

t36_trees_3

(TMcxRmqhfeemhqU6U9hkt6CPYS3YJcs8RsV)

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Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k5_numbers : \iota$ be given. Let $k6_numbers : \iota$ be given. Let $v6_trees_3 : \iota \Rightarrow o$ be given. Let $k2_finseq_2 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1_relat_1 : \iota \Rightarrow o$ be given. Let $v1_funct_1 : \iota \Rightarrow o$ be given. Let $v3_trees_2 : \iota \Rightarrow o$ be given. Let $k1_xboole_0 : \iota$ be given. Let $k10_xtuple_0 : \iota \Rightarrow \iota$ be given. Let $k2_funcop_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_tarski : \iota \Rightarrow \iota$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $v3_trees_3 : \iota \Rightarrow o$ be given. Let $k7_funcop_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k4_ordinal1 : \iota$ be given. Let $v7_ordinal1 : \iota \Rightarrow o$ be given. Let $k2_finseq_1 : \iota \Rightarrow \iota$ be given. Let $k1_finseq_1 : \iota \Rightarrow \iota$ be given. Let $v3_card_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v1_finseq_1 : \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0. \forall X1. (X0 \neq k1_xboole_0) \Rightarrow (k10_xtuple_0 (k2_funcop_1 X0 X1) = k1_tarski X1) \quad (1)$$

Assume the following.

$$\forall X0. (v1_xboole_0 X0) \Rightarrow (X0 = k1_xboole_0) \quad (2)$$

Assume the following.

$$\forall X0. (v3_trees_3 (k1_tarski X0)) \Leftrightarrow ((v1_relat_1 X0) \wedge ((v1_funct_1 X0) \wedge (v3_trees_2 X0))) \quad (3)$$

Assume the following.

$$\forall X0. \forall X1. k7_funcop_1 X0 X1 = k2_funcop_1 X0 X1 \quad (4)$$

Assume the following.

$$k6_numbers = k1_xboole_0 \quad (5)$$

Assume the following.

$$k5_numbers = k4_ordinal1 \quad (6)$$

Assume the following.

$$\forall X0.(v7_ordinal1\ X0)\Rightarrow(k2_finseq_1\ X0 = k1_finseq_1\ X0) \quad (7)$$

Assume the following.

$$\forall X0.\forall X1.(v7_ordinal1\ X0)\Rightarrow((v1_relat_1\ (k2_finseq_2\ X0\ X1))\wedge((v1_funct_1\ (k2_finseq_2\ X0\ X1))\wedge((v3_card_1\ (k2_finseq_2\ X0\ X1)\ X0)\wedge(v1_finseq_1\ (k2_finseq_2\ X0\ X1)))))) \quad (8)$$

Assume the following.

$$\forall X0.((v7_ordinal1\ X0)\wedge(\neg v1_xboole_0\ X0))\Rightarrow(\neg v1_xboole_0\ (k1_finseq_1\ X0)) \quad (9)$$

Assume the following.

$$v1_xboole_0\ k1_xboole_0 \quad (10)$$

Assume the following.

$$\forall X0.(v7_ordinal1\ X0)\Rightarrow(\forall X1.k2_finseq_2\ X0\ X1 = k7_funcop_1\ (k2_finseq_1\ X0)\ X1) \quad (11)$$

Assume the following.

$$\forall X0.((v1_relat_1\ X0)\wedge(v1_funct_1\ X0))\Rightarrow((v6_trees_3\ X0)\Leftrightarrow(v3_trees_3\ (k10_xtuple_0\ X0))) \quad (12)$$

Assume the following.

$$\forall X0.(m1_subset_1\ X0\ k4_ordinal1)\Rightarrow(v7_ordinal1\ X0) \quad (13)$$

Theorem 1

$$\forall X0.\forall X1.(m1_subset_1\ X1\ k5_numbers)\Rightarrow((X1\neq k6_numbers)\Rightarrow((v6_trees_3\ (k2_finseq_2\ X1\ X0))\Leftrightarrow((v1_relat_1\ X0)\wedge((v1_funct_1\ X0)\wedge(v3_trees_2\ X0))))))$$