

t15_fomodel1 (TMar- wyvb6BESY2g2EiF3baPq3oH66TkWMow)

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Let $v6_struct_0 : \iota \Rightarrow o$ be given. Let $v11_fomodel1 : \iota \Rightarrow o$ be given. Let $l1_fomodel1 : \iota \Rightarrow o$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_fomodel1 : \iota \Rightarrow \iota$ be given. Let $k8_fomodel1 : \iota \Rightarrow \iota$ be given. Let $k18_fomodel1 : \iota \Rightarrow \iota$ be given. Let $k37_fomodel1 : \iota \Rightarrow \iota$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $k2_tarski : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2_xboole_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_tarski : \iota \Rightarrow \iota$ 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 $k9_fomodel1 : \iota \Rightarrow \iota$ be given. Let $k7_fomodel1 : \iota \Rightarrow \iota$ be given. Let $v1_finset_1 : \iota \Rightarrow o$ be given. Let $u1_struct_0 : \iota \Rightarrow \iota$ be given. Let $u2_struct_0 : \iota \Rightarrow \iota$ be given. Let $u3_struct_0 : \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0. \forall X1. (m1_subset_1 X0 X1) \Rightarrow ((v1_xboole_0 X1) \vee (X0 \in X1)) \quad (1)$$

Assume the following.

$$\forall X0. \forall X1. k2_tarski X0 X1 = k2_xboole_0 (k1_tarski X0) (k1_tarski X1) \quad (2)$$

Assume the following.

$$\forall X0. \forall X1. k6_subset_1 X0 X1 = k4_xboole_0 X0 X1 \quad (3)$$

Assume the following.

$$\forall X0. ((\neg v6_struct_0 X0) \wedge ((v11_fomodel1 X0) \wedge (l1_fomodel1 X0))) \Rightarrow (k37_fomodel1 X0 = k9_fomodel1 X0) \quad (4)$$

Assume the following.

$$\forall X0. ((\neg v6_struct_0 X0) \wedge (l1_fomodel1 X0)) \Rightarrow (k18_fomodel1 X0 = k7_fomodel1 X0) \quad (5)$$

Assume the following.

$$\forall X0. ((\neg v6_struct_0 X0) \wedge ((v11_fomodel1 X0) \wedge (l1_fomodel1 X0))) \Rightarrow (\neg v1_finset_1 (k1_fomodel1 X0)) \quad (6)$$

Assume the following.

$$\forall X0.(l1_fomodel1\ X0)\Rightarrow(k9_fomodel1\ X0 = k6_subset_1\ (u1_struct_0\ X0)\ (k2_tarski\ (u2_struct_0\ X0)\ (u3_struct_0\ X0))) \quad (7)$$

Assume the following.

$$\forall X0.(l1_fomodel1\ X0)\Rightarrow(k8_fomodel1\ X0 = u3_struct_0\ X0) \quad (8)$$

Assume the following.

$$\forall X0.(l1_fomodel1\ X0)\Rightarrow(k7_fomodel1\ X0 = u2_struct_0\ X0) \quad (9)$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.(X2 = k4_xboole_0\ X0\ X1)\Leftrightarrow(\forall X3.(X3 \in X2)\Leftrightarrow((X3 \in X0)\wedge(\neg X3 \in X1))) \quad (10)$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.(X2 = k2_xboole_0\ X0\ X1)\Leftrightarrow(\forall X3.(X3 \in X2)\Leftrightarrow((X3 \in X0)\vee(X3 \in X1))) \quad (11)$$

Assume the following.

$$\forall X0.\forall X1.(X1 = k1_tarski\ X0)\Leftrightarrow(\forall X2.(X2 \in X1)\Leftrightarrow(X2 = X0)) \quad (12)$$

Assume the following.

$$\forall X0.(l1_fomodel1\ X0)\Rightarrow(k1_fomodel1\ X0 = u1_struct_0\ X0) \quad (13)$$

Assume the following.

$$\forall X0.(v1_finset_1\ X0)\Rightarrow(v1_xboole_0\ X0) \quad (14)$$

Theorem 1

$$\forall X0.((\neg v6_struct_0\ X0)\wedge((v11_fomodel1\ X0)\wedge(l1_fomodel1\ X0)))\Rightarrow(\forall X1.(m1_subset_1\ X1\ (k1_fomodel1\ X0))\Rightarrow(\neg(X1\neq k8_fomodel1\ X0)\wedge((X1\neq k18_fomodel1\ X0)\wedge(\neg X1 \in k37_fomodel1\ X0))))$$