

t11_petri

(TMTEWo3y4kKPQqVs9LSfP85n8H2snTbmjAZ)

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Let $v2_struct_0 : \iota \Rightarrow o$ be given. Let $v11_struct_0 : \iota \Rightarrow o$ be given. Let $v2_petri : \iota \Rightarrow o$ be given. Let $v3_petri : \iota \Rightarrow o$ be given. Let $l1_petri : \iota \Rightarrow o$ be given. Let $k8_petri : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_subset_1 : \iota \Rightarrow \iota$ be given. Let $u4_struct_0 : \iota \Rightarrow \iota$ be given. Let $k1_xboole_0 : \iota$ be given. Let $k4_tarski : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $m1_petri : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $u1_struct_0 : \iota \Rightarrow \iota$ be given. Let $u1_petri : \iota \Rightarrow \iota$ be given. Let $k2_zfmisc_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\begin{aligned} & \forall X0. \neg(X0 \neq k1_xboole_0) \wedge (\forall X1. \neg(X1 \in X0) \wedge (\forall X2. \\ & \forall X3. \neg((X2 \in X0) \vee (X3 \in X0)) \wedge (X1 = k4_tarski X2 X3))) \end{aligned} \quad (1)$$

Assume the following.

$$\begin{aligned} & \forall X0. ((\neg v2_struct_0 X0) \wedge ((\neg v11_struct_0 X0) \wedge ((v2_petri \\ & X0) \wedge ((v3_petri X0) \wedge (l1_petri X0)))))) \Rightarrow (\forall X1. (m1_subset_1 \\ & X1 (k1_zfmisc_1 (u4_struct_0 X0))) \Rightarrow (\forall X2. (X2 \in k8_petri \\ & X0 X1) \Leftrightarrow (\exists X3. (m1_petri X3 (u1_struct_0 X0) (u4_struct_0 \\ & X0) (u1_petri X0)) \wedge (\exists X4. (m1_subset_1 X4 (u4_struct_0 X0)) \wedge \\ & ((X4 \in X1) \wedge (X3 = k4_tarski X2 X4)))))) \end{aligned} \quad (2)$$

Assume the following.

$$\forall X0. \forall X1. \neg X0 \in k2_zfmisc_1 X0 X1 \quad (3)$$

Assume the following.

$$\forall X0. \forall X1. (m1_subset_1 X1 (k1_zfmisc_1 X0)) \Rightarrow (\forall X2. (X2 \in X1) \Rightarrow (X2 \in X0)) \quad (4)$$

Assume the following.

$$\forall X0. m1_subset_1 (k1_subset_1 X0) (k1_zfmisc_1 X0) \quad (5)$$

Assume the following.

$$\forall X0. k1_subset_1 X0 = k1_xboole_0 \quad (6)$$

Theorem 1

$$\forall X0. ((\neg v2_struct_0 X0) \wedge ((\neg v11_struct_0 X0) \wedge ((v2_petri X0) \wedge ((v3_petri X0) \wedge (l1_petri X0))))) \Rightarrow (k8_petri X0 (k1_subset_1 (u4_struct_0 X0)) = k1_xboole_0)$$