

7. (4) $F = \overline{A}\overline{B} + (\overline{A}B\overline{C} + \overline{A}B\overline{C}) + (\overline{A}B\overline{C} + \overline{A}B\overline{C})$
 $= \overline{A}\overline{B} + \overline{B}\overline{C} + \overline{A}\overline{C}$

8. (4) $F = \overline{A}\overline{C} \overline{A}B\overline{C} + \overline{B}C + AB\overline{C}$
 $= (A + \overline{C})(A + \overline{B} + \overline{C}) + \overline{B}C + AB\overline{C}$
 $= \overline{A}\overline{B} + \overline{A}\overline{C} + \overline{A}\overline{C} + \overline{B}C + \overline{C} + \overline{B}C + AB\overline{C}$
 $= \overline{A}\overline{B} + \overline{C} + \overline{B}C = \overline{A}\overline{B} + \overline{C} + \overline{B} = \overline{B} + \overline{C} = \overline{B}\overline{C}$

$B\overline{C}$;

10. (4)

		CD			
AB		00	01	11	10
00		1	1	1	1
01					
11					
10					

$F = \overline{A}\overline{B} + AD + AC$

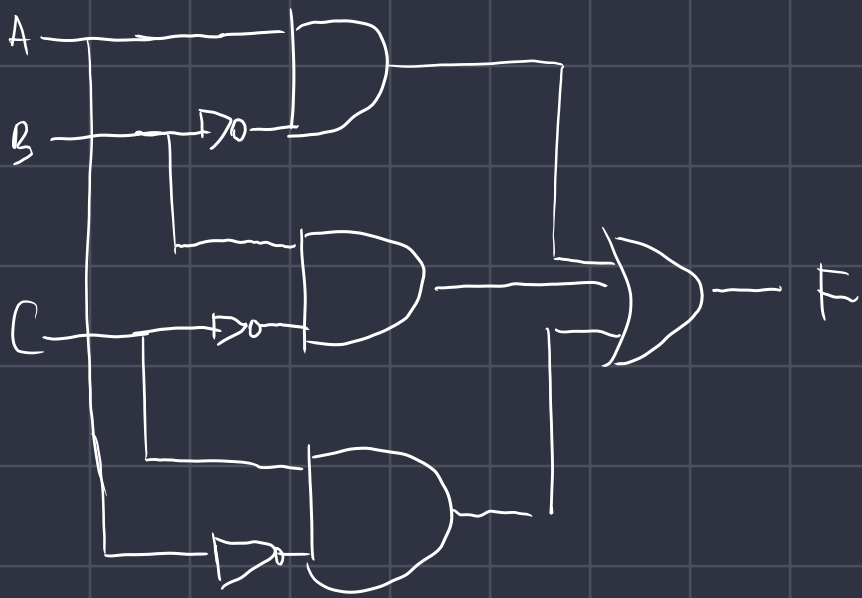
12. 填

A	B	C	F
0	0	0	0
0	0	1	1
0	1	0	1
0	1	1	1
1	0	0	1
1	0	1	1
1	1	0	1
1	1	1	0

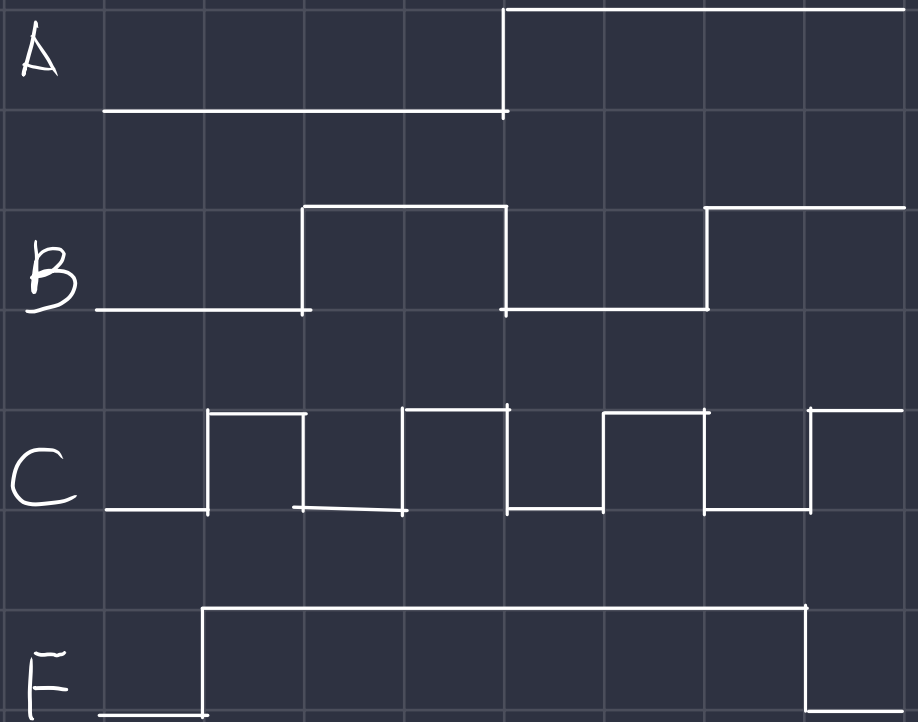
② 卡

		C	
AB		0	1
00			1
01		1	1
11		1	
10		1	1

③ 逻辑图



④ 波形图



⑤ verilog 语言 `module XOR (X, A, B, C)`

output X;

input A, B, C;

assign X = A & ~B | B & ~C | C & ~A

B. (a)

