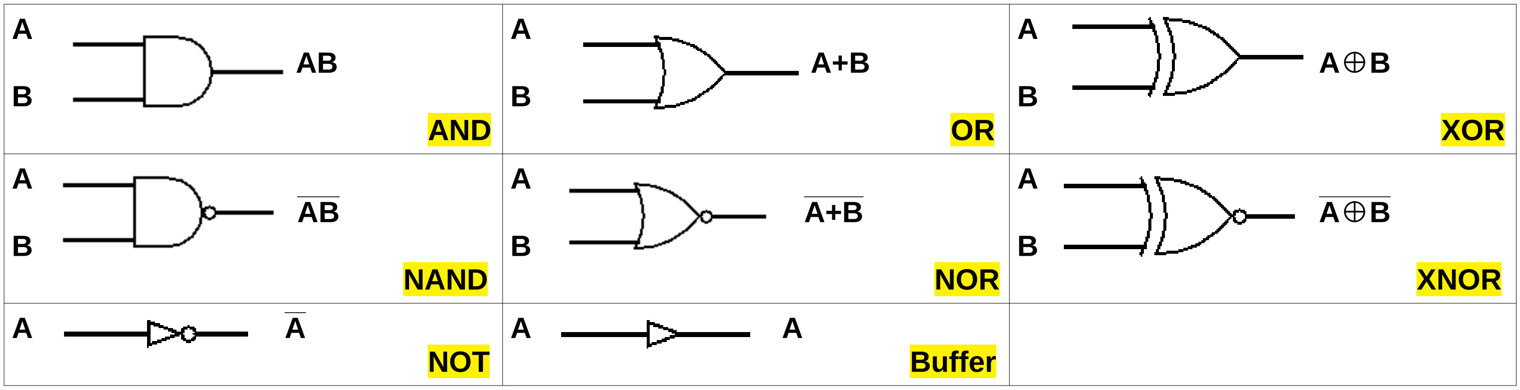

Postulates						
1a	$\overline{1} = 0$	1b	$\overline{0} = 1$			
2a	$0 \cdot 0 = 0$	2b	$0 + 0 = 0$	2c	$0 \oplus 0 = 0$	$\overline{0 \oplus 0} = 1$
3a	$1 \cdot 1 = 1$	3b	$1 + 1 = 1$	3c	$1 \oplus 1 = 0$	$\overline{1 \oplus 1} = 1$
4a	$1 \cdot 0 = 0$	4b	$1 + 0 = 1$	4c	$0 \oplus 1 = 1$	$\overline{0 \oplus 1} = 0$
Basic Theorems						
5a	$A \cdot 1 = A$ $\overline{A} \cdot 1 = \overline{A}$	5b	$A + 1 = 1$ $\overline{A} + 1 = 1$	5c	$A \oplus 1 = \overline{A}$	$\overline{A \oplus 1} = A$
6a	$A \cdot A = A$ $\overline{A} \cdot \overline{A} = \overline{A}$	6b	$A + A = A$ $\overline{A} + \overline{A} = \overline{A}$	6c	$A \oplus 0 = A$	$\overline{A \oplus 0} = \overline{A}$
7a	$A \cdot 0 = 0$	7b	$A + 0 = A$	7c	$A \oplus A = 0$	$\overline{A \oplus A} = 1$
8a	$A \cdot \overline{A} = 0$	8b	$A + \overline{A} = 1$	8c	$A \oplus \overline{A} = 1$	$\overline{A \oplus \overline{A}} = 0$
9a	$\overline{\overline{A}} = A$ (double negation)	9b	(double negation) $A = \overline{\overline{A}}$	9c	$\overline{A} \oplus \overline{A} = 0$	$\overline{\overline{A} \oplus \overline{A}} = 1$
Commutative Properties						
10a	$AB = BA$	10b	$A + B = B + A$	10c	$A \oplus B = B \oplus A$	
Associative Properties						
11a	$A(BC) = (AB)C$	11b	$A + (B + C) = (A + B) + C$	11c	$(A \oplus B) \oplus C = A \oplus (B \oplus C) = A \oplus B \oplus C$	
Distributive Properties						
12a	$A(B + C) = AB + AC$	12b	$A + BC = (A + B)(A + C)$	12c 12d	$A(B \oplus C) = AB \oplus AC$ $(A \oplus B)(A \oplus C) = \overline{A}\,B\,C + A\,\overline{B}\,\overline{C}$	
De Morgan's Theorem						
13a	$\overline{A}\,\overline{B}\,\overline{C} = \overline{A + B + C}$	13b	$\overline{A} + \overline{B} + \overline{C} = \overline{ABC}$			
Absorption Theorems						
14a	$A(A + B) = A$	14b	$A + AB = A$ $A(1+B) = A$ (factoring)	14c 14d	$A \oplus (\overline{A}+B) = \overline{AB}$ $A(\overline{A} \oplus B) = AB$	
15a	$A(\overline{A} + B) = AB$	15b	$A + \overline{A}B = A + B$	15c 15d	$A \oplus (\overline{A}B) = A+B$ $A \oplus (AB) = A\overline{B}$	
Multiplying Out						
16a	$(A + B)(\overline{A} + C) = AC + \overline{A}B$	16b	$(A+B) \oplus (\overline{A}+C) = \overline{AC \oplus \overline{A}\,B}$			
Consensus Theorems						
17a	$AB + \overline{A}C + BC = AB + \overline{A}C$	17b	$(A+B)(\overline{A}+C)(B+C) = (A+B)(\overline{A}+C)$			
18a	$(A \oplus B)(\overline{A} \oplus C)(B \oplus C) = (A \oplus B)(\overline{A} \oplus C) = (A \oplus B)(B \oplus C) = (\overline{A} \oplus C)(B \oplus C)$					
Other						
19a	$\overline{A} \oplus \overline{B} \oplus \overline{C} = \overline{A \oplus B \oplus C}$	19b	$A \oplus B = A\overline{B} + \overline{A}B = (A+B)(\overline{A}+\overline{B})$	19c	$\overline{A \oplus B} = A\,B + \overline{A}\,\overline{B} = (\overline{A}+B)(A+\overline{B})$	