

*Note: Late HW is **not** accepted! Put your “last name, first name,” the course number (3701), and the HW number in the top right hand corner of the first page of all HW assignments. Also for all homework, use file name **HWx.pdf**. Do **NOT** put your social security number or your UF ID number on your HW.*

1. Use a Quartus simulation to show that an S-R latch can be made using two NAND gates.
2. Use a Quartus simulation to show that an S-R latch can be made using two NOR gates.
3. Derive the characteristic equations and excitation tables for each type of flip-flop. See Table 12-9 in your Roth textbook.
4. Roth textbook problems:
  - 5<sup>th</sup>, 6<sup>th</sup> and 7<sup>th</sup> edition: 11.1, 11.3, 11.8, 11.9
  - 5<sup>th</sup> edition: 11.21
  - 6<sup>th</sup> and 7<sup>th</sup> edition: 11.26