

t13_net_1

(TMW76Dz9t1stEWE3MrXat1pdYf5Ld3v6WjR)

October 27, 2020

Let $v1_net_1 : \iota \Rightarrow o$ be given. Let $l1_petri : \iota \Rightarrow o$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k2_net_1 : \iota \Rightarrow \iota$ be given. Let $u4_struct_0 : \iota \Rightarrow \iota$ be given. Let $k3_net_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $r1_net_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k4_tarski : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_net_1 : \iota \Rightarrow \iota$ be given. Let $u1_struct_0 : \iota \Rightarrow \iota$ be given. Let $k2_xboole_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. \forall X2. ((v1_net_1 X2) \wedge (l1_petri X2)) \Rightarrow \\ & (((k4_tarski X0 X1 \in k1_net_1 X2) \wedge (X1 \in u4_struct_0 X2)) \Rightarrow (X0 \in u1_struct_0 \\ & \quad X2)) \end{aligned} \tag{1}$$

Assume the following.

$$\begin{aligned} & \forall X0. (l1_petri X0) \Rightarrow (\forall X1. (m1_subset_1 X1 (k2_net_1 \\ & X0)) \Rightarrow (\forall X2. (X2 = k3_net_1 X0 X1) \Leftrightarrow (\forall X3. (X3 \in X2) \Leftrightarrow ((\\ & \quad X3 \in k2_net_1 X0) \wedge (k4_tarski X3 X1 \in k1_net_1 X0)))))) \end{aligned} \tag{2}$$

Assume the following.

$$\begin{aligned} & \forall X0. ((v1_net_1 X0) \wedge (l1_petri X0)) \Rightarrow (\forall X1. \forall X2. \\ & (r1_net_1 X0 X1 X2) \Leftrightarrow ((k4_tarski X2 X1 \in k1_net_1 X0) \wedge (X1 \in u4_struct_0 \\ & \quad X0))) \end{aligned} \tag{3}$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. \forall X2. (X2 = k2_xboole_0 X0 X1) \Leftrightarrow (\forall X3. \\ & (X3 \in X2) \Leftrightarrow ((X3 \in X0) \vee (X3 \in X1))) \end{aligned} \tag{4}$$

Assume the following.

$$\begin{aligned} & \forall X0. (l1_petri X0) \Rightarrow (k2_net_1 X0 = k2_xboole_0 (u1_struct_0 \\ & \quad X0) (u4_struct_0 X0)) \end{aligned} \tag{5}$$

Assume the following.

$$\forall X0. \forall X1. k2_xboole_0 X0 X1 = k2_xboole_0 X1 X0 \tag{6}$$

Theorem 1

$$\forall X0. \forall X1. ((v1_net_1 X1) \wedge (l1_petri X1)) \Rightarrow (\forall X2. \\ (m1_subset_1 X2 (k2_net_1 X1)) \Rightarrow ((X2 \in u4_struct_0 X1) \Rightarrow ((X0 \in k3_net_1 \\ X1 X2) \Leftrightarrow (r1_net_1 X1 X2 X0))))$$