

t34_pcs_0

(TMa4NqKDwUTwVL7EpFW9TRG2uPV45sAU8d5)

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Let $l2_pcs_0 : \iota \Rightarrow o$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $u1_struct_0 : \iota \Rightarrow \iota$ be given. Let $k20_pcs_0 : \iota \Rightarrow \iota$ be given. Let $r1_pcs_0 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $l1_pcs_0 : \iota \Rightarrow o$ be given. Let $u1_pcs_0 : \iota \Rightarrow \iota$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $k2_zfmisc_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $l1_orders_2 : \iota \Rightarrow o$ be given. Let $v12_pcs_0 : \iota \Rightarrow o$ be given. Let $k4_tarski : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k4_xboole_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2_tarski : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_tarski : \iota \Rightarrow \iota$ be given. Let $k3_subset_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $u1_orders_2 : \iota \Rightarrow \iota$ be given. Let $k3_relset_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0.(l1_pcs_0 X0) \Rightarrow (m1_subset_1 (u1_pcs_0 X0) (k1_zfmisc_1 (k2_zfmisc_1 (u1_struct_0 X0) (u1_struct_0 X0)))) \quad (1)$$

Assume the following.

$$\forall X0.(l2_pcs_0 X0) \Rightarrow ((l1_orders_2 X0) \wedge (l1_pcs_0 X0)) \quad (2)$$

Assume the following.

$$\forall X0.(l2_pcs_0 X0) \Rightarrow ((v12_pcs_0 (k20_pcs_0 X0)) \wedge (l2_pcs_0 (k20_pcs_0 X0))) \quad (3)$$

Assume the following.

$$\forall X0.(l1_pcs_0 X0) \Rightarrow (\forall X1.(m1_subset_1 X1 (u1_struct_0 X0)) \Rightarrow (\forall X2.(m1_subset_1 X2 (u1_struct_0 X0)) \Rightarrow ((r1_pcs_0 X0 X1 X2) \Leftrightarrow (k4_tarski X1 X2 \in u1_pcs_0 X0)))) \quad (4)$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.(X2 = k4_xboole_0 X0 X1) \Leftrightarrow (\forall X3.(X3 \in X2) \Leftrightarrow ((X3 \in X0) \wedge (\neg X3 \in X1))) \quad (5)$$

Assume the following.

$$\forall X0.\forall X1.k4_tarski X0 X1 = k2_tarski (k2_tarski X0 X1) (k1_tarski X0) \quad (6)$$

Assume the following.

$$\forall X0.\forall X1.(m1_subset_1 X1 (k1_zfmisc_1 X0))\Rightarrow(k3_subset_1 X0 X1 = k4_xboole_0 X0 X1) \quad (7)$$

Assume the following.

$$\begin{aligned} \forall X0.(l2_pcs_0 X0)\Rightarrow(\forall X1.((v12_pcs_0 X1)\wedge(l2_pcs_0 \\ X1))\Rightarrow((X1 = k20_pcs_0 X0)\Leftrightarrow((u1_struct_0 X1 = u1_struct_0 X0)\wedge(\\ (u1_orders_2 X1 = k3_relset_1 (u1_struct_0 X0) (u1_struct_0 X0) \\ (u1_orders_2 X0))\wedge(u1_pcs_0 X1 = k3_subset_1 (k2_zfmisc_1 (u1_struct_0 \\ X0) (u1_struct_0 X0)) (u1_pcs_0 X0)))))) \end{aligned} \quad (8)$$

Theorem 1

$$\begin{aligned} \forall X0.(l2_pcs_0 X0)\Rightarrow(\forall X1.(m1_subset_1 X1 (u1_struct_0 \\ X0))\Rightarrow(\forall X2.(m1_subset_1 X2 (u1_struct_0 X0))\Rightarrow(\forall X3. \\ (m1_subset_1 X3 (u1_struct_0 (k20_pcs_0 X0))\Rightarrow(\forall X4.(m1_subset_1 \\ X4 (u1_struct_0 (k20_pcs_0 X0))\Rightarrow(\neg(X1 = X3)\wedge((X2 = X4)\wedge((r1_pcs_0 \\ X0 X1 X2)\wedge(r1_pcs_0 (k20_pcs_0 X0) X3 X4)))))))))) \end{aligned}$$