

l24_petri_2

(TMM8A6tWxCac7JFpr8H2bKmwimc5N5cdKLD)

October 27, 2020

Let $k3_xboole_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_xboole_0 : \iota$ be given. Let $r1_tarski : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k6_subset_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k4_xboole_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $r1_xboole_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0. k3_xboole_0 X0 k1_xboole_0 = k1_xboole_0 \quad (1)$$

Assume the following.

$$\forall X0. \forall X1. (r1_tarski X0 X1) \Rightarrow (k3_xboole_0 X0 X1 = X0) \quad (2)$$

Assume the following.

$$\forall X0. \forall X1. \forall X2. (r1_tarski X0 X1) \Rightarrow (r1_tarski (k3_xboole_0 X0 X2) (k3_xboole_0 X1 X2)) \quad (3)$$

Assume the following.

$$\forall X0. \forall X1. \forall X2. k3_xboole_0 (k3_xboole_0 X0 X1) X2 = k3_xboole_0 X0 (k3_xboole_0 X1 X2) \quad (4)$$

Assume the following.

$$\forall X0. \forall X1. \forall X2. k3_xboole_0 X0 (k3_xboole_0 X1 X2) = k3_xboole_0 (k3_xboole_0 X0 X1) (k3_xboole_0 X0 X2) \quad (5)$$

Assume the following.

$$\forall X0. \forall X1. \forall X2. (r1_tarski X0 (k4_xboole_0 X1 X2)) \Rightarrow ((r1_tarski X0 X1) \wedge (r1_xboole_0 X0 X2)) \quad (6)$$

Assume the following.

$$\forall X0. \forall X1. k6_subset_1 X0 X1 = k4_xboole_0 X0 X1 \quad (7)$$

Assume the following.

$$\forall X0.\forall X1.(r1_xboole_0 X0 X1)\Leftrightarrow(k3_xboole_0 X0 X1 = k1_xboole_0) \quad (8)$$

Assume the following.

$$k1_xboole_0 = the (\lambda X0 : \iota.v1_xboole_0 X0) \quad (9)$$

Assume the following.

$$\forall X0.\forall X1.k3_xboole_0 X0 X1 = k3_xboole_0 X1 X0 \quad (10)$$

Theorem 1

$$\begin{aligned} & \forall X0.\forall X1.\forall X2.\forall X3.\forall X4.\forall X5. \\ & \forall X6.\forall X7.((k3_xboole_0 X0 X1 = k1_xboole_0)\wedge((r1_tarski \\ & X2 X0)\wedge((r1_tarski X3 X1)\wedge((r1_tarski X4 (k6_subset_1 X0 X2))\wedge \\ & ((r1_tarski X5 (k6_subset_1 X1 X3))\wedge((X6 = X2)\wedge(X7 = X3))))))\Rightarrow \\ & ((k3_xboole_0 X4 X5 = k1_xboole_0)\wedge((k3_xboole_0 X4 X6 = k1_xboole_0)\wedge \\ & ((k3_xboole_0 X4 X7 = k1_xboole_0)\wedge((k3_xboole_0 X5 X6 = k1_xboole_0)\wedge \\ & ((k3_xboole_0 X5 X7 = k1_xboole_0)\wedge(k3_xboole_0 X6 X7 = k1_xboole_0)))))) \end{aligned}$$