

t13_gate_1 (TMVWoKR- wXaJ2fTUDQckXukR3QsFXLXer5eF)

October 27, 2020

Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $k7_gate_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0. \forall X1. (\neg v1_xboole_0 X0 \Rightarrow (v1_xboole_0 (k7_gate_1 X0 X1))) \quad (1)$$

Assume the following.

$$\forall X0. \forall X1. ((v1_xboole_0 X0) \wedge (v1_xboole_0 X1)) \Rightarrow (\neg v1_xboole_0 (k7_gate_1 X0 X1)) \quad (2)$$

Assume the following.

$$\forall X0. \forall X1. k7_gate_1 X0 X1 = k7_gate_1 X1 X0 \quad (3)$$

Theorem 1

$$\forall X0. \forall X1. (\neg v1_xboole_0 (k7_gate_1 X0 X1)) \Leftrightarrow ((v1_xboole_0 X0) \wedge (v1_xboole_0 X1))$$