DMath_U1_bf

1.5

a.

A	B	C	A B	(A B) C
0	0	0	0	0
0	0	1	0	1
0	1	0	1	1
0	1	1	1	0
1	0	0	1	1
1	0	1	1	0
1	1	0	0	0
1	1	1	0	1
A	**B**	**C**	**B C**	**A (B C)**
0	0	0	0	0
0	0	1	1	1
0	1	0	1	1
0	1	1	0	0
1	0	0	0	1
1	0	1	1	0
1	1	0	1	0
1	1	1	0	1

(A B) C ≡ A (B C)

---

b.

A	B	¬A	¬B	¬A ∧ ¬B	¬(A B)
0	0	1	1	1	1
0	1	1	0	0	0

A	B	¬A	¬B	¬A ∧ ¬B	¬(A B)
1	0	0	1	0	0
1	1	0	0	1	1

¬A ∧ ¬B ≡ ¬(A B)

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c.

A	B	C	F
0	0	0	0
0	0	1	1
0	1	0	0
0	1	1	1
1	0	0	1
1	0	1	0
1	1	0	1
1	1	1	0

A	B	C	A B	(A B) C	(A B) ((A B) C)	A (A B) ((A B) C)
0	0	0	0	0	0	0
0	0	1	0	1	1	1
0	1	0	1	1	0	0
0	1	1	1	0	1	1
1	0	0	1	1	0	1
1	0	1	1	0	1	0
1	1	0	0	0	0	1
1	1	1	0	1	1	0

F ≡ A (A B) ((A B) C)