

**UTS DASAR SISTEM KOMPUTER  
PETA KARNAUGH**



**Nama: Devafilla Rizqy Santosa  
Kelas : 1 D4 Teknik Informatika A  
NRP : 3120600026**

$$1. F(w, x, y, z) = \prod (0, 2, 3, 4, 6, 7, 8, 11)$$

0000, 0010, 0011, 0100, 0110, 0111,

wx \ yz	00	01	11	10
00	0		0	0
01	0		0	0
11				
10	0		0	

$$F = (w+z)(w+y)(x+y+z)(x+y'+z')$$

$$2. F(w, x, y, z) = \prod (0, 1, 3, 5, 7, 8, 10, 13, 15)$$

0000, 0010, 0011, 0100, 0111, 1000, 1010, 1101, 1111

wx \ yz	00	01	11	10
00	0	0	0	0
01		0	0	
11		0	0	
10	0			0

$$F = (w+x)(x'+z')(w'+x+z)$$

$$3. F(w, x, y, z) = \sum (0, 2, 4, 6, 9, 11, 13, 15)$$

0000, 0010, 0011, 0101, 0111, 1000, 1010, 1101, 1111

wx \ yz	00	01	11	10
00	1			1
01	1			1
11		1	1	
10		1	1	1

$$F = (w'z') + (wz) + (wx'y)$$

$$4. F(w, x, y, z) = \sum (0, 2, 5, 6, 7, 8, 10, 15)$$

0000, 0010, 0101, 0110, 0111, 1000, 1010, 1111

wx\yz	00	01	11	10
00	1			
01		1	1	
11				1
10				

$$(x'z') + (w'xz) + (xy) + (w'yz')$$