

t3_amistd_2

(TMRz6GSjWxXRBWQbccwCWsRv8ztE3bYAxLo)

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Let $v1_setfam_1 : \iota \Rightarrow o$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_compos_0 : \iota \Rightarrow \iota$ be given. Let $u1_compos_1 : \iota \Rightarrow \iota$ be given. Let $k4_amistd_1 : \iota \Rightarrow \iota$ be given. Let $k3_compos_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_tarSKI : \iota \Rightarrow \iota$ be given. Let $k6_numbers : \iota$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $k1_xboole_0 : \iota$ be given. Let $k5_xtuple_0 : \iota \Rightarrow \iota$ be given. Let $v1_compos_0 : \iota \Rightarrow o$ be given. Let $k2_compos_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v5_compos_0 : \iota \Rightarrow o$ be given. Let $v4_compos_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $l1_compos_1 : \iota \Rightarrow o$ be given. Let $v2_compos_0 : \iota \Rightarrow o$ be given. Let $v3_compos_0 : \iota \Rightarrow o$ be given. Let $l1_extpro_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $l1_memstr_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v1_extpro_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0.(v1_xboole_0 X0) \Rightarrow (X0 = k1_xboole_0) \quad (1)$$

Assume the following.

$$\forall X0.(\neg v1_setfam_1 X0) \Rightarrow (\forall X1.(m1_subset_1 X1 (u1_compos_1 (k4_amistd_1 X0))) \Rightarrow (k5_xtuple_0 X1 = k6_numbers)) \quad (2)$$

Assume the following.

$$\forall X0.((\neg v1_xboole_0 X0) \wedge (v1_compos_0 X0)) \Rightarrow (\forall X1.(m1_subset_1 X1 (k1_compos_0 X0)) \Rightarrow (\exists X2.(m1_subset_1 X2 X0) \wedge (k2_compos_0 X0 X2 = X1))) \quad (3)$$

Assume the following.

$$k6_numbers = k1_xboole_0 \quad (4)$$

Assume the following.

$$\forall X0.\forall X1.(((v1_compos_0 X0) \wedge (v5_compos_0 X0)) \wedge ((v4_compos_0 X1 X0) \wedge (m1_subset_1 X1 X0))) \Rightarrow (v1_xboole_0 (k5_xtuple_0 X1)) \quad (5)$$

Assume the following.

$$\forall X0.(l1_compos_1 X0) \Rightarrow ((v1_compos_0 (u1_compos_1 X0)) \wedge ((v2_compos_0 (u1_compos_1 X0)) \wedge ((v3_compos_0 (u1_compos_1 X0)) \wedge (v5_compos_0 (u1_compos_1 X0))))) \quad (6)$$

Assume the following.

$$\forall X0.\forall X1.(l1_extpro_1 X1 X0) \Rightarrow ((l1_memstr_0 X1 X0) \wedge (l1_compos_1 X1)) \quad (7)$$

Assume the following.

$$\forall X0.(\neg v1_setfam_1 X0) \Rightarrow ((v1_extpro_1 (k4_amistd_1 X0) X0) \wedge (l1_extpro_1 (k4_amistd_1 X0) X0)) \quad (8)$$

Assume the following.

$$\forall X0.((\neg v1_xboole_0 X0) \wedge (v1_compos_0 X0)) \Rightarrow (\forall X1.(m1_subset_1 X1 (k1_compos_0 X0)) \Rightarrow (k3_compos_0 X0 X1 = ReplSep (toset (\lambda X2 : \iota.m1_subset_1 X2 X0) (\lambda X2 : \iota.k2_compos_0 X0 X2 = X1) (\lambda X2 : \iota.k5_xtuple_0 X2)))) \quad (9)$$

Assume the following.

$$k1_xboole_0 = the (\lambda X0 : \iota.v1_xboole_0 X0) \quad (10)$$

Assume the following.

$$\forall X0.\forall X1.(X1 = k1_tarski X0) \Leftrightarrow (\forall X2.(X2 \in X1) \Leftrightarrow (X2 = X0)) \quad (11)$$

Assume the following.

$$\forall X0.(v5_compos_0 X0) \Rightarrow (\neg v1_xboole_0 X0) \quad (12)$$

Assume the following.

$$\forall X0.(\neg v1_setfam_1 X0) \Rightarrow (\forall X1.(m1_subset_1 X1 (u1_compos_1 (k4_amistd_1 X0))) \Rightarrow (v4_compos_0 X1 (u1_compos_1 (k4_amistd_1 X0)))) \quad (13)$$

Theorem 1

$$\forall X0.(\neg v1_setfam_1 X0) \Rightarrow (\forall X1.(m1_subset_1 X1 (k1_compos_0 (u1_compos_1 (k4_amistd_1 X0)))) \Rightarrow (k3_compos_0 (u1_compos_1 (k4_amistd_1 X0)) X1 = k1_tarski k6_numbers))$$