

Základní a odvozené zákony Booleovy algebry

Tabulka 1: Axiomy

Komutativita	$a + b = b + a$	$ab = ba$
Asociativita	$a + (b + c) = (a + b) + c$	$a(bc) = (ab)c$
Distributivita	$a + (bc) = (a + b)(a + c)$	$a(b + c) = (ab) + (ac)$
Neutralita 0 a 1	$a + 0 = a$	$a1 = a$
Vlastnosti komplementu	$a + \bar{a} = 1$	$a\bar{a} = 0$
Agresivita 0 a 1	$a0 = 0$	$a + 1 = 1$
Idempotence	$aa = a$	$a + a = a$
Absorpce	$a + ab = a$	$a(a + b) = a$

Tabulka 2: Odvozené zákony

Dvojitá negace	$\bar{\bar{a}} = a$	
Absorpce negace	$a + \bar{a}b = a + b$	$a(\bar{a} + b) = ab$
De Morgan	$\overline{(a + b)} = \bar{a}\bar{b}$	$\overline{(ab)} = \bar{a} + \bar{b}$
Consensus	$ab + \bar{a}c + bc = ab + \bar{a}c$	$(a + b)(\bar{a} + c)(b + c) = (a + b)(\bar{a} + c)$