

A B A || B

F F

F T

T F

T T

1. ( )

2

num of var 2 cases

2 var

4 case

3

8 cases

A & B A  
 T T → T  
 F F → F

$$A \quad B \quad C$$

F	F	F
F	F	T
F	T	F
F	T	T
T	F	F
T	F	T
T	T	F
T	T	T

$$!A \quad || \quad (C || A)$$

F
T
T
T
T
T
T
T

$$B \quad \&\& \quad ! (C || A)$$

F
T
T
T
T
T
T
T

$$B \quad \&\& \quad ! (C || A)$$

T
T
T
T
T
T
T
T

$$\begin{array}{ccccc}
 A & !A & A & \&\& & !A \\
 \hline
 T & F & \rightarrow & F & \\
 F & T & \rightarrow & F & 
 \end{array}$$

$A \text{ xor } B$

$A \neq B$

F	F	F
F	T	
T	F	
F	T	

A	B
F	F
F	T
T	F
T	T

A (11) B

↑

F  
T  
T  
T

A (22) B

↑

F  
F  
F  
T

A xor B

F  
T  
T  
F

$$(((A \parallel B) \parallel C) \parallel D) \parallel E)$$

$$\neg(A \& B) = \neg A \vee \neg B$$

$$\neg(A \vee B) = \neg A \& \neg B$$

$A \text{ xor } B$  $A \neq B$ 

A	B
F	F
F	T
T	F
T	T

A	$\neq B$
F	F
T	T
T	F
F	T

 $A == B$