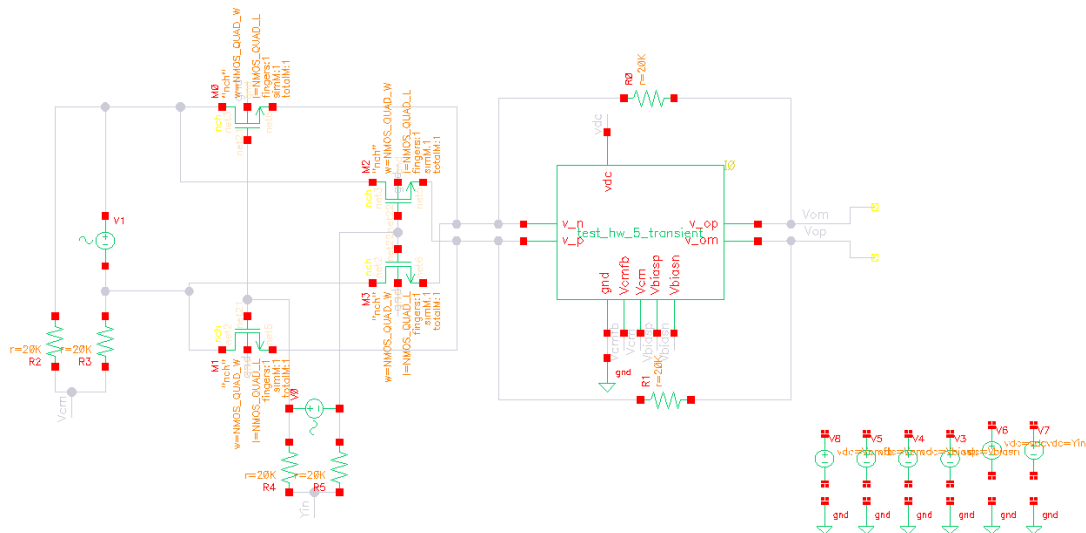
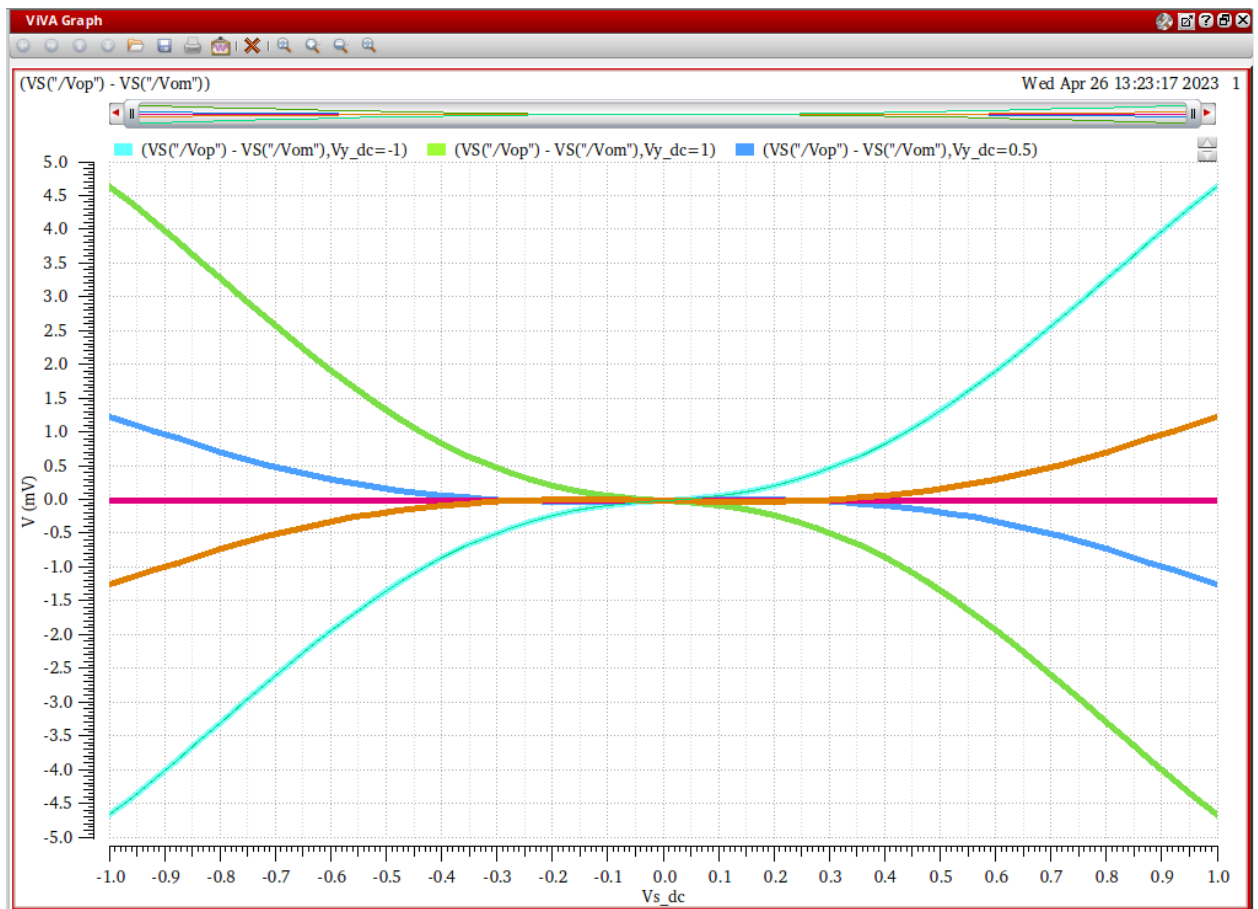


