

l3_dtconstr (TMScYVzCjGXovYjHtNXmyXH- FcPepXT6Ksdk)

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Let $k4_finseq_1 : \iota \Rightarrow \iota$ be given. Let $k14_trees_3 : \iota \Rightarrow \iota$ be given. Let $k1_xboole_0 : \iota$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k4_ordinal1 : \iota$ be given. Let $k5_numbers : \iota$ be given. Let $v1_relat_1 : \iota \Rightarrow o$ be given. Let $v1_funct_1 : \iota \Rightarrow o$ be given. Let $v1_finseq_1 : \iota \Rightarrow o$ be given. Let $k9_xtuple_0 : \iota \Rightarrow \iota$ be given. Let $v4_relat_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_relset_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v7_ordinal1 : \iota \Rightarrow o$ be given. Let $v1_finset_1 : \iota \Rightarrow o$ be given. Let $v3_card_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v2_finseq_1 : \iota \Rightarrow o$ be given. Let $v6_trees_3 : \iota \Rightarrow o$ be given. Let $v3_trees_2 : \iota \Rightarrow o$ be given. Let $k1_funct_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v4_trees_3 : \iota \Rightarrow o$ be given. Let $v5_trees_3 : \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0. \forall X1. \neg (X0 \in X1) \wedge (v1_xboole_0 X1) \quad (1)$$

Assume the following.

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

Assume the following.

$$m1_subset_1 k1_xboole_0 k4_ordinal1 \quad (3)$$

Assume the following.

$$k5_numbers = k4_ordinal1 \quad (4)$$

Assume the following.

$$\forall X0. ((v1_relat_1 X0) \wedge ((v1_funct_1 X0) \wedge (v1_finseq_1 X0))) \Rightarrow (k4_finseq_1 X0 = k9_xtuple_0 X0) \quad (5)$$

Assume the following.

$$\forall X0. \forall X1. ((v1_relat_1 X1) \wedge (v4_relat_1 X1 X0)) \Rightarrow (k1_relset_1 X0 X1 = k9_xtuple_0 X1) \quad (6)$$

Assume the following.

$$\forall X0.(v7_ordinal1\ X0)\Rightarrow(\exists X1.(v1_relat_1\ X1)\wedge((v4_relat_1\ X1\ k5_numbers)\wedge((v1_funct_1\ X1)\wedge((v1_finset_1\ X1)\wedge((v3_card_1\ X1\ X0)\wedge((v1_finseq_1\ X1)\wedge(v2_finseq_1\ X1))))))) \quad (7)$$

Assume the following.

$$\forall X0.(v1_xboole_0\ X0)\Rightarrow(v1_xboole_0\ (k9_xtuple_0\ X0)) \quad (8)$$

Assume the following.

$$\begin{aligned} \forall X0.((v1_relat_1\ X0)\wedge((v1_funct_1\ X0)\wedge(v1_finseq_1\ X0)))\Rightarrow \\ ((v6_trees_3\ X0)\Rightarrow(\forall X1.((v1_relat_1\ X1)\wedge((v1_funct_1\ X1)\wedge(v1_finseq_1\ X1))))\Rightarrow((X1 = k14_trees_3\ X0)\Leftrightarrow((k1_relset_1\ k5_numbers\ X1 = k1_relset_1\ k5_numbers\ X0)\wedge(\forall X2.(m1_subset_1\ X2\ k5_numbers)\Rightarrow(\neg(X2 \in k1_relset_1\ k5_numbers\ X0)\wedge(\forall X3. \\ ((v1_relat_1\ X3)\wedge((v1_funct_1\ X3)\wedge(v3_trees_2\ X3))\Rightarrow(\neg(X3 = k1_funct_1\ X0\ X2)\wedge(k1_funct_1\ X1\ X2 = k1_funct_1\ X3\ k1_xboole_0)))))))))) \quad (9) \end{aligned}$$

Assume the following.

$$\forall X0.(m1_subset_1\ X0\ k4_ordinal1)\Rightarrow(v7_ordinal1\ X0) \quad (10)$$

Assume the following.

$$\forall X0.(v3_card_1\ X0\ k1_xboole_0)\Rightarrow(v1_xboole_0\ X0) \quad (11)$$

Assume the following.

$$\forall X0.(v1_xboole_0\ X0)\Rightarrow(v1_relat_1\ X0) \quad (12)$$

Assume the following.

$$\forall X0.(v1_xboole_0\ X0)\Rightarrow(v1_funct_1\ X0) \quad (13)$$

Assume the following.

$$\forall X0.((v1_relat_1\ X0)\wedge((v1_funct_1\ X0)\wedge(v1_xboole_0\ X0)))\Rightarrow \\ ((v1_relat_1\ X0)\wedge((v1_funct_1\ X0)\wedge((v4_trees_3\ X0)\wedge((v5_trees_3\ X0)\wedge(v6_trees_3\ X0)))))) \quad (14)$$

Theorem 1 $k4_finseq_1\ (k14_trees_3\ k1_xboole_0) = k1_xboole_0.$