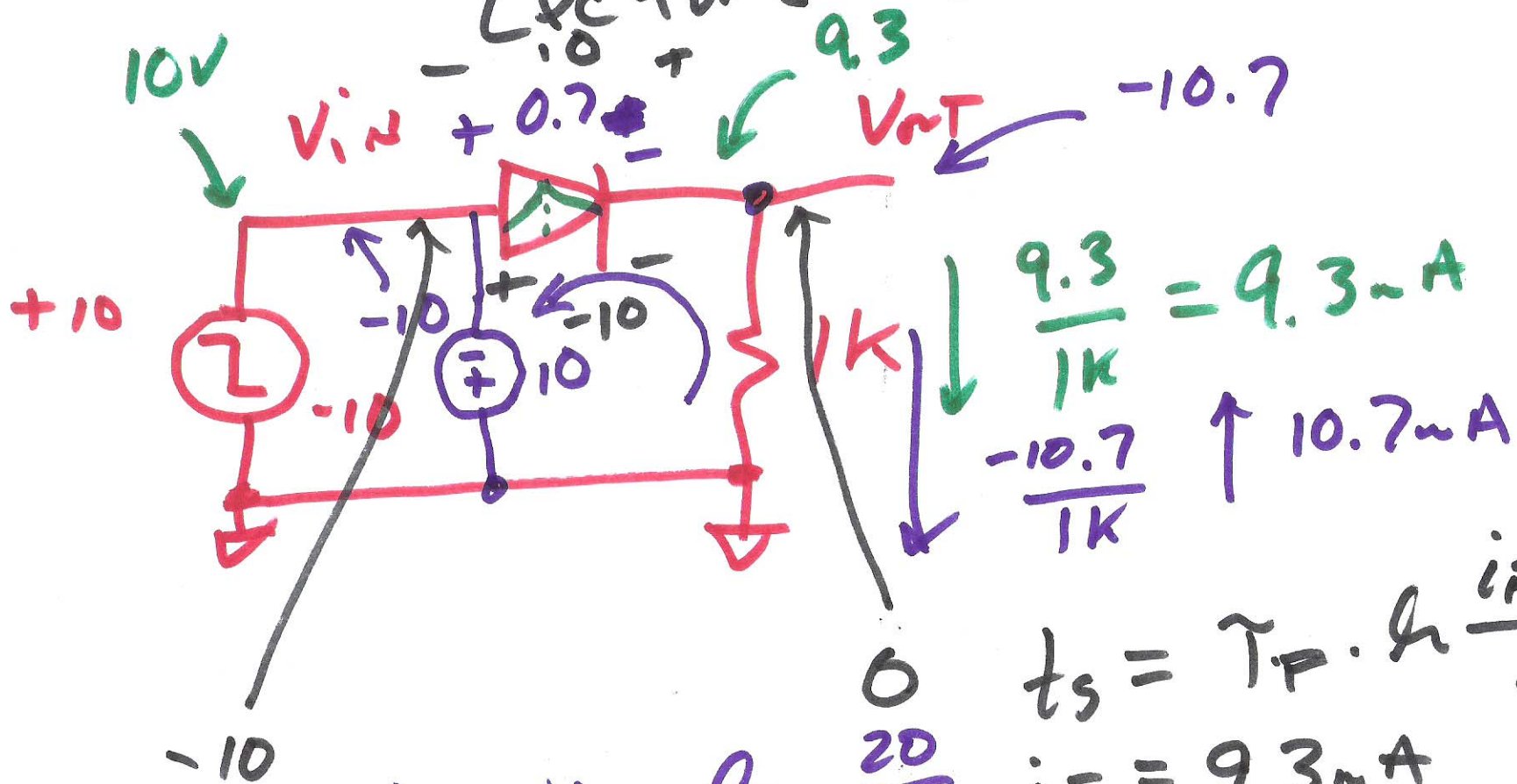


EE 421 / ECG 621

Digital IC Design

Sept. 11, 2013

Lecture 2 6

