

t1_net_1
(TMEiZ1MZcR6pXt9iDHeUGpbWAHaxAvGqzsg)

October 27, 2020

Let $l1_petri : \iota \Rightarrow o$ be given. Let $k2_net.1 : \iota \Rightarrow \iota$ be given. Let $k1_xboole.0 : \iota$ be given. Let $m1_subset.1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $u1_struct.0 : \iota \Rightarrow \iota$ be given. Let $u4_struct.0 : \iota \Rightarrow \iota$ be given. Let $v1_xboole.0 : \iota \Rightarrow o$ be given. Let $k2_xboole.0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0. \forall X1. \neg(v1_xboole.0 X0) \wedge ((X0 \neq X1) \wedge (v1_xboole.0 X1)) \quad (1)$$

Assume the following.

$$\forall X0. \forall X1. (m1_subset.1 X0 X1) \Rightarrow ((v1_xboole.0 X1) \vee (X0 \in X1)) \quad (2)$$

Assume the following.

$$\forall X0. \forall X1. (X0 \in X1) \Rightarrow (m1_subset.1 X0 X1) \quad (3)$$

Assume the following.

$$\forall X0. \forall X1. (\neg v1_xboole.0 X0) \Rightarrow (\neg v1_xboole.0 (k2_xboole.0 X1 X0)) \quad (4)$$

Assume the following.

$$\forall X0. \forall X1. \forall X2. (X2 = k2_xboole.0 X0 X1) \Leftrightarrow (\forall X3. (X3 \in X2) \Leftrightarrow ((X3 \in X0) \vee (X3 \in X1))) \quad (5)$$

Assume the following.

$$\forall X0. (l1_petri X0) \Rightarrow (k2_net.1 X0 = k2_xboole.0 (u1_struct.0 X0) (u4_struct.0 X0)) \quad (6)$$

Assume the following.

$$\forall X0. \forall X1. k2_xboole.0 X0 X1 = k2_xboole.0 X1 X0 \quad (7)$$

Theorem 1

$$\forall X0. \forall X1. (l1_petri X1) \Rightarrow (\neg(k2_net.1 X1 \neq k1_xboole.0) \wedge ((m1_subset.1 X0 (k2_net.1 X1)) \wedge ((\neg m1_subset.1 X0 (u1_struct.0 X1)) \wedge (\neg m1_subset.1 X0 (u4_struct.0 X1)))))$$