

t19_msscyc_1 (TMNqNxAzvXxP-
jARgKxwszME19scVCXLfdyr)

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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 $m1_trees_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k9_xtuple_0 : \iota \Rightarrow \iota$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k5_numbers : \iota$ be given. Let $k17_finseq_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $v1_trees_1 : \iota \Rightarrow o$ be given. Let $v1_finseq_1 : \iota \Rightarrow o$ be given. Let $r1_tarski : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $m2_finseq_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $m1_finseq_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k4_ordinal1 : \iota$ be given. Let $v7_ordinal1 : \iota \Rightarrow o$ be given. Let $k16_finseq_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k5_relat_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $k2_zfmisc_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2_finseq_1 : \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0. \forall X1. (m1_subset_1 X0 X1) \Rightarrow ((v1_xboole_0 X1) \vee (X0 \in X1)) \quad (1)$$

Assume the following.

$$\begin{aligned} & \forall X0. ((\neg v1_xboole_0 X0) \wedge (v1_trees_1 X0)) \Rightarrow (\forall X1. \\ & ((v1_relat_1 X1) \wedge ((v1_funct_1 X1) \wedge (v1_finseq_1 X1))) \Rightarrow (\forall X2. \\ & ((v1_relat_1 X2) \wedge ((v1_funct_1 X2) \wedge (v1_finseq_1 X2))) \Rightarrow (((X1 \in \\ & X0) \wedge (r1_tarski X2 X1)) \Rightarrow (X2 \in X0)))) \quad (2) \end{aligned}$$

Assume the following.

$$\forall X0. \forall X1. (X0 \in X1) \Rightarrow (m1_subset_1 X0 X1) \quad (3)$$

Assume the following.

$$\forall X0. \forall X1. (m2_finseq_1 X1 X0) \Leftrightarrow (m1_finseq_1 X1 X0) \quad (4)$$

Assume the following.

$$\begin{aligned} & \forall X0. ((\neg v1_xboole_0 X0) \wedge (v1_trees_1 X0)) \Rightarrow (\forall X1. \\ & (m1_trees_1 X1 X0) \Leftrightarrow (m1_subset_1 X1 X0)) \quad (5) \end{aligned}$$

Assume the following.

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

Assume the following.

$$\forall X0.\forall X1.\forall X2.((v7_ordinal1\ X1)\wedge(m1_finseq_1\ X2\ X0))\Rightarrow(k17_finseq_1\ X0\ X1\ X2 = k16_finseq_1\ X1\ X2) \quad (7)$$

Assume the following.

$$\forall X0.\forall X1.((v1_relat_1\ X0)\wedge(v1_funct_1\ X0))\Rightarrow((v1_relat_1\ (k5_relat_1\ X0\ X1))\wedge(v1_funct_1\ (k5_relat_1\ X0\ X1))) \quad (8)$$

Assume the following.

$$\forall X0.((v1_relat_1\ X0)\wedge((v1_funct_1\ X0)\wedge(v3_trees_2\ X0)))\Rightarrow((\neg v1_xboole_0\ (k9_xtuple_0\ X0))\wedge(v1_trees_1\ (k9_xtuple_0\ X0))) \quad (9)$$

Assume the following.

$$\forall X0.\forall X1.(m2_finseq_1\ X1\ X0)\Rightarrow((v1_funct_1\ X1)\wedge((v1_finseq_1\ X1)\wedge(m1_subset_1\ X1\ (k1_zfmisc_1\ (k2_zfmisc_1\ k5_numbers\ X0)))))) \quad (10)$$

Assume the following.

$$\forall X0.((\neg v1_xboole_0\ X0)\wedge(v1_trees_1\ X0))\Rightarrow(\forall X1.(m1_trees_1\ X1\ X0)\Rightarrow(m2_finseq_1\ X1\ k5_numbers)) \quad (11)$$

Assume the following.

$$\forall X0.\forall X1.(m1_finseq_1\ X1\ X0)\Rightarrow((v1_relat_1\ X1)\wedge((v1_funct_1\ X1)\wedge(v1_finseq_1\ X1))) \quad (12)$$

Assume the following.

$$\forall X0.\forall X1.(v1_relat_1\ X0)\Rightarrow(v1_relat_1\ (k5_relat_1\ X0\ X1)) \quad (13)$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.((v7_ordinal1\ X1)\wedge(m1_finseq_1\ X2\ X0))\Rightarrow(m2_finseq_1\ (k17_finseq_1\ X0\ X1\ X2)\ X0) \quad (14)$$

Assume the following.

$$\forall X0.((v1_relat_1\ X0)\wedge((v1_funct_1\ X0)\wedge(v1_finseq_1\ X0)))\Rightarrow((\forall X1.((v1_relat_1\ X1)\wedge((v1_funct_1\ X1)\wedge(v1_finseq_1\ X1))))\Rightarrow((r1_tarSKI\ X0\ X1)\Leftrightarrow(\exists X2.(m1_subset_1\ X2\ k5_numbers)\wedge(X0 = k5_relat_1\ X1\ (k2_finseq_1\ X2)))))) \quad (15)$$

Assume the following.

$$\forall X0.(v7_ordinal1\ X0)\Rightarrow(\forall X1.((v1_relat_1\ X1)\wedge((v1_funct_1\ X1)\wedge(v1_finseq_1\ X1))))\Rightarrow(k16_finseq_1\ X0\ X1 = k5_relat_1\ X1\ (k2_finseq_1\ X0)) \quad (16)$$

Assume the following.

$$\forall X0.(m1_subset_1 X0 k4_ordinal1) \Rightarrow (v7_ordinal1 X0) \quad (17)$$

Theorem 1

$$\begin{aligned} & \forall X0.((v1_relat_1 X0) \wedge ((v1_funct_1 X0) \wedge (v3_trees_2 X0))) \Rightarrow \\ & (\forall X1.(m1_trees_1 X1 (k9_xtuple_0 X0)) \Rightarrow (\forall X2.(m1_subset_1 \\ & X2 k5_numbers) \Rightarrow (m1_trees_1 (k17_finseq_1 k5_numbers X2 X1) (k9_xtuple_0 \\ & X0)))) \end{aligned}$$