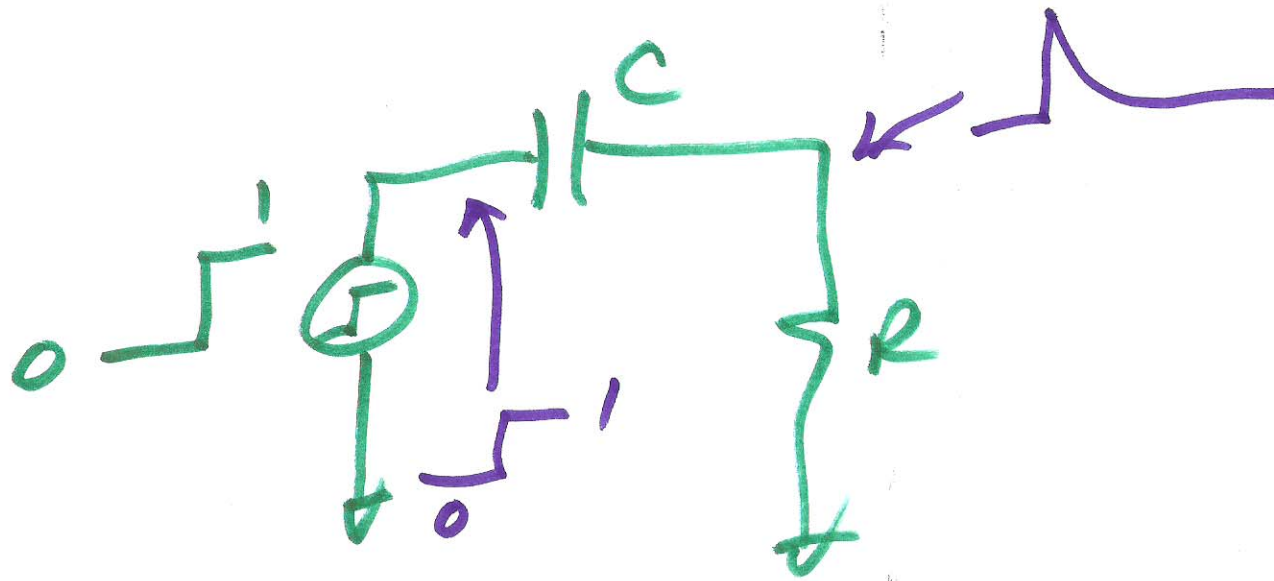


$$t_s = 10\omega \cdot \ln \frac{20}{10.7} = \underline{\underline{6.25 \text{ ns}}}$$

