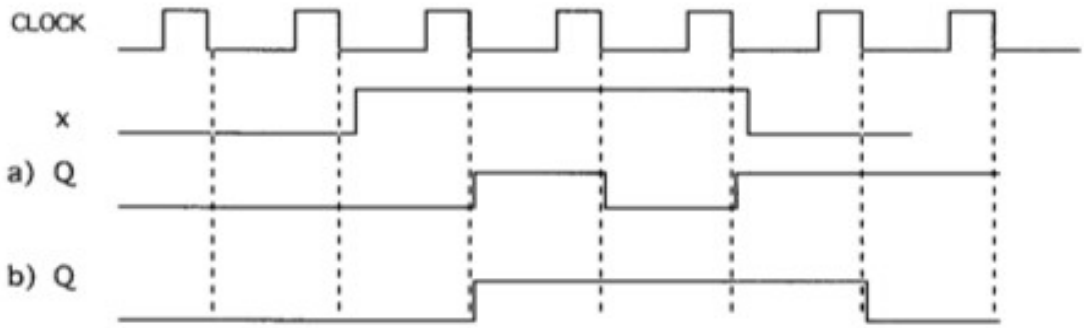
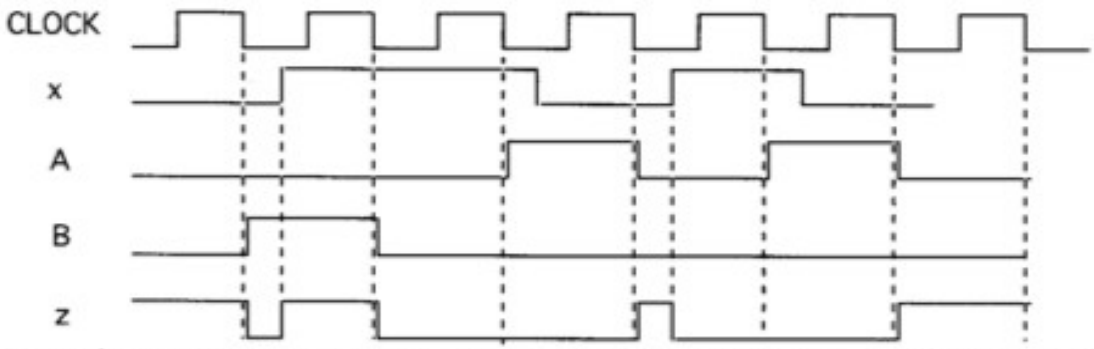
Homework 14 Solutions

4. $IN = x\,Q' + x'\,Q$

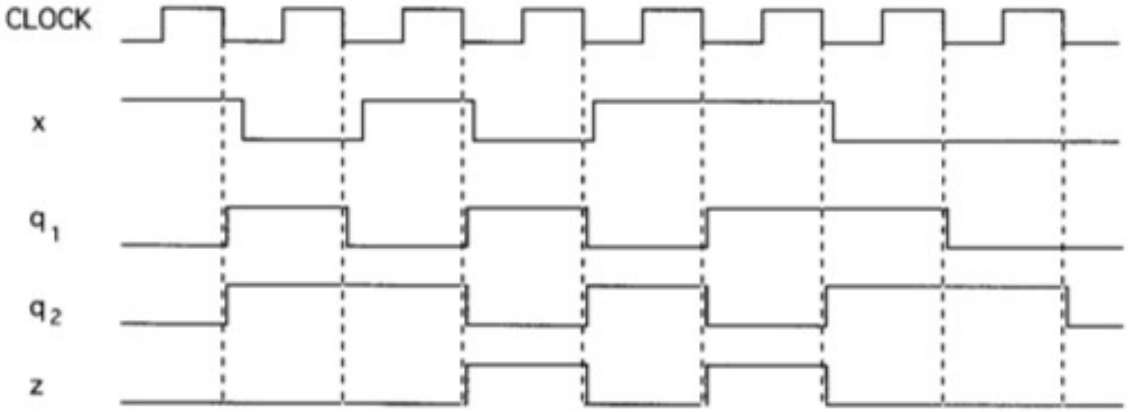


7. a) $D_A = x\,B'$ $\quad D_B = x'\,A'$ $\quad z = x\,B + x'\,A'\,B'$



Note that there are two false outputs (glitches) beccause x changes after the clock edge.

b) $D_1 = x$ $\quad J_2 = x + q_1$ $\quad K_2 = q_1'$ $\quad z = q_1\,q_2'$



Note that at the last clock edge, J_2 is unknown, but $K_2 = 1$. Since q_2 was in state 1, it will go to 0 whether J_2 is 0 or 1.