Name:

Class   **ID:**

De Morgan's first theorem

$$\overline{A.B} = \overline{A} + \overline{B}$$

Verifying De Morgan's First Theorem using Truth Table

Inputs		Truth Table Outputs For Each Term				
B	A	A.B	$\overline{A.B}$	$\overline{A}$	$\overline{B}$	$\overline{A} + \overline{B}$
0	0		1			
0	1		1			
1	0		1			
1	1		0			

De Morgan's second theorem

$$\overline{A+B} = \overline{A}.\overline{B}$$

Verifying De Morgan's second Theorem using Truth Table

Inputs		Truth Table Outputs For Each Term				
B	A	A+B	$\overline{A+B}$	$\overline{A}$	$\overline{B}$	$\overline{A}.\overline{B}$
0	0		1			
0	1		0			
1	0		0			
1	1		0			