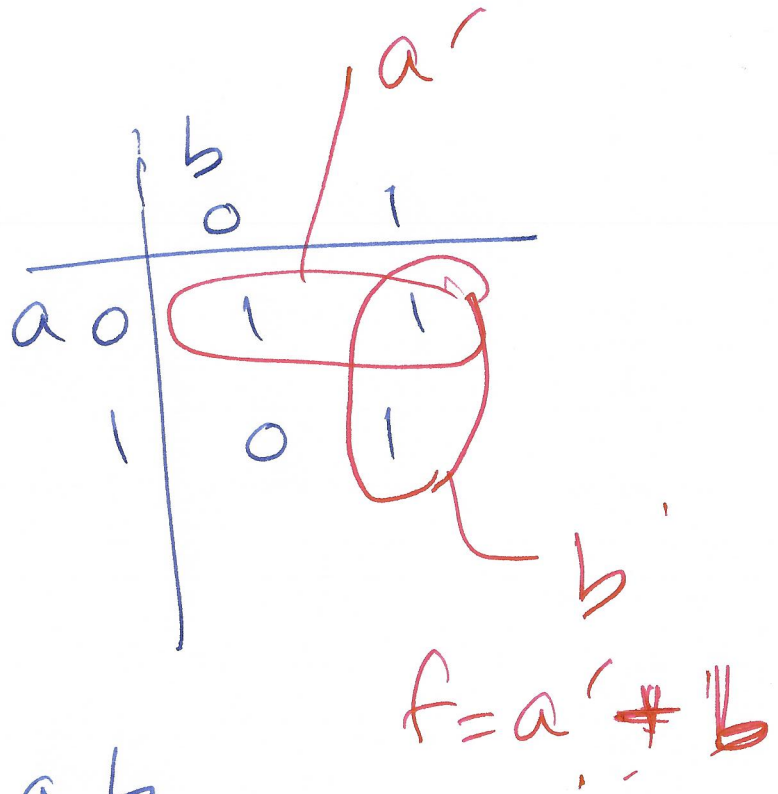
Row	a b	f
0	00	1
1	01	1
2	10	0
3	11	1



$f = a'$ + b'

