

t9_oposet_1

(TMN66DWJzHzvhqJmLsq75MBRfjyE6MGMB5Y)

October 27, 2020

Let $v2_struct_0 : \iota \Rightarrow o$ be given. Let $l1_orders_2 : \iota \Rightarrow o$ be given. Let $v3_necklace : \iota \Rightarrow o$ be given. Let $v4_orders_2 : \iota \Rightarrow o$ be given. Let $v2_necklace : \iota \Rightarrow o$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $u1_orders_2 : \iota \Rightarrow \iota$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $k2_zfmisc_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $u1_struct_0 : \iota \Rightarrow \iota$ be given. Let $r5_relat_2 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v1_relat_1 : \iota \Rightarrow o$ be given. Let $r8_relat_2 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k4_tarski : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0.(l1_orders_2 X0) \Rightarrow (m1_subset_1 (u1_orders_2 X0) (k1_zfmisc_1 (k2_zfmisc_1 (u1_struct_0 X0) (u1_struct_0 X0)))) \quad (1)$$

Assume the following.

$$\forall X0.((\neg v2_struct_0 X0) \wedge (l1_orders_2 X0)) \Rightarrow ((v2_necklace X0) \Leftrightarrow (r5_relat_2 (u1_orders_2 X0) (u1_struct_0 X0))) \quad (2)$$

Assume the following.

$$\begin{aligned} & \forall X0.(v1_relat_1 X0) \Rightarrow (\forall X1.(r8_relat_2 X0 X1) \Leftrightarrow (\forall X2. \\ & \forall X3.\forall X4.((X2 \in X1) \wedge ((X3 \in X1) \wedge ((X4 \in X1) \wedge ((k4_tarski \\ & X2 X3 \in X0) \wedge (k4_tarski X3 X4 \in X0))))) \Rightarrow (k4_tarski X2 X4 \in X0))) \end{aligned} \quad (3)$$

Assume the following.

$$\forall X0.(v1_relat_1 X0) \Rightarrow (\forall X1.(r5_relat_2 X0 X1) \Leftrightarrow (\forall X2. \forall X3. \neg (X2 \in X1) \wedge ((X3 \in X1) \wedge ((k4_tarski X2 X3 \in X0) \wedge (k4_tarski X3 X2 \in X0))))) \quad (4)$$

Assume the following.

$$\forall X0.(l1_orders_2 X0) \Rightarrow ((v3_necklace X0) \Leftrightarrow (\forall X1. \neg (X1 \in u1_struct_0 X0) \wedge (k4_tarski X1 X1 \in u1_orders_2 X0))) \quad (5)$$

Assume the following.

$$\forall X0.(l1_orders_2 X0) \Rightarrow ((v4_orders_2 X0) \Leftrightarrow (r8_relat_2 (u1_orders_2 X0) (u1_struct_0 X0))) \quad (6)$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.(m1_subset_1 X2 (k1_zfmisc_1 (k2_zfmisc_1 X0 X1)))\Rightarrow(v1_relat_1 X2) \quad (7)$$

Theorem 1

$$\forall X0.((\neg v2_struct_0 X0)\wedge(l1_orders_2 X0))\Rightarrow(((v3_necklace X0)\wedge(v4_orders_2 X0))\Rightarrow(v2_necklace X0))$$