COCO 2610 Homework 8

Due date: March 26, in studio

Problems:

1. 7.2

2. Consider the following circuit. The numbers inside each gate indicates the propagation delay in nsec. At the time $t_0$, the switch is opened and at the time $t_1$ it is closed again, as indicated by the waveform of signal $A$. Assume that $Z=1$ at the time $t < t_0$.

Draw the timing diagram of the signals $B$, $C$, and $Z$. 
3. Given the following schematic diagram,

Determine its truth table. What is it? and complete the following timing diagram for the output, assuming the setup and hold time of the clock is 20 ns.
4. 7.27

5. Consider the following flip-flop, what type of FF does this figure below represent? Explain briefly how it works.