* Dificuldades

	A	B	C	D	S_a	S_b	S_c	S_d	S_e	S_f	S_g
(1)	0	0	0	0	1	1	0	1	1	0	1
(2)	0	0	0	1	0	1	1	0	0	1	1
(3)	0	0	1	0	0	1	1	0	0	0	0
(4)	0	0	1	1	1	0	1	1	0	1	1
(5)	0	1	0	0	1	0	1	1	0	1	1
(6)	0	1	0	1	1	1	1	0	0	0	0
(7)	0	1	1	0	0	1	1	0	0	1	1
(8)	0	1	1	1	0	1	1	0	0	1	1
(9)	1	0	0	0	1	0	1	1	1	1	1
(10)	1	0	0	1	1	1	1	1	0	0	1
(11)	1	0	1	0	1	1	1	1	1	1	1
(12)	1	0	1	1	1	1	1	0	0	0	0
(13)	1	1	0	0	1	1	1	0	0	1	1
(14)	1	1	0	1	1	1	1	0	0	0	0
(15)	1	1	1	0	1	1	1	1	1	1	1
(16)	1	1	1	1	1	1	1	0	0	1	1

S_a:

A B/CD	00	01	11	10
00	1	0	1	0
01	1	1	0	0
11	1	1	1	1
10	1	1	1	1

S_b:

A B/CD	00	01	11	10
00	1	1	0	1
01	0	1	1	1
11	1	1	1	1
10	0	1	1	1

$S_a = \bar{C}\bar{D} + B\bar{C} + A + \bar{B}CD$

$S_b = \bar{A}\bar{B}\bar{C} + B\bar{D} + A\bar{D} + AB + C\bar{D}$

S_c:

A B / C D	00	01	11	10
00	0	1	1	1
01	1	1	1	1
11	1	1	1	1
10	1	1	1	1

$S_c = B + A + D + C$

S_d:

A B / C D	00	01	11	10
00	1	0	1	0
01	1	0	0	0
11	0	0	0	1
10	1	1	0	1

$S_d = \bar{A}\bar{C}\bar{D} + A\bar{B}\bar{C} + \bar{A}\bar{B}CD + AC\bar{D}$

S_e:

A B / C D	00	01	11	10
00	1	0	0	0
01	0	0	0	0
11	0	0	0	1
10	1	0	0	1

$S_e = AC\bar{D} + \bar{B}\bar{C}\bar{D}$

S_f:

A B / C D	00	01	11	10
00	0	1	1	0
01	1	0	1	1
11	1	0	1	1
10	1	0	0	1

$S_f = \bar{A}\bar{B}D + B\bar{D} + A\bar{D} + BC$

S_g:

A B / C D	00	01	11	10
00	1	1	1	0
01	1	0	1	1
11	1	0	1	1
10	1	1	0	1

$S_g = \bar{A}\bar{B}D + A\bar{D} + \bar{B}\bar{C} + BC + C\bar{D}$

Q_n	Q_{n+1}
ABCD	ABCD
0000	0001
0001	0100
0010	0011
0011	0100
0100	0101
0101	1101
0110	1000
0111	1000
1000	1001
1001	1110
1010	1011
1011	1100
1100	1101
1101	1110
1110	1111
1111	0000

D_A:

AB/CD	00	01	11	10
00	0	0	0	0
01	0	1	1	1
11	1	1	0	1
10	1	1	1	1

$$D_A = A\bar{B} + A\bar{C} + BC\bar{D} + \bar{A}BC + B\bar{C}D$$

D_B:

AB/CD	00	01	11	10
00	0	1	1	0
01	1	1	0	0
11	1	1	0	1
10	0	1	1	0

$$D_B = B\bar{C} + \bar{B}D + AB\bar{D}$$

D_C:

AB/CD	00	01	11	10
00	0	0	0	1
01	0	0	0	0
11	0	1	0	1
10	0	1	0	1

$$D_C = AC\bar{D} + A\bar{C}D + \bar{B}C\bar{D}$$

D_D:

AB/CD	00	01	11	10
00	1	0	0	1
01	1	1	0	0
11	1	0	0	1
10	1	0	0	1

$$D_D = A\bar{D} + \bar{B}\bar{D} + \bar{A}B\bar{C}$$