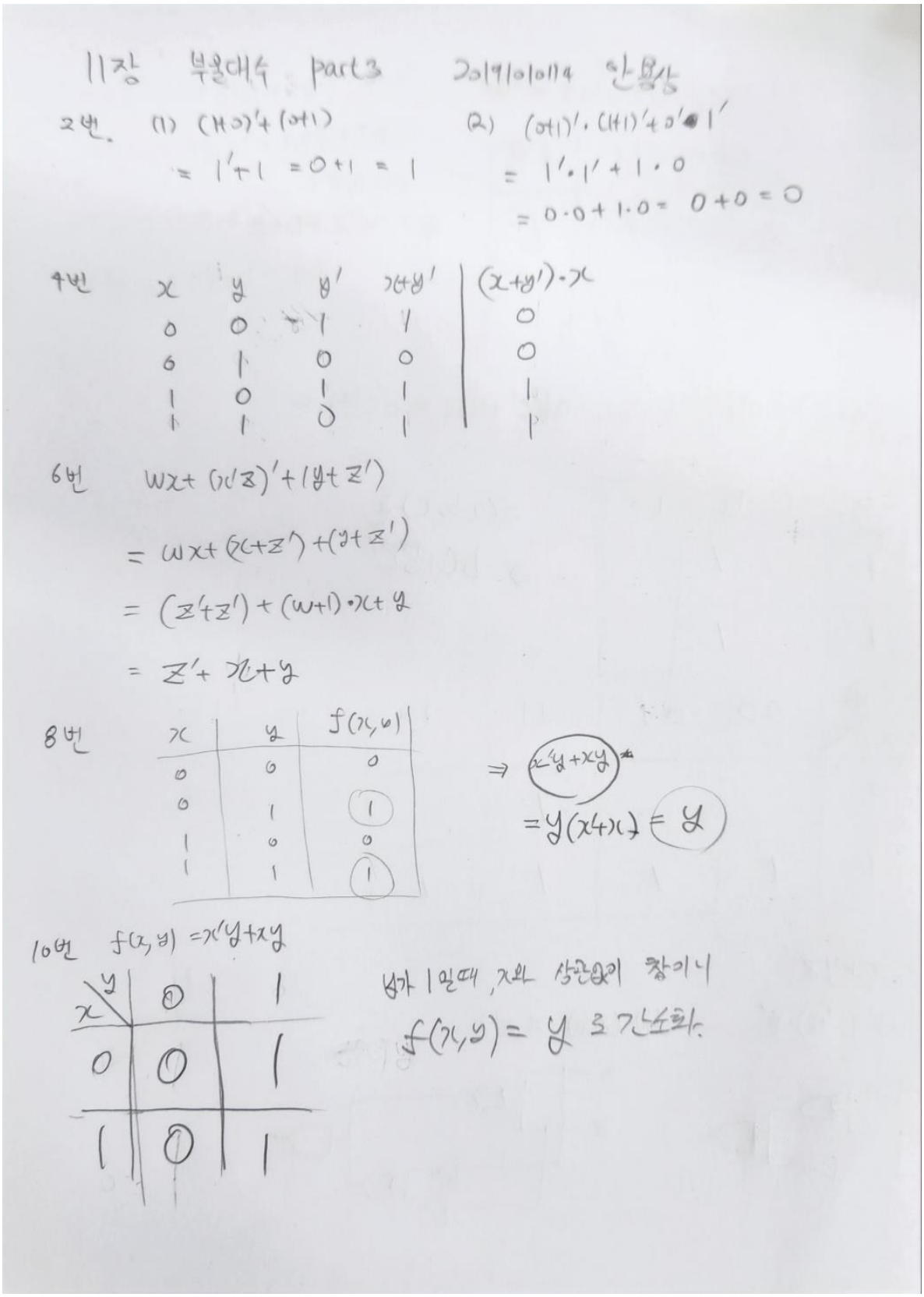
이산수학 과제 #11 (11장) 부울 대수

2019101074 안용상



12번 $f(x,y,z) = xyz + xyz' + xy'z + xy'z'$

x \ yz	00	01	11	10
0			1	1
1		1	1	

$f(x,y,z)$
$\Rightarrow = xz + xy$

14번 $f(a,b,c) = a'bc' + a'bc + ab'c' + abc = b'c' + bc$
000 011 100 111

a \ bc	00	01	11	10
0	1		1	
1	1		1	

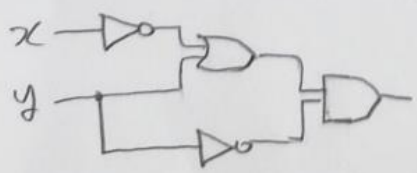
$f(a,b,c)$는
$\Rightarrow bc + b'c'$

16번

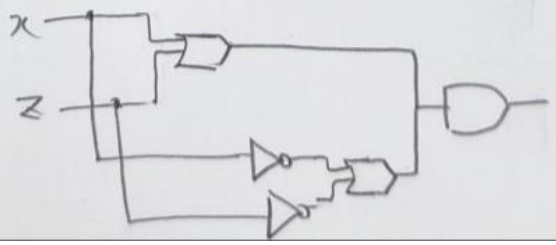
x \ yz	00	01	11	10
0			1	
1	1	1	1	1

$\Rightarrow x + yz$

18번 (1) $(x+y)\cdot y'$



(2) $(x+y)\cdot(x+z')$



20번

↳ $S_1\beta d + S_2\beta d + S_1\beta' d + S_2\beta' d + S_1\beta_1 d + S_2\beta_1 d$

$= S_1\beta_1 d + (1+r)S\beta d + S_2\beta_1 d + S_1\beta_1 d =$

$S\beta d + S\beta' d + S_2\beta_1 d + S_1\beta_1 d =$

$= (\beta + \beta') \cdot Sd + S_2\beta_1 d + S_1\beta_1 d =$

$= Sd + S_2\beta_1 d + S_1\beta_1 d =$