

- 6.7 Perform two-level logic size optimization for the function $F(a, b, c, d) = a'bc'd + ab'cd'$, assuming that a and b can never both be 1 at the same time, and that c and d can never both be 1 at the same time (i.e., there are don't cares).

F cd
 ab

	00	01	11	10
00	0	0	x	0
01	0	1	x	0
11	x	x	x	x
10	0	0	x	1

bd (points to the 11 row)
 ac (points to the 10 column)

$$F(a, b, c, d) = ac + bd$$