

t17_petri (TMXRTWihK- spR6o5t77gG1HFC1K1o5M2N7bf)

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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 $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $u1_struct_0 : \iota \Rightarrow \iota$ be given. Let $v4_petri : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v6_petri : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k12_petri : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k11_petri : \iota \Rightarrow \iota$ be given. Let $k6_petri : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k7_petri : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1_petri : \iota \Rightarrow o$ be given. Assume the following.

$$\begin{aligned} \forall X0.((\neg v2_struct_0 X0) \wedge ((\neg v11_struct_0 X0) \wedge ((v2_petri \\ X0) \wedge ((v3_petri X0) \wedge (l1_petri X0))))) \Rightarrow (\forall X1.(m1_subset_1 \\ X1 (k1_zfmisc_1 (u1_struct_0 X0))) \Rightarrow (k6_petri (k11_petri X0) (\\ k12_petri X0 X1) = k7_petri X0 X1)) \end{aligned} \quad (1)$$

Assume the following.

$$\begin{aligned} \forall X0.((\neg v2_struct_0 X0) \wedge ((\neg v11_struct_0 X0) \wedge ((v2_petri \\ X0) \wedge ((v3_petri X0) \wedge (l1_petri X0))))) \Rightarrow (\forall X1.(m1_subset_1 \\ X1 (k1_zfmisc_1 (u1_struct_0 X0))) \Rightarrow (k7_petri (k11_petri X0) (\\ k12_petri X0 X1) = k6_petri X0 X1)) \end{aligned} \quad (2)$$

Assume the following.

$$\begin{aligned} \forall X0.((\neg v2_struct_0 X0) \wedge ((\neg v11_struct_0 X0) \wedge ((v2_petri \\ X0) \wedge ((v3_petri X0) \wedge (l1_petri X0))))) \Rightarrow ((\neg v2_struct_0 (k11_petri \\ X0)) \wedge ((\neg v11_struct_0 (k11_petri X0)) \wedge ((v1_petri (k11_petri \\ X0)) \wedge ((v2_petri (k11_petri X0)) \wedge (v3_petri (k11_petri X0))))) \end{aligned} \quad (3)$$

Assume the following.

$$\begin{aligned} \forall X0. \forall X1.(((\neg v2_struct_0 X0) \wedge ((\neg v11_struct_0 X0) \wedge \\ ((v2_petri X0) \wedge ((v3_petri X0) \wedge (l1_petri X0))))) \wedge (m1_subset_1 \\ X1 (k1_zfmisc_1 (u1_struct_0 X0)))) \Rightarrow (m1_subset_1 (k12_petri \\ X0 X1) (k1_zfmisc_1 (u1_struct_0 (k11_petri X0)))) \end{aligned} \quad (4)$$

Assume the following.

$$\forall X0.(l1_petri\ X0)\Rightarrow((v1_petri\ (k11_petri\ X0))\wedge(l1_petri\ (k11_petri\ X0))) \quad (5)$$

Assume the following.

$$\begin{aligned} \forall X0.((\neg v2_struct_0\ X0)\wedge((\neg v11_struct_0\ X0)\wedge((v2_petri\ X0)\wedge((v3_petri\ X0)\wedge(l1_petri\ X0))))))\Rightarrow(\forall X1.(m1_subset_1\ X1\ (k1_zfmisc_1\ (u1_struct_0\ X0)))\Rightarrow((v4_petri\ X1\ X0)\Leftrightarrow(m1_subset_1\ (k6_petri\ X0\ X1)\ (k1_zfmisc_1\ (k7_petri\ X0\ X1)))))) \end{aligned} \quad (6)$$

Assume the following.

$$\begin{aligned} \forall X0.((\neg v2_struct_0\ X0)\wedge((\neg v11_struct_0\ X0)\wedge((v2_petri\ X0)\wedge((v3_petri\ X0)\wedge(l1_petri\ X0))))))\Rightarrow(\forall X1.(m1_subset_1\ X1\ (k1_zfmisc_1\ (u1_struct_0\ X0)))\Rightarrow((v6_petri\ X1\ X0)\Leftrightarrow(m1_subset_1\ (k7_petri\ X0\ X1)\ (k1_zfmisc_1\ (k6_petri\ X0\ X1)))))) \end{aligned} \quad (7)$$

Theorem 1

$$\begin{aligned} \forall X0.((\neg v2_struct_0\ X0)\wedge((\neg v11_struct_0\ X0)\wedge((v2_petri\ X0)\wedge((v3_petri\ X0)\wedge(l1_petri\ X0))))))\Rightarrow(\forall X1.(m1_subset_1\ X1\ (k1_zfmisc_1\ (u1_struct_0\ X0)))\Rightarrow((v4_petri\ X1\ X0)\Leftrightarrow(v6_petri\ (k12_petri\ X0\ X1)\ (k11_petri\ X0)))) \end{aligned}$$