$$f = a'b' + a'b + ab$$

$$= a'(b' + b) + ab$$

$$= a' + ab + a'b$$

$$= a' + b(a + a')$$

$$= a' + b$$

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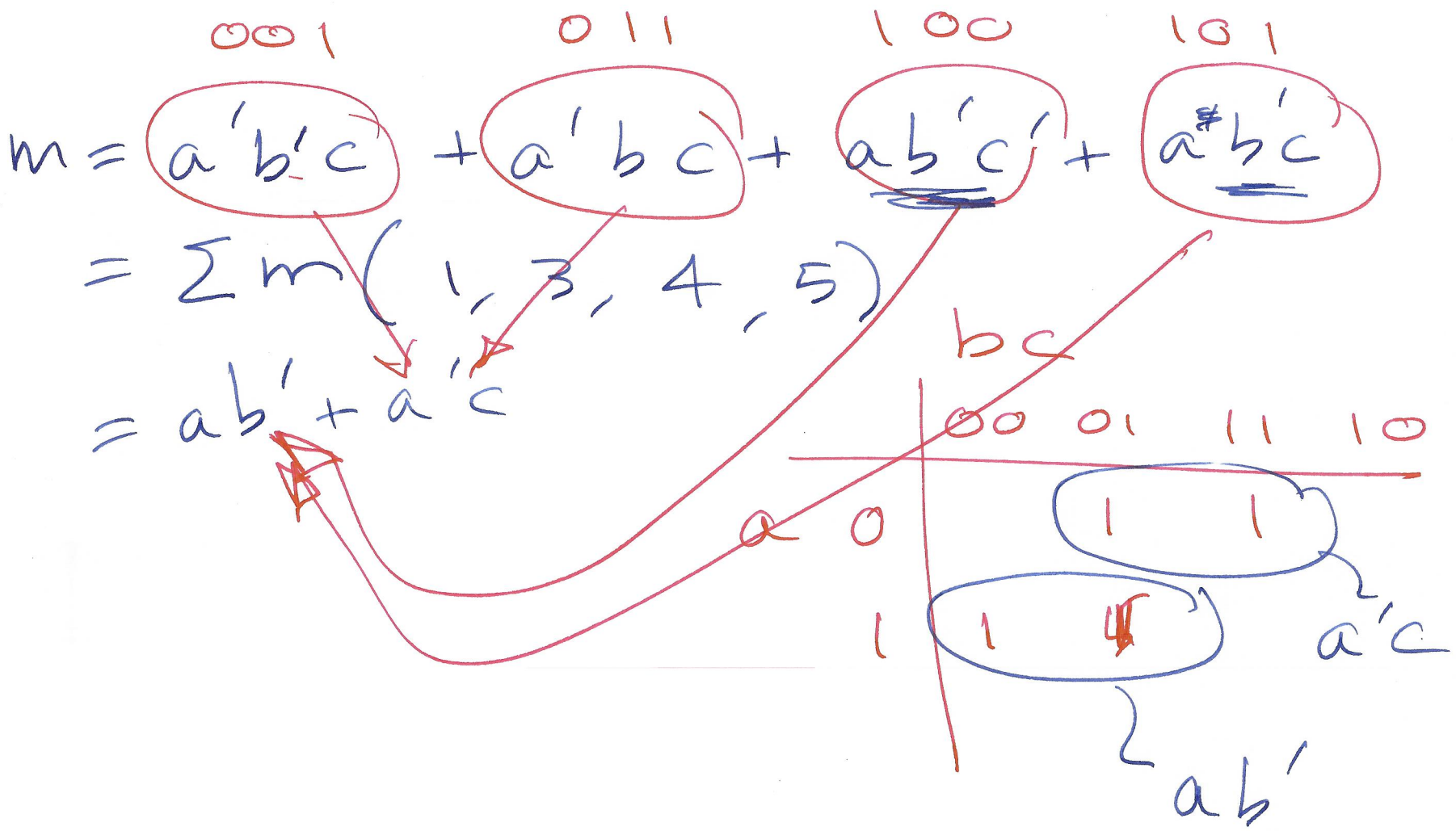
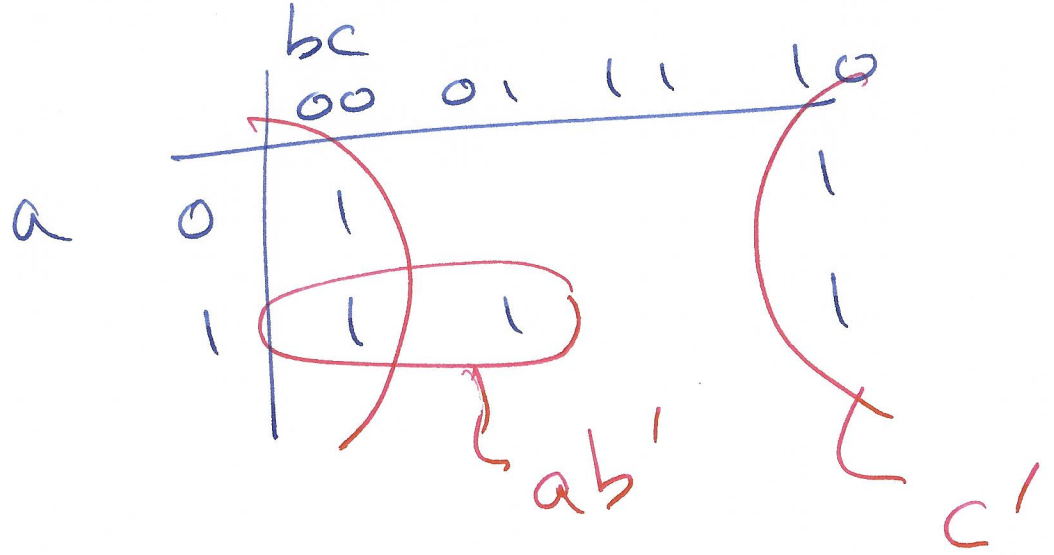
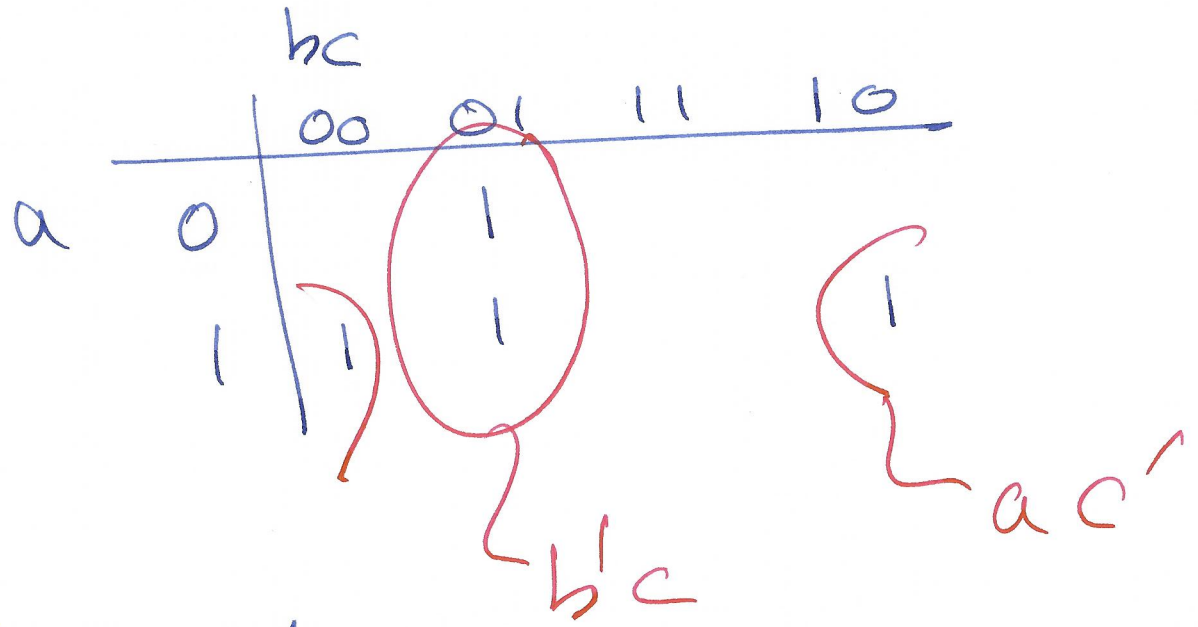

