

t2_scmpds_9 (TM-
PvLD6TmVBjubCiRUnyRwYHkXH4FauBTXg)

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Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $u1_compos_1 : \iota \Rightarrow \iota$ be given. Let $k1_scmpds_2 : \iota$ be given. Let $k5_numbers : \iota$ be given. Let $k1_amistd_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $np_2 : \iota$ be given. Let $k1_tarski : \iota \Rightarrow \iota$ be given. Let $k1_ordinal1 : \iota \Rightarrow \iota$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $k2_amistd_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1_setfam_1 : \iota \Rightarrow o$ be given. Let $v2_struct_0 : \iota \Rightarrow o$ be given. Let $v2_memstr_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v3_memstr_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $l1_extpro_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $m2_subset_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_numbers : \iota$ be given. Let $r1_tarski : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v2_xxreal_0 : \iota \Rightarrow o$ be given. Let $np_1 : \iota$ be given. Let $np_0 : \iota$ be given. Let $k4_ordinal1 : \iota$ be given. Let $v1_extpro_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v7_ordinal1 : \iota \Rightarrow o$ be given. Assume the following.

$$\begin{aligned} & \forall X0. (\neg v1_setfam_1 X0) \Rightarrow (\forall X1. ((\neg v2_struct_0 X1) \wedge \\ & ((v2_memstr_0 X1 X0) \wedge ((v3_memstr_0 X1 X0) \wedge (l1_extpro_1 X1 X0)))) \Rightarrow \\ & (\forall X2. (m1_subset_1 X2 (u1_compos_1 X1)) \Rightarrow (\forall X3. (m2_subset_1 \\ & X3 k1_numbers k5_numbers) \Rightarrow (r1_tarski (k2_amistd_1 X0 X1 X2) (k1_amistd_1 \\ & X0 X1 X3 X2)))))) \end{aligned} \tag{1}$$

Assume the following.

$$\begin{aligned} & ((v2_xxreal_0 np_2) \wedge (m2_subset_1 np_2 k1_numbers k5_numbers)) \wedge \\ & ((m1_subset_1 np_2 k5_numbers) \wedge (m1_subset_1 np_2 k1_numbers)) \end{aligned} \tag{2}$$

Assume the following.

$$\neg v1_xboole_0 np_2 \tag{3}$$

Assume the following.

$$\begin{aligned} & ((v2_xxreal_0 np_1) \wedge (m2_subset_1 np_1 k1_numbers k5_numbers)) \wedge \\ & ((m1_subset_1 np_1 k5_numbers) \wedge (m1_subset_1 np_1 k1_numbers)) \end{aligned} \tag{4}$$

Assume the following.

$$\begin{aligned} & (m2_subset_1 np_0 k1_numbers k5_numbers) \wedge ((m1_subset_1 np_0 \\ & k5_numbers) \wedge (m1_subset_1 np_0 k1_numbers)) \end{aligned} \tag{5}$$

Assume the following.

$$k1_ordinal1\ np_1 = np_2 \quad (6)$$

Assume the following.

$$k1_ordinal1\ np_0 = np_1 \quad (7)$$

Assume the following.

$$k5_numbers = k4_ordinal1 \quad (8)$$

Assume the following.

$$(v2_memstr_0\ k1_scmpds_2\ np_2) \wedge ((v3_memstr_0\ k1_scmpds_2\ np_2) \wedge (v1_extpro_1\ k1_scmpds_2\ np_2)) \quad (9)$$

Assume the following.

$$(\neg v2_struct_0\ k1_scmpds_2) \wedge (v1_extpro_1\ k1_scmpds_2\ np_2) \quad (10)$$

Assume the following.

$$(v1_extpro_1\ k1_scmpds_2\ np_2) \wedge (l1_extpro_1\ k1_scmpds_2\ np_2) \quad (11)$$

Assume the following.

$$\forall X0.\forall X1.(r1_tarski\ X0\ X1) \Leftrightarrow (\forall X2.(X2 \in X0) \Rightarrow (X2 \in X1)) \quad (12)$$

Assume the following.

$$\forall X0.(v1_xboole_0\ X0) \Leftrightarrow (\forall X1.\neg X1 \in X0) \quad (13)$$

Assume the following.

$$\forall X0.\forall X1.(X1 = k1_tarski\ X0) \Leftrightarrow (\forall X2.(X2 \in X1) \Leftrightarrow (X2 = X0)) \quad (14)$$

Assume the following.

$$\forall X0.(m1_subset_1\ X0\ k4_ordinal1) \Rightarrow (v7_ordinal1\ X0) \quad (15)$$

Assume the following.

$$\forall X0.((\neg v1_xboole_0\ X0) \wedge (v7_ordinal1\ X0)) \Rightarrow ((\neg v1_xboole_0\ X0) \wedge ((v7_ordinal1\ X0) \wedge (\neg v1_setfam_1\ X0))) \quad (16)$$

Theorem 1

$$\forall X0.(m1_subset_1\ X0\ (u1_compos_1\ k1_scmpds_2)) \Rightarrow ((\forall X1.(m1_subset_1\ X1\ k5_numbers) \Rightarrow (k1_amistd_1\ np_2\ k1_scmpds_2\ X1\ X0 = k1_tarski\ (k1_ordinal1\ X1))) \Rightarrow (v1_xboole_0\ (k2_amistd_1\ np_2\ k1_scmpds_2\ X0)))$$