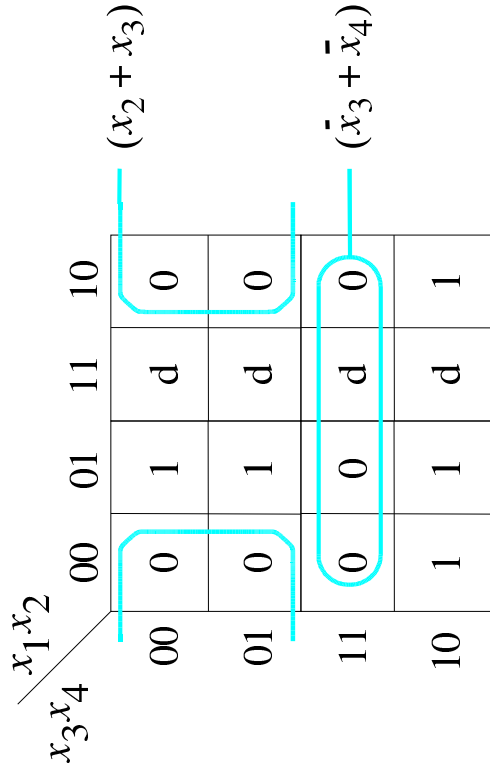


(a) SOP implementation



(b) POS implementation

Figure 4.15. Two implementations of $f = \Sigma m(2, 4, 5, 6, 10) + D(12, 13, 14, 15)$.

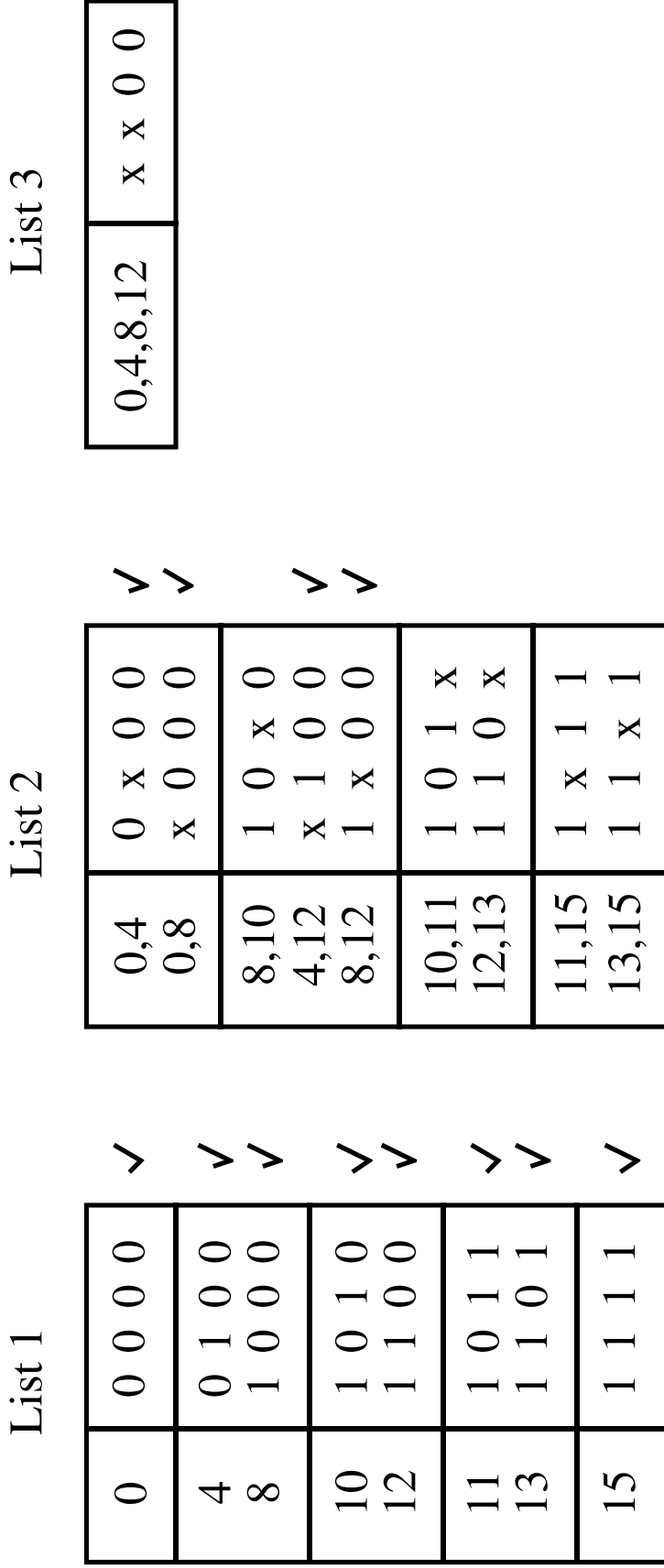


Figure 4.36. Generation of prime implicants for $f = \sum m(0, 4, 8, 10, 11, 12, 13, 15)$.

List 1		List 2		List 3		
0	0 0 0 0	0,1	0 0 0 x	0,1,8,9	x 0 0 x	✓
1	0 0 0 1	0,2	0 0 x 0	1,5,9,13	x x 0 1	✓
2	0 0 1 0	0,8	x 0 0 0	8,9,12,13	1 x 0 x	✓
8	1 0 0 0	1,5	0 x 0 1	5,7,13,15	x 1 x 1	✓
5	0 1 0 1	2,6	0 x 1 0			✓
6	0 1 1 0	1,9	x 0 0 1			✓
9	1 0 0 1	8,9	1 0 0 x			✓
12	1 1 0 0	8,12	1 x 0 0			✓
7	0 1 1 1	5,7	0 1 x 1			✓
13	1 1 0 1	6,7	0 1 1 x			✓
15	1 1 1 1	5,13	x 1 0 1			✓
		9,13	1 x 0 1			✓
		12,13	1 1 0 x			✓
		7,15	x 1 1 1			✓
		13,15	1 1 x 1			✓

Figure 4.38. Generation of prime implicants for $f = \sum m(0,2,5,6,7,8,9,13) + D(1,12,15)$.