

(الف)

قبل 12

$$F(a, b, c, d) = \sum m(2, 3, 5, 7, 8, 10, 11, 12, 13) + d(4)$$

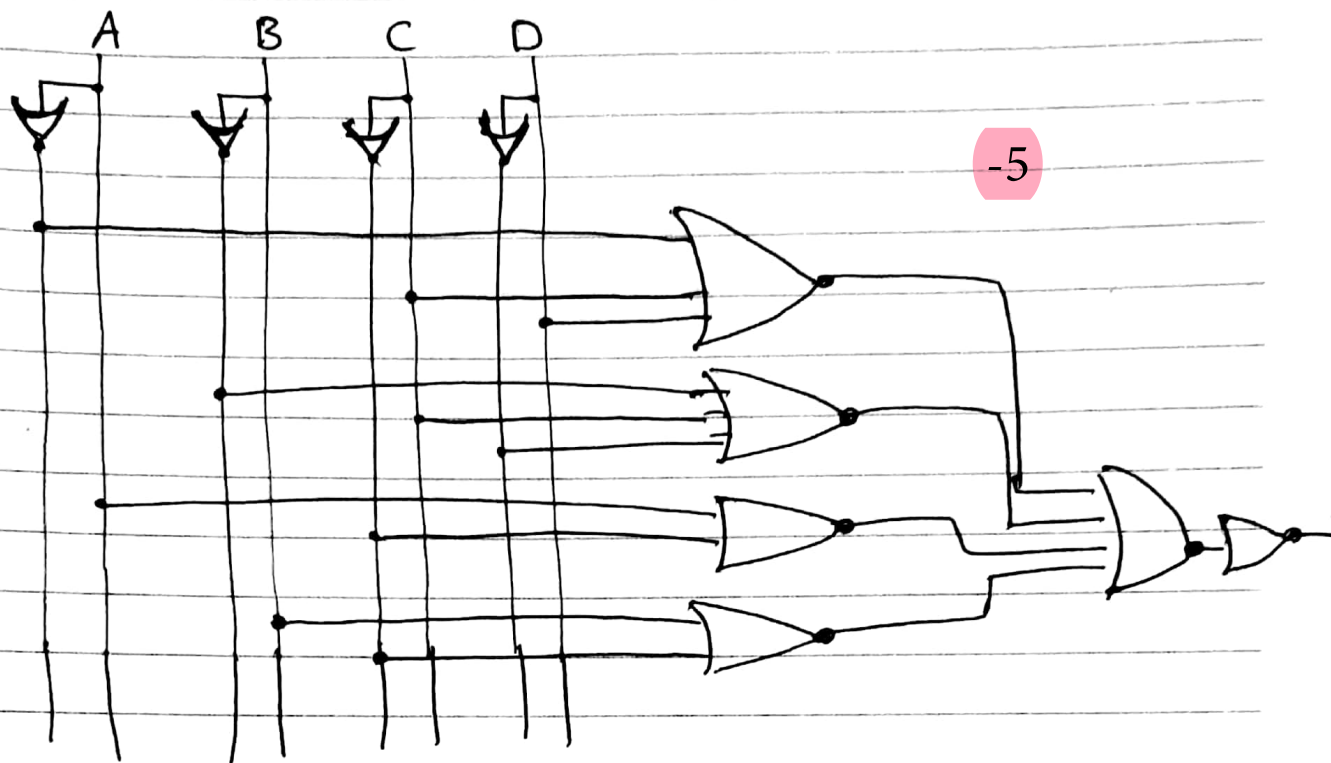
ab \ cd				
00	0	0	1	1
01	0	1	1	1
10	1	1	0	0
11	1		1	1

