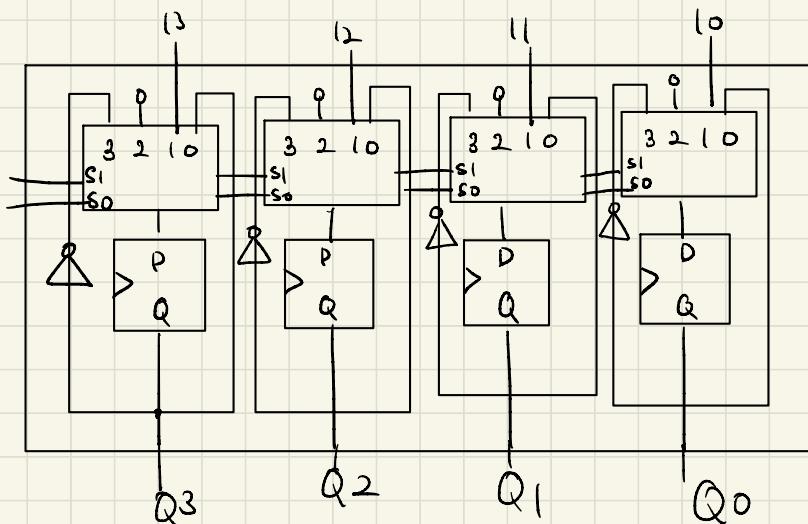
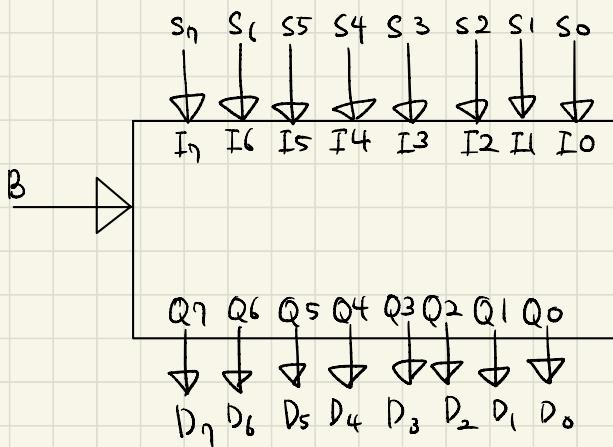


20150327 이진수

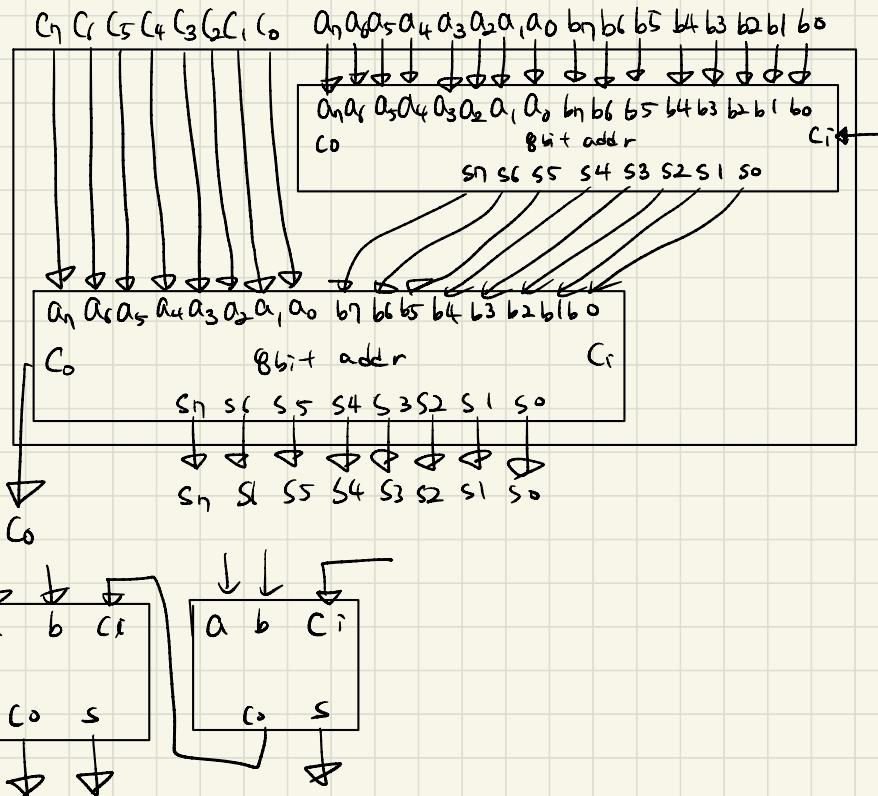
4.3



4.6



4.15



4.25

a) 16 time-units.

$$b) 1 \text{ time-unit} \Rightarrow (9 + 10 + 11 + 12 + 13 + 14 + 15) * 2 = 168$$

4.28

$$a: 0000\ 1111 \Rightarrow 15$$

$$d: 111\ 111\ 11 \Rightarrow -1$$

$$b: 1000\ 0000 \Rightarrow -128$$

$$e: 10010101 \Rightarrow -107$$

$$c: 1000\ 0000\ 1 \Rightarrow -127$$

4.35

a.  $1 \Rightarrow 000000001$

b.  $+ \Rightarrow 111111111$

c.  $-256 \Rightarrow 1000000000$

d.  $-255 \Rightarrow 100000001$

e.  $255 \Rightarrow 011111111$

f.  $-8 \Rightarrow 111111000$

g.  $-128 \Rightarrow 1100000000$

4.37

Inputs			Outputs	
a	b	wi	d	wo
0	0	0	0	0
0	0	1	1	1
0	1	0	1	1
0	1	1	0	1
1	0	0	1	0
1	0	1	0	0
1	1	0	0	0
1	1	1	1	1

$$d = a'b'wi + a'bwi' + ab'wi' + abwi$$

$$wo = a'b'wi + a'bwi' + a'bwit + abwi$$

