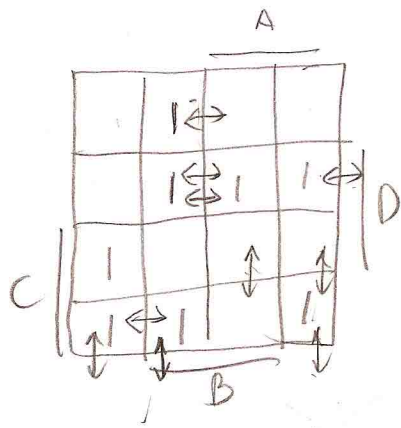


$$F_1 = (A+B) \cdot (A'+C) \cdot (B+C'+D)$$

$$F_2 = A'C' + AD + CD'$$

b)  $F = F_1 \oplus F_2$



static: 5 (one is a "double")  
dynamic: 5

c) static

ABCD	ABCD	ABCD	ABCD
0101	1110	0110	0110
1101	1111	0010	0100

dynamic

ABCD	ABCD	ABCD	ABCD	ABCD
0100	1001	1011	1010	0010
1100	0001	1010	1000	0000

d) fixes

$$F_{1\text{new}} = F_{1\text{old}} \cdot (B'+C) \cdot (A+C'+D) \cdot (A'+B+D)$$

$$F_{2\text{new}} = F_{2\text{old}} + C'D + AC + A'D$$