

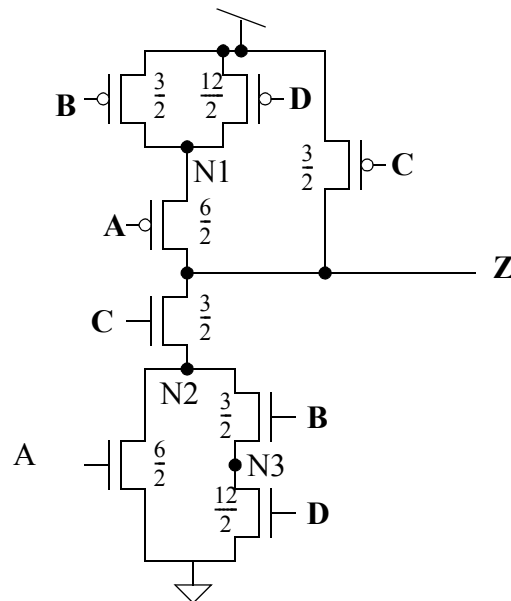
Homework 4: Due Tuesday, October 28

Problem 1 (Section 7.7)

Do Problem 7.12 in book

Problem 2 (Sections 7.5-7.7)

Estimate the rise and fall time of the following circuit using the RC method. Assume that $\beta_n=2\beta_p=60\mu\text{A}/\text{V}^2$ for minimum W/L ratios. The load capacitance is 1pF. The W/L ratios are given in units of λ on the diagram. Assume $C_{N1}=50\text{fF}$, $C_{N2}=40\text{fF}$, and $C_{N3}=30\text{fF}$.



Problem 3 (Section 7.8)

do Problem 7.15 in Text

Problem 4 (Section 11.5)

do Problem 11.7 in Text