## ELEG 587V Homework #6 (50 pts)

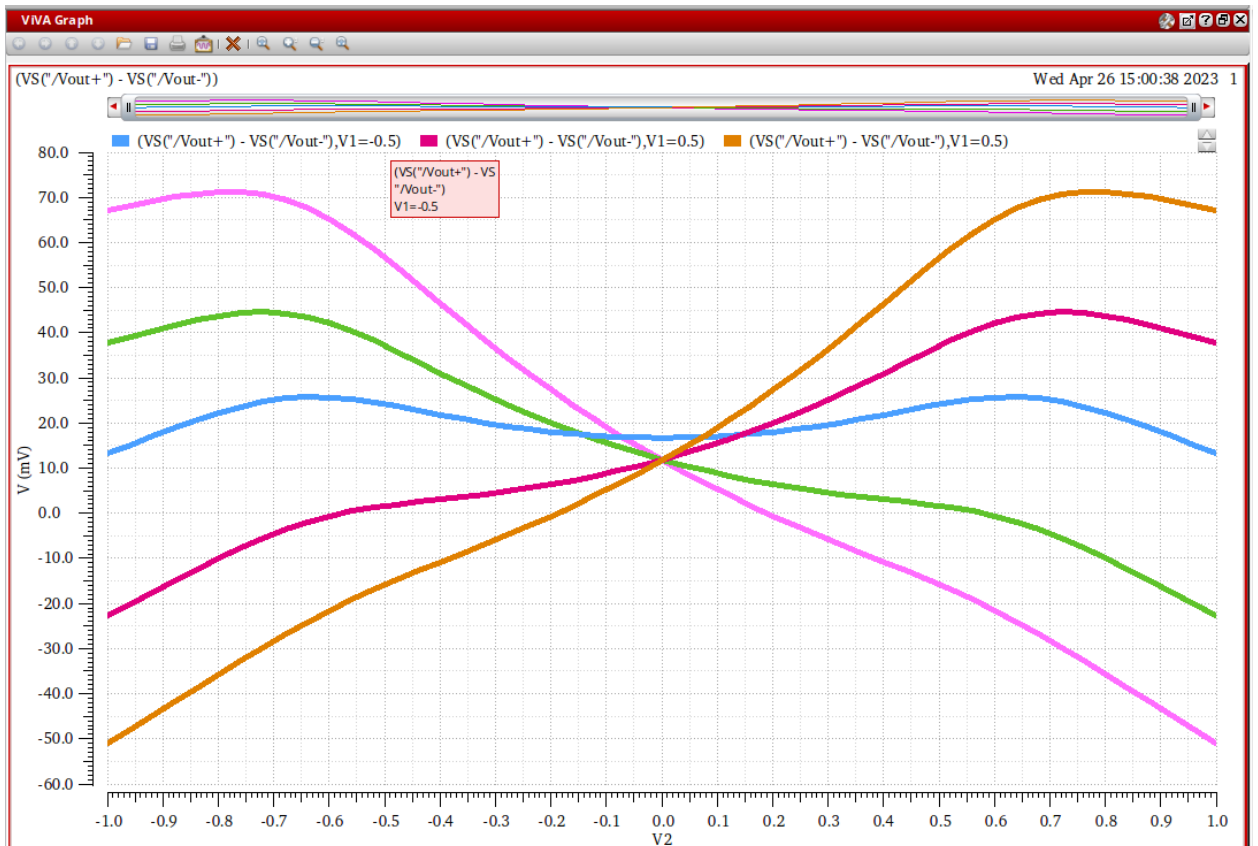
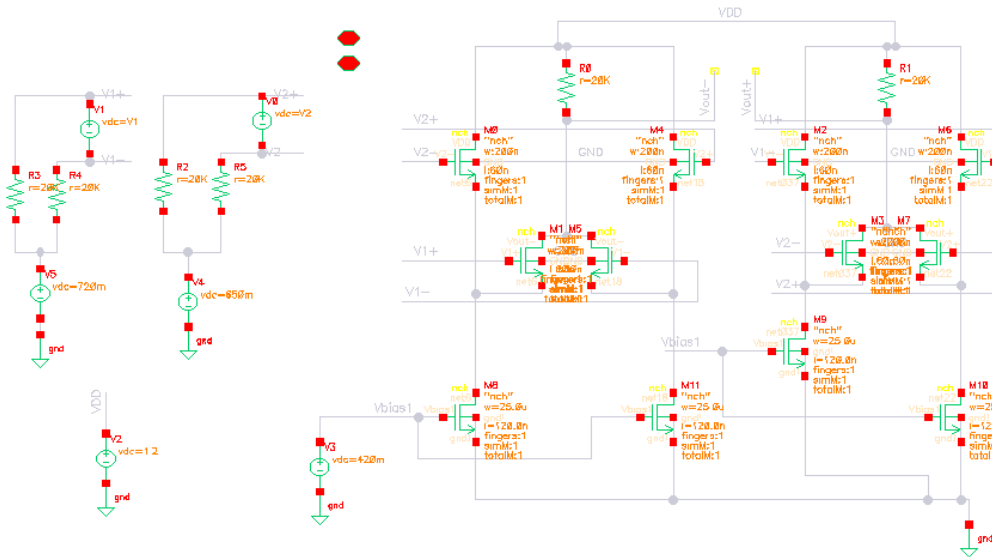
For all problems, you are to choose all the transistor properties that are required to meet the desired specification for the circuit as well as draw the circuit. Please box or underline all answers. Design both circuits within the MUSE 65nm technology within Cadence Virtuoso.

