

t14_necklace
(TMXx63R2kGL2HgQ78wwkMr2RdB8Hk1G4SxS)

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Let $l1_orders_2 : \iota \Rightarrow o$ be given. Let $v2_necklace : \iota \Rightarrow o$ be given. Let $r1_xboole_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $u1_orders_2 : \iota \Rightarrow \iota$ be given. Let $k3_relset_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $u1_struct_0 : \iota \Rightarrow \iota$ be given. Let $v1_relat_1 : \iota \Rightarrow o$ be given. Let $k4_tarski : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_relat_1 : \iota \Rightarrow \iota$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $k2_zfmisc_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2_relat_1 : \iota \Rightarrow \iota$ be given. Let $r5_relat_2 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v5_relat_2 : \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0. \forall X1. (\neg(\neg r1_xboole_0 X0 X1) \wedge (\forall X2. \neg(X2 \in X0) \wedge (X2 \in X1))) \wedge (\neg(\exists X2. (X2 \in X0) \wedge (X2 \in X1)) \wedge (r1_xboole_0 X0 X1)) \quad (1)$$

Assume the following.

$$\forall X0. \forall X1. \forall X2. (v1_relat_1 X2) \Rightarrow ((k4_tarski X0 X1 \in X2) \Rightarrow ((X0 \in k1_relat_1 X2) \wedge (X1 \in k1_relat_1 X2))) \quad (2)$$

Assume the following.

$$\forall X0. \forall X1. \forall X2. (m1_subset_1 X2 (k1_zfmisc_1 (k2_zfmisc_1 X0 X1))) \Rightarrow (k3_relset_1 X0 X1 X2 = k2_relat_1 X2) \quad (3)$$

Assume the following.

$$\forall X0. (l1_orders_2 X0) \Rightarrow (m1_subset_1 (u1_orders_2 X0) (k1_zfmisc_1 (k2_zfmisc_1 (u1_struct_0 X0) (u1_struct_0 X0)))) \quad (4)$$

Assume the following.

$$\forall X0. (v1_relat_1 X0) \Rightarrow (v1_relat_1 (k2_relat_1 X0)) \quad (5)$$

Assume the following.

$$\forall X0. (v1_relat_1 X0) \Rightarrow (\forall X1. (v1_relat_1 X1) \Rightarrow ((X1 = k2_relat_1 X0) \Leftrightarrow (\forall X2. \forall X3. (k4_tarski X2 X3 \in X1) \Leftrightarrow (k4_tarski X3 X2 \in X0)))) \quad (6)$$

Assume the following.

$$\forall X0.(v1_relat_1 X0) \Rightarrow (\forall X1.(r5_relat_2 X0 X1) \Leftrightarrow (\forall X2. \forall X3. \neg(X2 \in X1) \wedge ((X3 \in X1) \wedge ((k4_tarski X2 X3 \in X0) \wedge (k4_tarski X3 X2 \in X0)))))) \quad (7)$$

Assume the following.

$$\forall X0.(l1_orders_2 X0) \Rightarrow ((v2_necklace X0) \Leftrightarrow (v5_relat_2 (u1_orders_2 X0))) \quad (8)$$

Assume the following.

$$\forall X0.(v1_relat_1 X0) \Leftrightarrow (\forall X1. \neg(X1 \in X0) \wedge (\forall X2. \forall X3. X1 \neq k4_tarski X2 X3)) \quad (9)$$

Assume the following.

$$\forall X0.(v1_relat_1 X0) \Rightarrow ((v5_relat_2 X0) \Leftrightarrow (r5_relat_2 X0 (k1_relat_1 X0))) \quad (10)$$

Assume the following.

$$\forall X0. \forall X1. \forall X2. (m1_subset_1 X2 (k1_zfmisc_1 (k2_zfmisc_1 X0 X1))) \Rightarrow (v1_relat_1 X2) \quad (11)$$

Theorem 1

$$\forall X0.(l1_orders_2 X0) \Rightarrow ((v2_necklace X0) \Rightarrow (r1_xboole_0 (u1_orders_2 X0) (k3_relset_1 (u1_struct_0 X0) (u1_struct_0 X0) (u1_orders_2 X0))))$$