

6

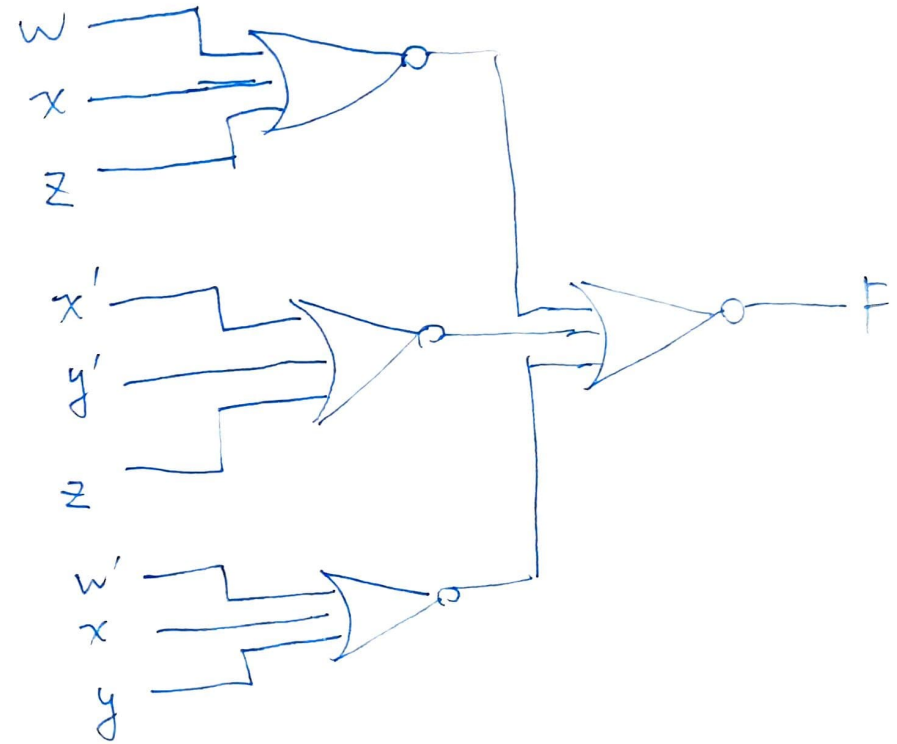
$$F(w, x, y, z) = w'z + xy' + yz + wx'y$$

$w \backslash yz$	00	01	11	10	
00	0	1	1	0	$\rightarrow (w+x+z)$
01	1	1	1	0	$\rightarrow (x'+y'+z)$
11	1	1	1	0	
10	0	0	1	1	$\rightarrow (w'+x+y)$

NOR - NOR

$$[(\alpha+\beta)' + (r+w)']$$

$$= (\alpha+\beta) \cdot (r+w) \cdot (\text{product of sum})$$



product of sum

$$\Rightarrow F(w, x, y, z) = (w+x+z) \cdot (x'+y'+z) \cdot (w'+x+y)$$

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

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