$$t_s = \tau_F \cdot \ln \frac{iF - iR}{-iR}$$

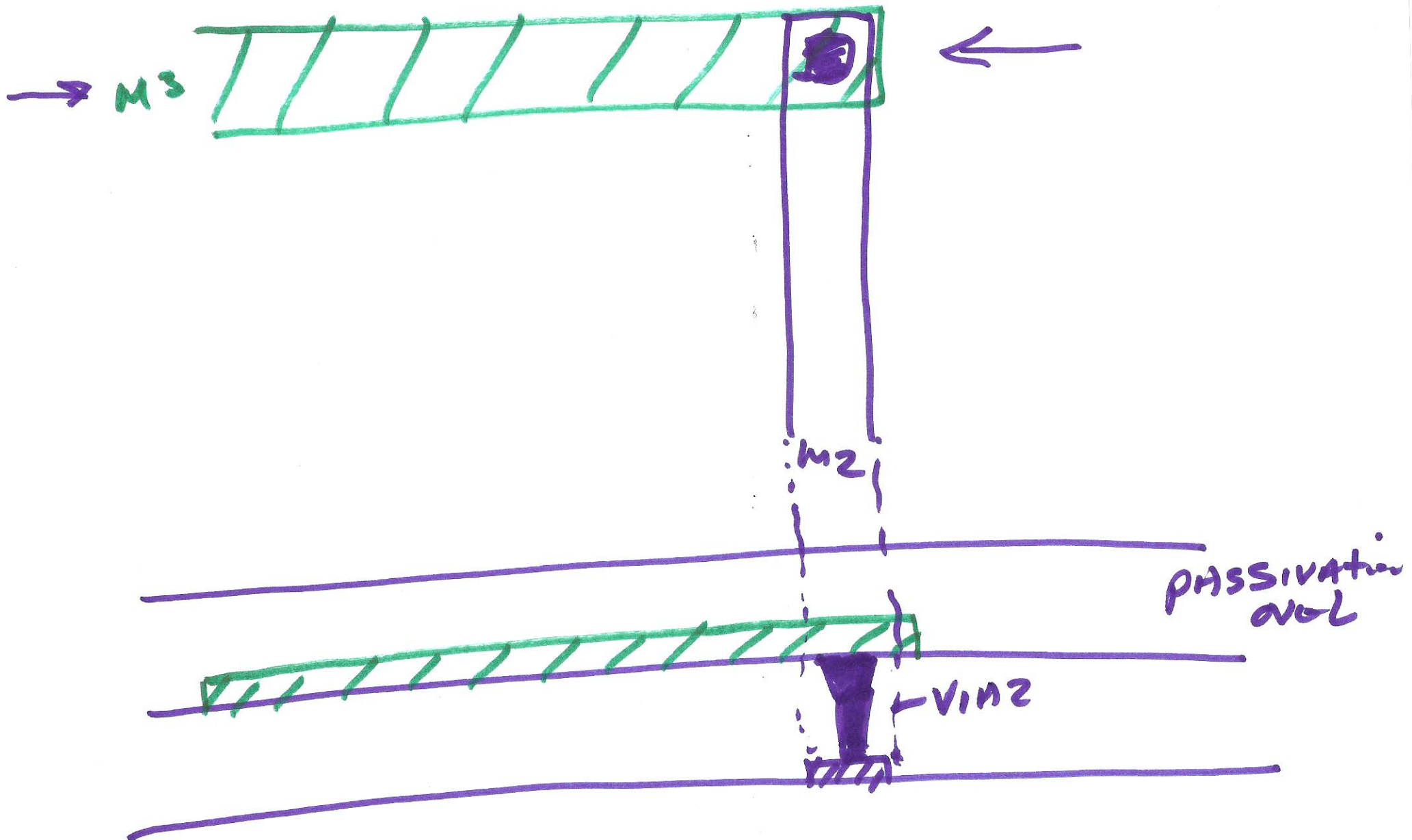
$$i_F = 9.3 \mu A$$

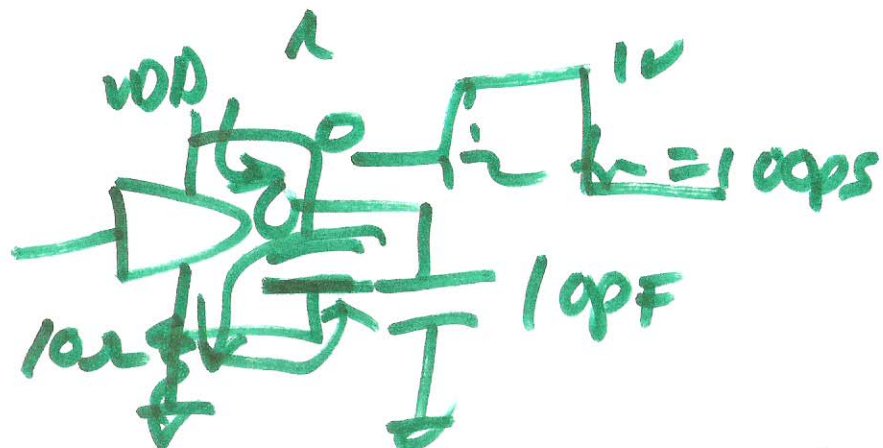
$$i_R = -10.7 \text{ mA}$$



N-well
 metal 3
 OVL VIA2
 metal 2
 VIA1
 metal 1

2)





$$I = 10pF \cdot \frac{1}{100ps} = \underline{\underline{100nA}}$$

$$10 \cdot 100nA = 1V$$

4)