

정기현 교수님 논리회로 문제 4-3

	W	X	Y	Z	F
0	0	0	0	0	0
1	0	0	0	1	0
2	0	0	1	0	0
3	0	0	1	1	1
4	0	1	0	0	0
5	0	1	0	1	0
6	0	1	1	0	1
7	0	1	1	1	0
8	1	0	0	0	0
9	1	0	0	1	1
10	1	0	1	0	0
11	1	0	1	1	0
12	1	1	0	0	1
13	1	1	0	1	0
14	1	1	1	0	0
15	1	1	1	1	1

$$\begin{array}{ll}
 3: 0011 & W' \cdot X' \cdot Y \cdot Z \\
 6: 0110 & W' \cdot X \cdot Y \cdot Z' \\
 9: 1001 & W \cdot X' \cdot Y' \cdot Z \\
 12: 1100 & W \cdot X \cdot Y' \cdot Z' \\
 15: 1111 & W \cdot X \cdot Y \cdot Z
 \end{array}$$

Y\Z \backslash W\X	00	01	11	10
00			1	
01				1
11	1		1	
10		1		

$$\therefore \text{회로화} : W'X'Y'Z + W'X \cdot Y \cdot Z' + W \cdot X' \cdot Y' \cdot Z + W \cdot X \cdot Y' \cdot Z' + W \cdot X \cdot Y \cdot Z$$

$$\Rightarrow \Sigma_{W \cdot X \cdot Z} (3, 6, 9, 12, 15)$$