

Computational Logic

Note Title

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Lecture notes available from mcs website
(chap. 5 of Program Construction).

- $\text{Bool} = \{\text{true}, \text{false}\}$ (George Boole)
- Boolean algebra
- Boolean equality.

p	true	p	$\neg p$	false
true	true	true	false	false
false	true	false	true	false

p	q	true	$p = q$ $p \equiv q$	$p \neq q$ $p \neq q$	$p \wedge q$	$p \vee q$	$p \Leftrightarrow q$	$p \Rightarrow q$	false
true	true	true	true	false	true	true	true	true	false
true	false	true	false	true	false	true	true	false	false
false	true	true	false	true	false	true	false	true	false
false	false	true	true	false	false	false	true	true	false

p	q	$p \vee q$
T	T	
T	F	
F	T	
F	F	

p	q	$p = q$
T	T	
T	F	
F	T	
F	F	

p	q	$p = (p \vee q)$
T	T	
T	F	
F	T	
F	F	