A	B	C_{in}	S	C_{out}
0	0	0	0	0
0	0	1	1	0
0	1	0	1	0
0	1	1	0	1
1	0	0	1	0
1	0	1	0	1
1	1	0	0	1
1	1	1	1	1

FA:
A, B, C_{in} → FA → S, C_{out}

Sum K-map:

C_{in} \ AB	00	01	11	10
0	0	1	0	1
1	1	0	1	0

Sum

$$S = A \oplus B \oplus C_{in}$$

Cout K-map:
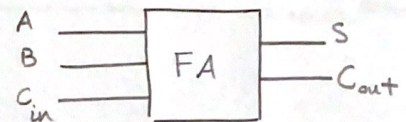
C_{in} \ AB	00	01	11	10
0	0	0	1	0
1	0	1	1	1

Cout

$$C_{out} = BC_{in} + AB + AC_{in}$$