

1. $A + AB = A$

1. $A + AB = A$

$$A(1 + B) = A$$

$$A(1) = A$$

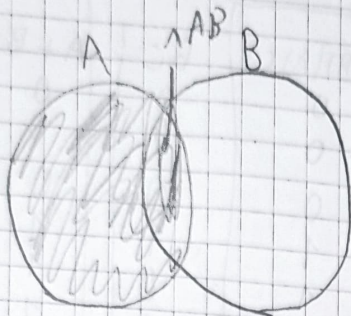
$$\boxed{A = A}$$

II.

A	B	AB	A + AB
0	0	0	0
0	1	0	0
1	0	0	1
1	1	1	1

=

III.



2. $A + A'B = A + B$

1. $(A + AB) + A'B$

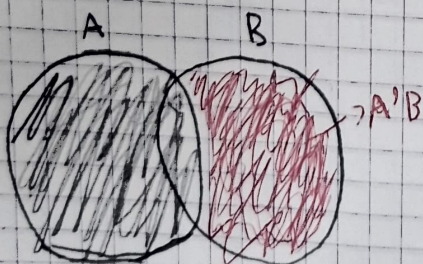
$$\begin{aligned} (A + AB) + A'B &= (AA + AB) + A'B + AA' = AA \cdot A'B + AA' + AB \cdot A'B + AA' \\ &= (A + A')(A + B) \\ &= (1)(A + B) = \boxed{A + B} \end{aligned}$$

II.

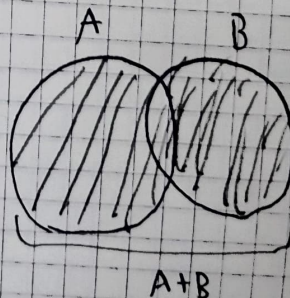
A	B	A'	A'B	A + B	A + A'B
0	0	1	0	0	0
0	1	1	1	1	1
1	0	0	0	1	1
1	1	0	0	1	1

=

III.



=



3. $(A+B)(A+C) = A+BC$

1. $A \cdot A + A \cdot C + B \cdot A + B \cdot C = A+BC$

$A+AC+BA+BC = A+BC$

$A(1+C) + B(A+C) = A+BC$

$A+B(A+C) = A+BC$

$A+BA+BC = A+BC$

$A(1+B) + BC = A+BC$

$A+BC = A+BC$

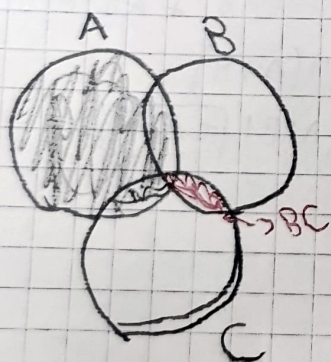
11.

A	B	C	A+B	A+C
0	0	0	0	0
0	0	1	0	1
0	1	0	1	0
0	1	1	1	1
1	0	0	1	1
1	0	1	1	1
1	1	0	1	1
1	1	1	1	1

$(A+B)(A+C)$
0
0
0
1
1
1
1
1

BC	A+BC
0	0
0	0
0	0
1	1
1	1
0	1
0	1
1	1

=



=

