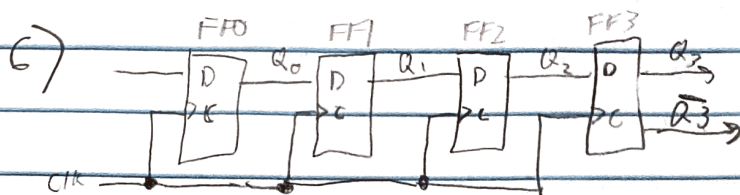


hw 6

8-2



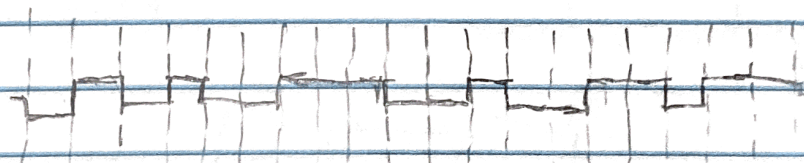
4 register contains all 1s

Serial input: 11010100

Initial	Q ₀	Q ₁	Q ₂	Q ₃
0	1	1	1	1
1	1	1	1	1
2	0	1	1	1
3	1	0	1	1
4	0	1	0	1
5	1	0	1	0
6	0	1	0	1
7	0	0	1	0

8)

Serial out



* shifted one over, starts with 0 instead of one

10)

LSB
↓

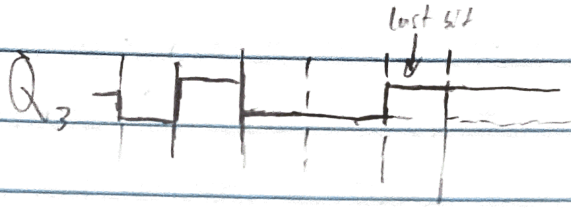
Data out: 0, 1, 0, 1, 1, 0, 1, 1

in order: 11011010

$$208 + 10 = 218$$

Initial: D_0, D_1, D_2, D_3
 1 0 1 0

14) shift / load : 0 1 1 0 1 1



8-3

21) 76 in hex = 0100 1100

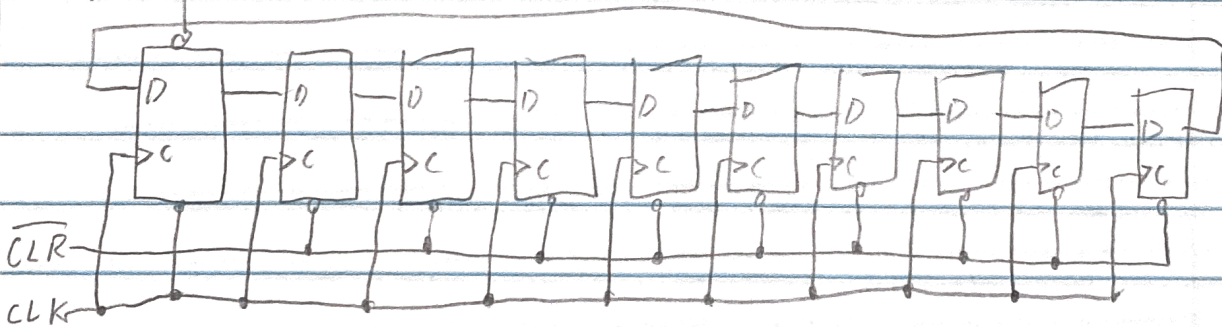
Right / Left : 1, 1, 0, 0, 0, 1, 0, 0, 1, 1

There is 5 right shifts & 6 left shifts, so it should only be shifted one left. The output would be {1001 1000}

8-4

28)

PRE = 0000100000100010 & also Q₀ waveform



Q₉: 0100010000010000