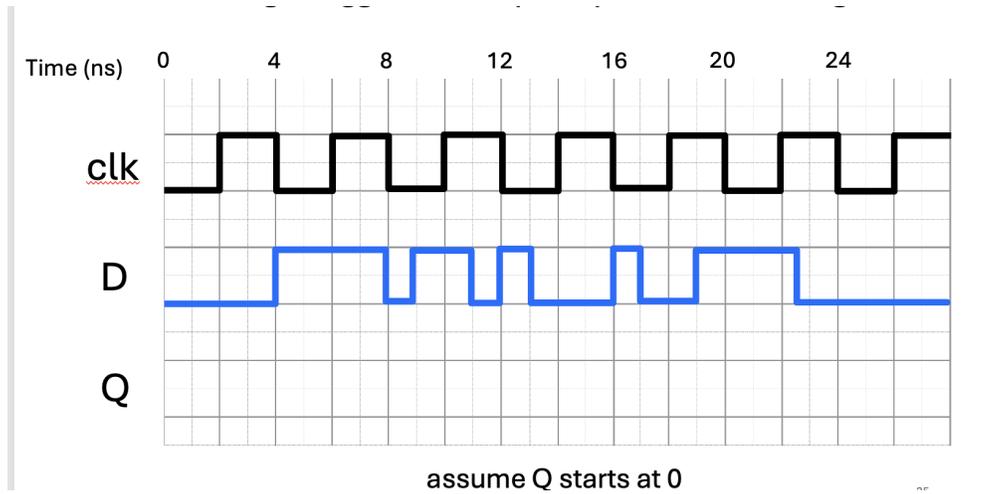
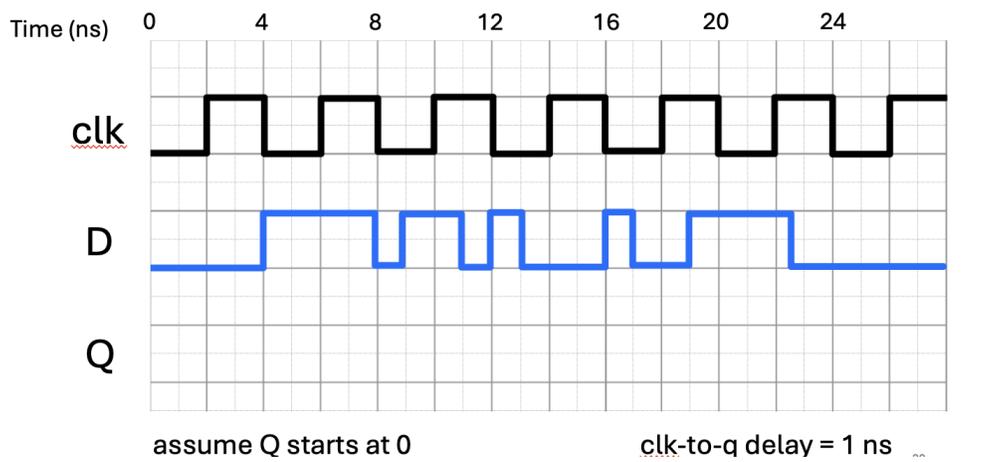


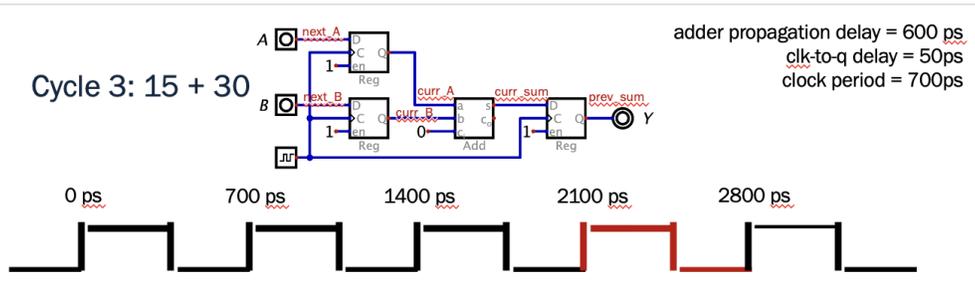
Question 1: Flip Flops Fill in the waveform diagram, for Q, the value stored in the positive edge-triggered D Flip-Flop.



Question 2: clk-to-q delay Fill in the waveform diagram, for Q, the value stored in the positive edge-triggered D Flip-Flop. Assume to a clk-to-Q delay of 1 ns.



Question 3: Timing Analysis Fill in the table to complete the timing analysis for the following circuit. Take note that A's input value changes.



Signal	t = 2100 ps A = 15 B = 30	t = 2150 ps A = 15 B = 30	t = 2750 ps A = 20 B = 30	t = 2800 ps A = 20 B = 30
next A	15			
next B	30			
curr A	30			
curr B	8			
curr_sum	38			
prev_sum	25			

Not a typo!
 What will happen in this case?