

BOOLEAN ALGEBRA

- BASICALLY DOING MATH BUT WITH ONES + ZEROS

0: FALSE, #f, off, 0, no ...

1: TRUE, #t, on, 1, yes ...

- APPLICATIONS REACH BEYOND PROGRAMMING

- ↳ CIRCUITS

- ↳ GRAPH THEORY

- ↳ SET THEORY

- ↳ AND MORE

IN RACKET

TRUE: #t

FALSE: #f

- KEYWORDS ENDING IN ? CAN BE BOOLEAN FUNCTIONS

- ↳ (zero? num)

- ↳ (null? v)

- ↳ (empty? v)

TRUTH TABLES

- USED IN SOLVING BOOLEAN EXPRESSIONS

a	
0	0
1	1

a b		
0	0	0
0	1	1
1	0	1
1	1	3

- Exhaust all possibilities for all variable values

- Rows = 2^v v = number of variables