$$a\bar{c}\bar{d} + B\bar{c}D + \bar{A}C + \bar{B}c \quad +3$$

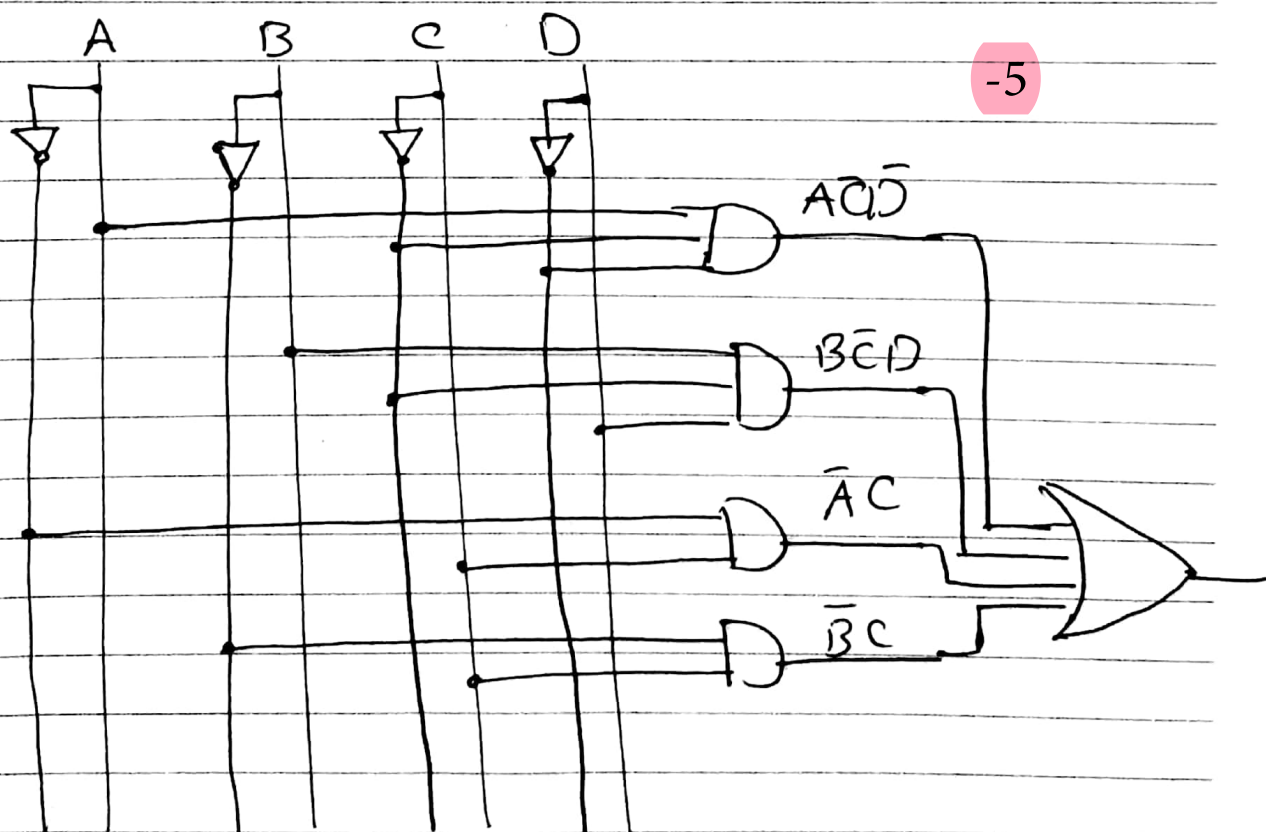
$$P\bar{L} \rightarrow (2, 3, 9, 7) (5, 13) (8, 12) (2, 3, 10, 11) (5, 7) (12, 13) \quad -7$$

$$EP\bar{L} \rightarrow (2, 3, 9, 7) (1, 13) (2, 3, 10, 11) \quad -2$$

ب) (NOR - NOR) NOR



AND - OR - INV



ع. ۱)

پوش کوشن مک لاسلی

-0.5 for (8,10)

	a	b	c	d	
1	0	0	1	0	001 - (2,4) 0 - 10 (2,4)
	1	0	0	0	-010 (2,10) 1 - 00 (8,12)
2	0	0	1	1	0 - 11 (3,7)
	0	1	0	1	-011 (3,11) 011 - (4,7)
	1	0	1	0	-101 (5,13)
	0	1	1	0	01 - 1 (5,7) 110 - (12,14)
	1	1	0	0	101 - (10,11) +7.5
3	0	1	1	1	-01 - (2,10,11)
	1	0	1	1	0 - 1 - (2,4,11,7)
	1	1	0	1	

+2

-5 because PIs weren't wrote

$$\rightarrow (2,3,4,7) - (2,3,10,11)$$

$$(12,14) - (5,7) - (5,13) - (8,12)$$

$$9) a\bar{c}\bar{d} + b\bar{c}d + \bar{a}c + \bar{b}c$$

+6

$$\Rightarrow abc + \bar{a}bd + a\bar{b}\bar{d}$$

در قسمت ب) AND-OR-Invert آن ترانس که نوشته ام

 $\bar{A}\bar{C}\bar{D}$ $B\bar{C}D$ $\bar{A}C$ $\bar{B}C$

با هم ای دها زاردها دایس ها کور به ترتیب

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