CSEE223 QUIZ

Name: _____

Boolean Laws and Expressions

Date: _____

1.	Anything *AND*-ed with a 0 is equal to 0:	
	Rule #1	A
	Rule #4	B
	Rule #7	C
	Rule #8	D
2.	Anything *OR*-ed with a 0 is equal to itself:	
	Rule #2	A
	Rule #3	B
	Rule #5	C
	Rule #6	D
3.	A variable complimented twice will return to its original logic level:	
	Rule #1	A
	Rule #3	B
	Rule #5	C
	Rule #9	D
4.	Anything *AND*-ed with a 1 is equal to itself:	
	Rule #2	A
	Rule #3	B
	Rule #5	C
	Rule #6	D
5.	Anything *OR*-ed with a 1 is equal to 1:	
	Rule #1	A
	Rule #4	B
	Rule #7	C
	Rule #8	D
6.	Anything *AND*-ed with its own compliment is equal to 0:	
	Rule #1	A
	Rule #4	B
	Rule #7	C
	Rule #8	D

7.	Anything *OR*-ed with its own compliment is equal to 1:	
	Rule #1	A
	Rule #4	B
	Rule #7	C
	Rule #8	D
8.	Anything *AND*-ed with itself is equal to itself:	
	Rule #5	A
	Rule #6	B
	Rule #9	C
	Rule #10	D
9.	Anything *OR*-ed with itself is equal to itself:	
	Rule #5	A
	Rule #6	B
	Rule #9	C
	Rule #10	D
10.	Minterm form:	
	(A • B) + (C • D)	A
	(A • B)’ = (A’ + B’)	B
	(A + B) • (C + D)	C
	(A + B)’ = (A’ • B’)	D
11.	Maxterm form:	
	(A • B) + (C • D)	A
	(A • B)’ = (A’ + B’)	B
	(A + B) • (C + D)	C
	(A + B)’ = (A’ • B’)	D
12.	Sum-of-Products Form:	
	(A • B) + (C • D)	A
	(A • B)’ = (A’ + B’)	B
	(A + B) • (C + D)	C
	(A + B)’ = (A’ • B’)	D
13.	Product-of-Sums Form:	
	(A • B) + (C • D)	A
	(A • B)’ = (A’ + B’)	B
	(A + B) • (C + D)	C
	(A + B)’ = (A’ • B’)	D
14.	The grouping of several variables of OR-ed or AND-ed does not matter:	
	DeMorgans Theorem	A
	Commutative Law	B
	Associative Law	C
	Distributive Law	D

15.	Method for expanding an equation containing ORs and ANDs:	
	DeMorgans Theorem	A
	Commutative Law	B
	Associative Law	C
	Distributive Law	D
16.	Converting an expression with an inversion over 2 or more variables to an expression with inversion bars over single variables:	
	DeMorgans Theorem	A
	Commutative Law	B
	Associative Law	C
	Distributive Law	D
17.	The order of OR-ing or AND-ing does not matter:	
	DeMorgans Theorem	A
	Commutative Law	B
	Associative Law	C
	Distributive Law	D