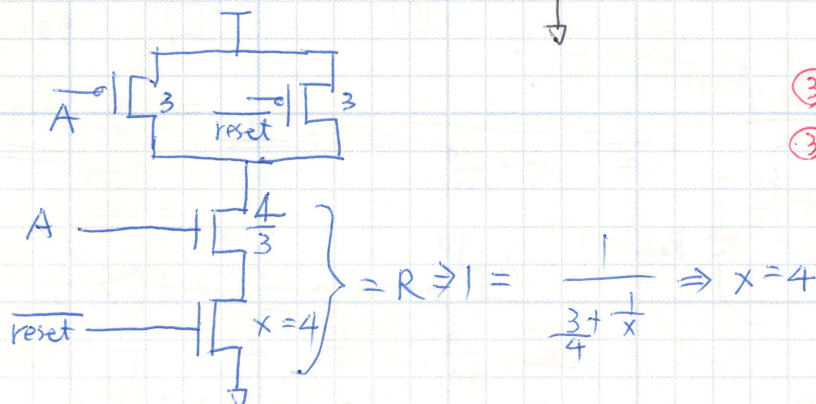
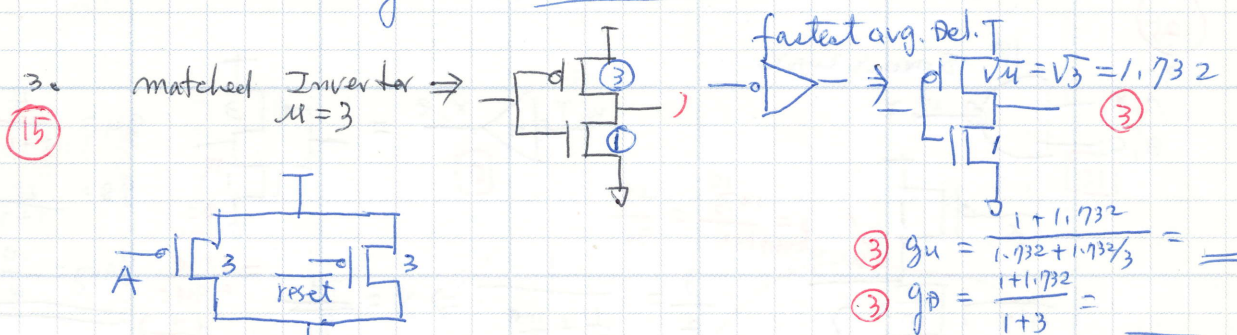
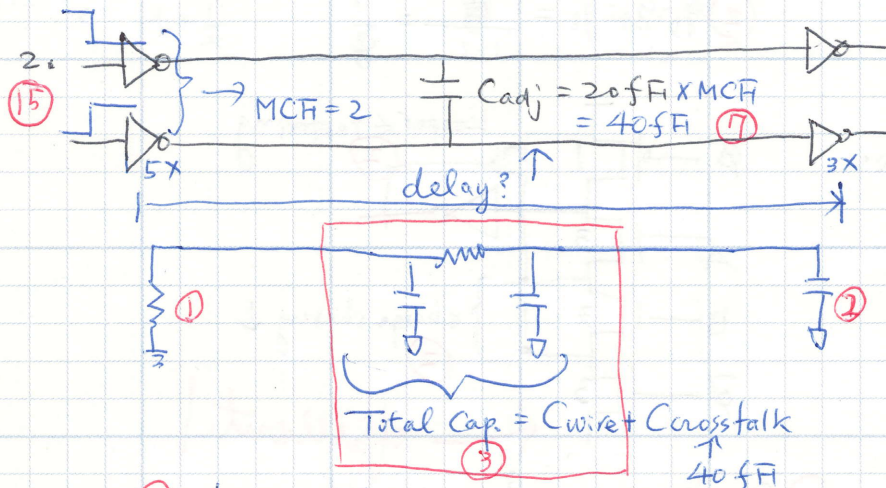
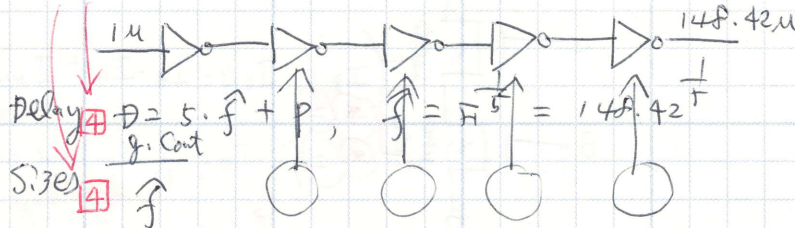




2017 Fall VLSI Systems Designs (Midterm Exam)

1. ① ⑦ $N?$ $D = N F^{\frac{1}{N}} + p \rightarrow \frac{\partial D}{\partial N} = N + \left(\frac{1}{F^{\frac{1}{N}}} \right) \rightarrow N = \log_e F$
 ② ⑧ $N = \log_e^{GBH} = \log_e^{148.42} = 5$



③ $g_A = \frac{3 + \frac{4}{x}}{4} =$

③ $g_{\text{reset}} = \frac{4 + 3}{4} =$

Computer System Architecture & VLSI Lab.