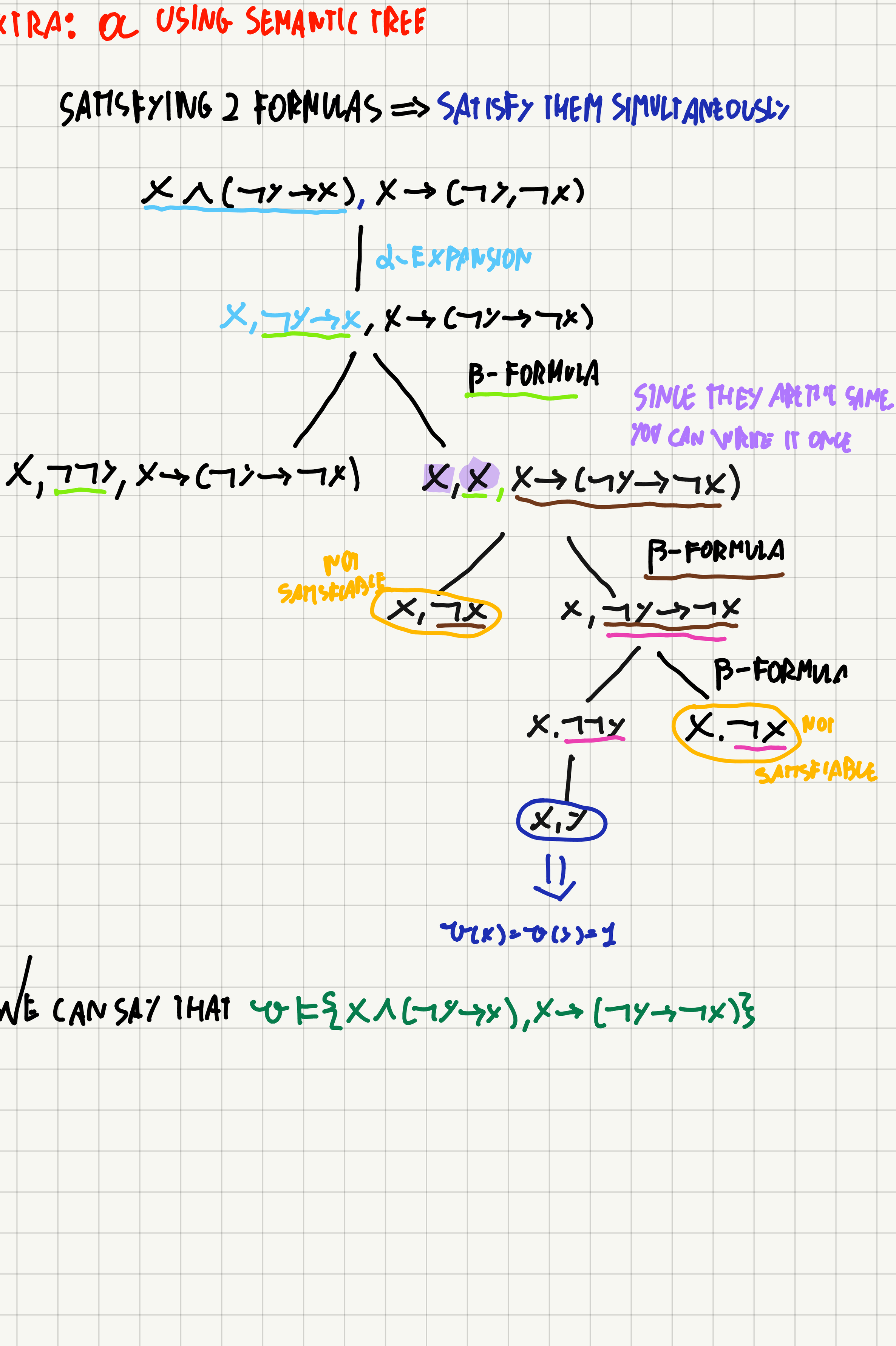
SAMPLE TABLE FOR ウィンディングしたり、ウィンドウを

EXTRA: α USING SEMANTIC TREE

SATISFYING 2 FORMULAS ⟹ SATISFY THEM SIMULTANEOUSLY



WE CAN SAY THAT $v \models \{X \wedge (\neg Y \to X), X \to (\neg Y \to \neg X)\}$

DETERMINE WHETHER THE FOLLOWING FORMULAS ARE TAUTOLOGIES, CONTRADICTIONS OR NEITHER OF THEM

VALID FORMULAS = TAUTOLOGIES UNSATISFIABLE FORMULAS = CONTRADICTION

a) $(x \to (y \to z)) \to ((x \to y) \to (x \to z))$

USING TRUTH TABLE

X	Y	Z	$y \to z$	$x \to y$	$x \to z$	$(x \to (y \to z))$	$((x \to y) \to (x \to z))$	φ
0	0	0	1	1	0	0	0	1
0	0	1	1	1	0	0	0	1
0	1	0	0	1	0	0	0	1
0	1	1	1	1	0	0	0	1
1	0	0	1	0	1	0	1	1
1	0	1	1	1	0	1	1	1
1	1	0	0	0	1	0	1	1
1	1	1	1	1	0	1	1	1

TAUTOLOGY