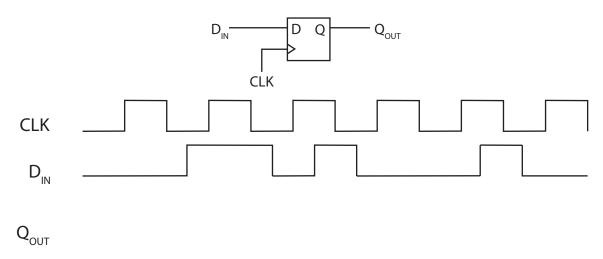


Name:

1. (25 points) Consider the D-type flip flop below. Draw the waveform for the output Q_{OUT} to the input D_{IN} . Hint: start by drawing dotted lines at each rising clock edge.



2. (25 points) Consider the D-type flip flop below with an inverter feeding Q_{OUT} back to D_{IN} . The initial state of Q_{OUT} is 0, causing D_{IN} to be driven to 1. Draw the waveform for the output Q_{OUT} and D_{IN} .

