

- ③ ① truth table, int. values x, y, out F
- ⑤ ② K-map reduction → simplest SOP
- ② ③ Draw circuit from 2

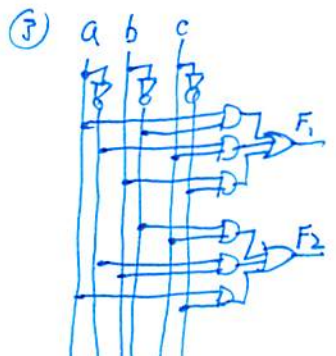
①

abc	xy	F
000	0 0	0
001	0 .	1
010	. 1	1
011	1 0	1
100	1 0	1
101	. 1	1
110	0 1	1
111	0 0	0

②

bc	00	01	11	10
a	0	1	1	1
$\bar{a}$	1	1	1	0

② 2 equally good solutions  
 $F = a\bar{b} + \bar{a}c + b\bar{c}$   
 $= \bar{b}c + \bar{a}b + a\bar{c}$   
 No essential prime implicants



CE1900 - 4  
 Quiz 4