1. Design a CMOS analog multiplier using the multiplying quad design. Provide a DC plot similar to Figure 27.27 in the book.



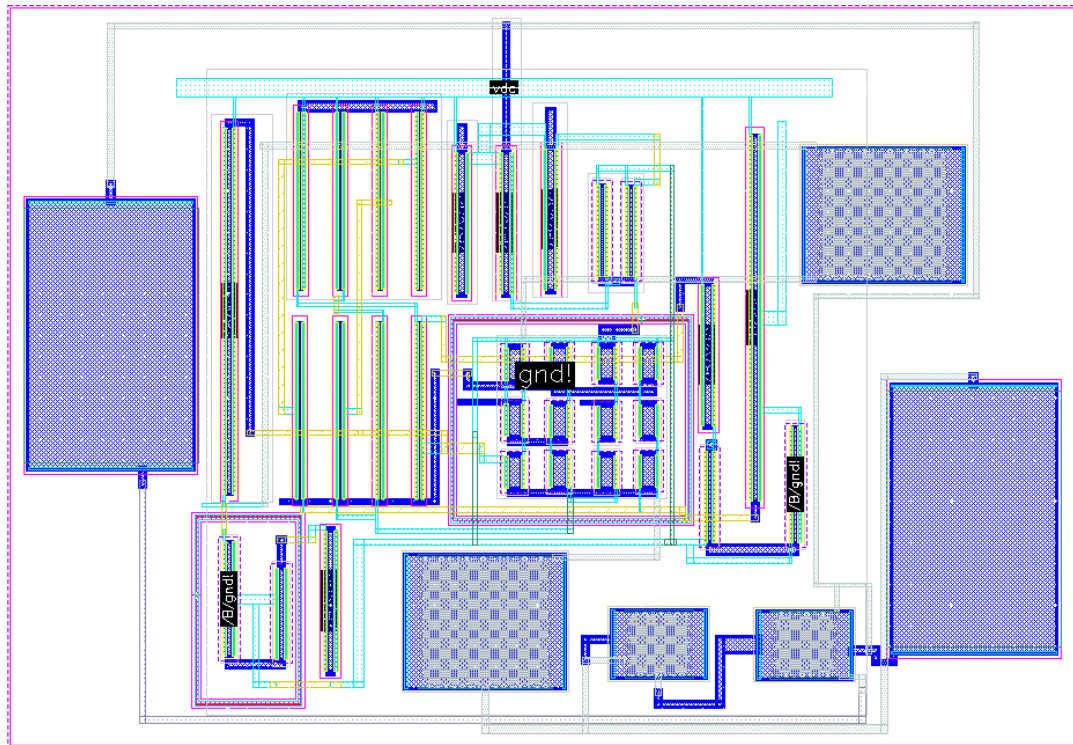


2. Design a multiplier using squaring circuits. Provide a DC plot in the same fashion as #1.



3. Lay out both the designs

### Layout Q1



### Layout Q2