001
011
100
101
m = a'b'c + a'bc + ab'c + a*b'c
= Σm(1, 3, 4, 5)
= ab' + a'c
bc
00 01 11 10
a
0
1 1
1 1 1
a'c
ab'

$$f(a,b,c) = \Sigma m(0,2,4,5,6)$$

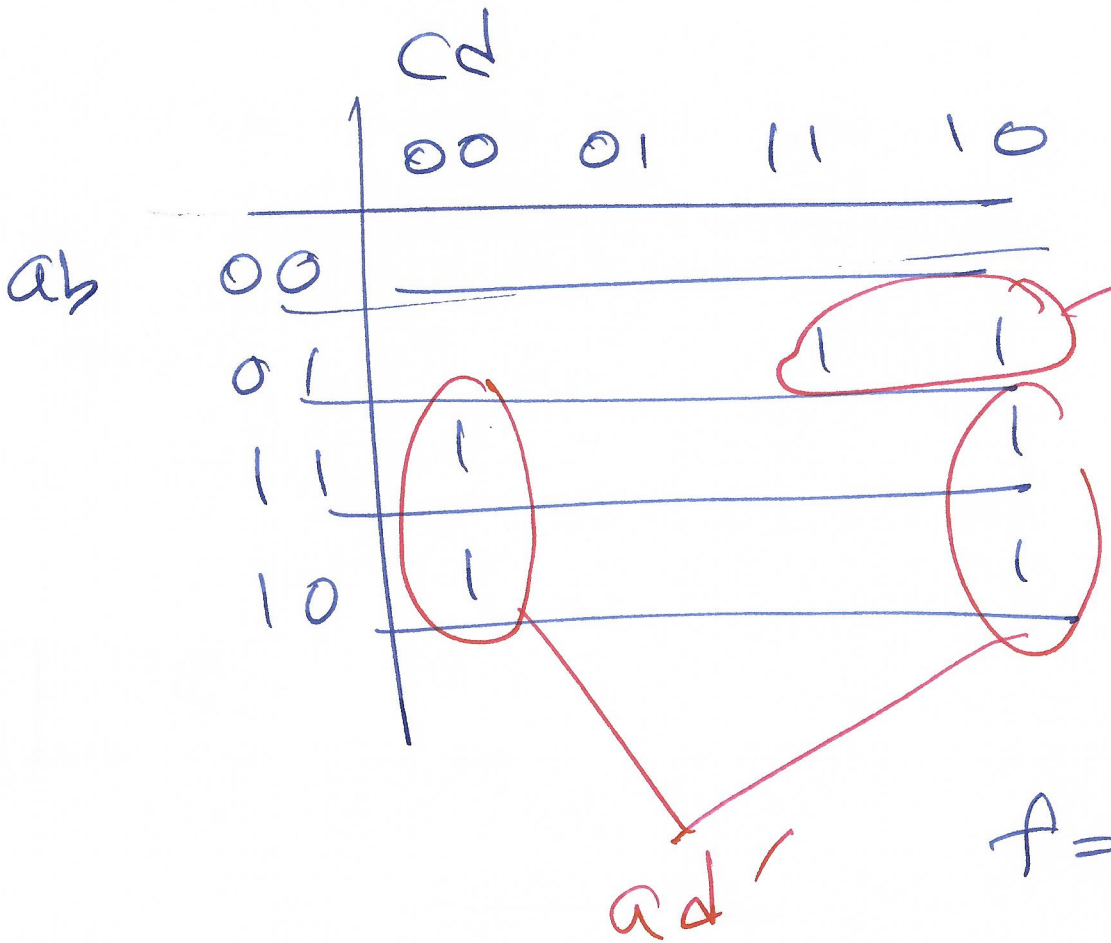


$$f = ab' + c'$$

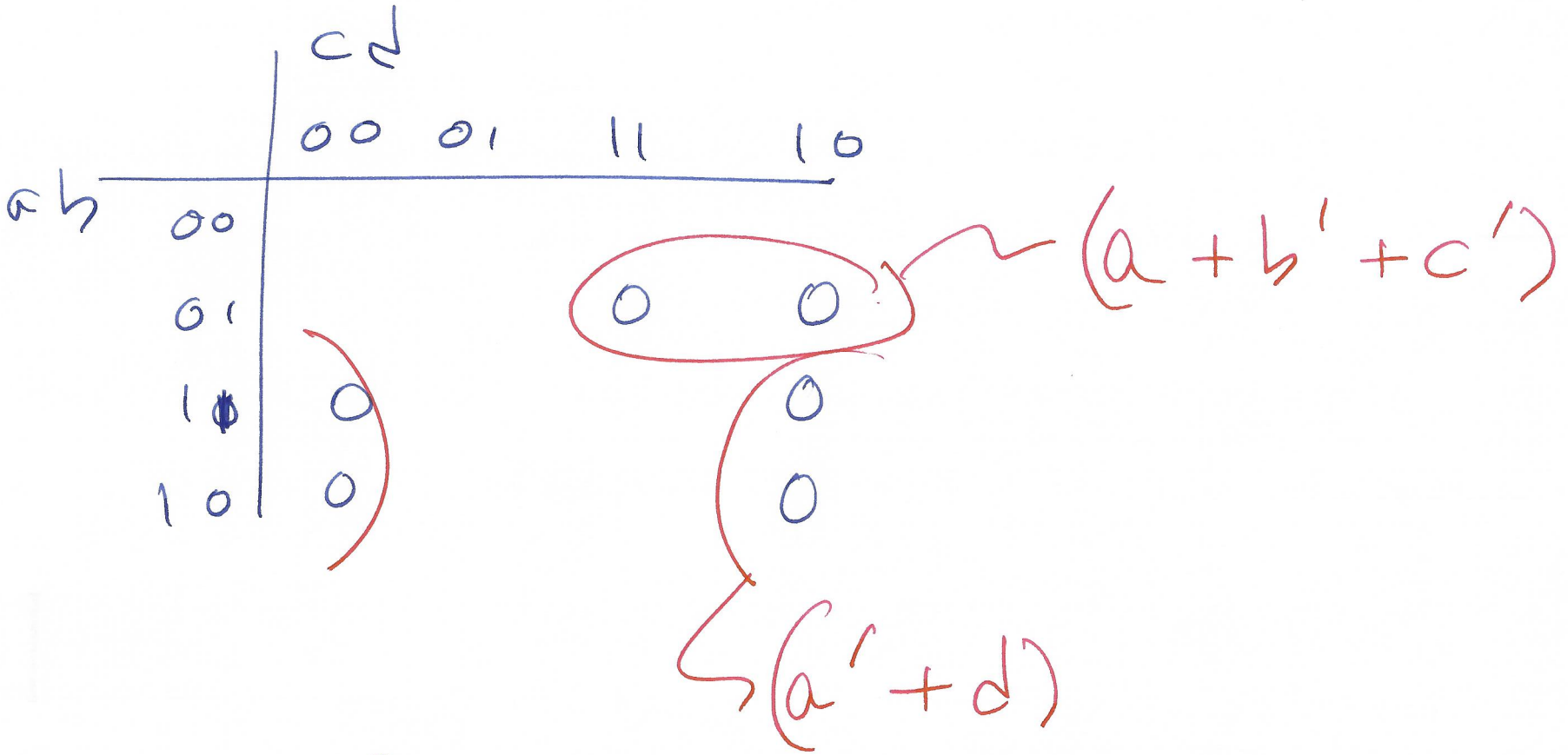
$f = \Sigma m(1, 4, 5, 6)$



$f = ac' + b'c$

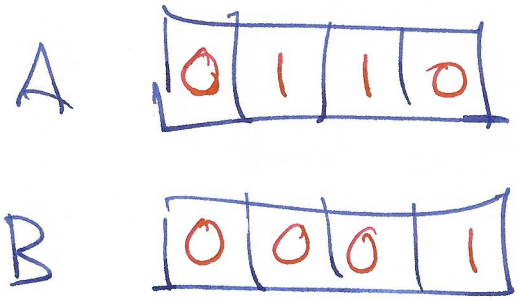


$f = ad' + a'bc$

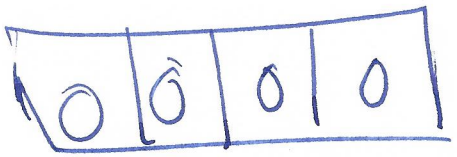


$$f = (a' + d)(a + b' + c')$$

Logical versus Bitwise AND



Logical value of A or B is TRUE if ANY Bit = 1

A & B →  → 0

A && B → Evaluate A as Logical
" B "
AND the two → 1