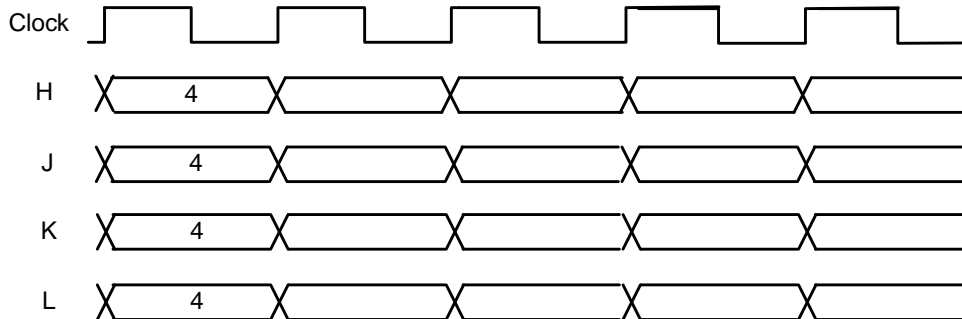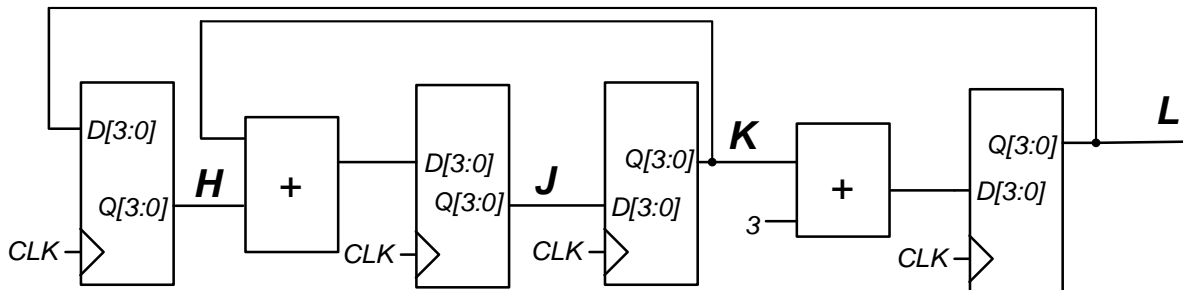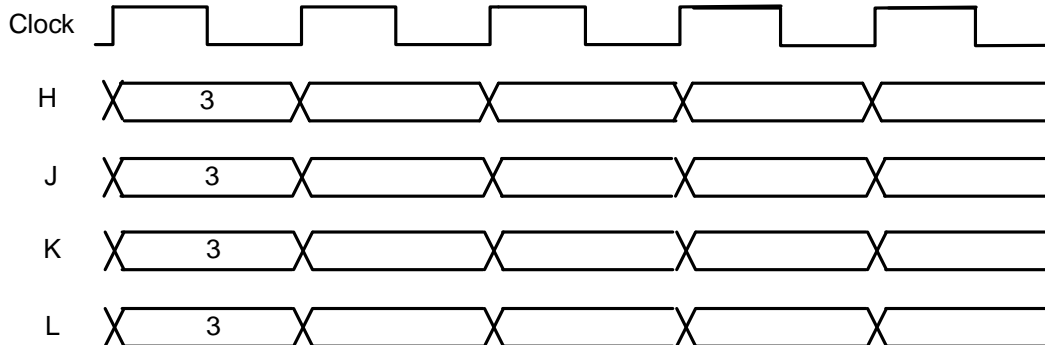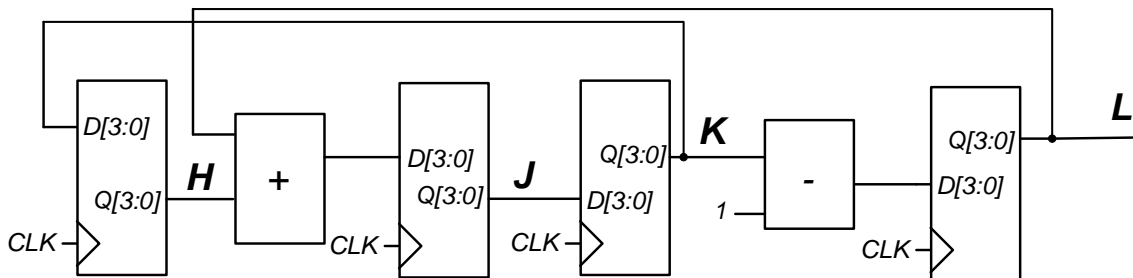# Register Sequence Waveforms

1. **Complete the waveform for the sequential circuit shown below by filling in the decimal value that each register will output during each clock cycle.**

Circuit labels: D[3:0], Q[3:0], H, +, CLK, D[3:0], Q[3:0], J, CLK, Q[3:0], D[3:0], K, CLK, 3, +, Q[3:0], D[3:0], L, CLK

H*=L
J*=H+K
K*=J
L*=K+3

Clock

H	4				
J	4				
K	4				
L	4				

2. **Complete the waveform for the sequential circuit shown below by filling in the decimal value that each register will output during each clock cycle.**

Circuit labels: D[3:0], Q[3:0], H, +, CLK, D[3:0], Q[3:0], J, CLK, Q[3:0], D[3:0], K, CLK, 1, -, Q[3:0], D[3:0], L, CLK

H*=K
J*=H+L
K*=J
L*=K-1

Clock

H	3				
J	3				
K	3				
L	3				