

t34_comput_1

(TMaaRC8G5dJgZ5VukvyHCzLLmFe3AcfRngh)

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Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k5_numbers : \iota$ be given. Let $k19_margrel1 : \iota \Rightarrow \iota$ be given. Let $k4_comput_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $m1_finseq_2 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $m2_finseq_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ 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 $v1_relat_1 : \iota \Rightarrow o$ be given. Let $v1_funct_1 : \iota \Rightarrow o$ be given. Let $v1_finseq_1 : \iota \Rightarrow o$ be given. Let $k3_finseq_1 : \iota \Rightarrow \iota$ be given. Let $k1_card_1 : \iota \Rightarrow \iota$ 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 $k9_xtuple_0 : \iota \Rightarrow \iota$ be given. Let $v2_margrel1 : \iota \Rightarrow o$ be given. Let $k18_margrel1 : \iota \Rightarrow \iota$ be given. Let $v3_ordinal1 : \iota \Rightarrow o$ be given. Let $v7_ordinal1 : \iota \Rightarrow o$ be given. Let $k4_finseq_2 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k3_finseq_2 : \iota \Rightarrow \iota$ be given. Let $v4_valued_0 : \iota \Rightarrow o$ be given. Let $k1_recdef_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2_nat_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k7_partfun1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $np_1 : \iota$ be given. Let $v3_card_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k6_numbers : \iota$ 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.

$$\forall X0. \forall X1. (m1_finseq_2 X1 X0) \Rightarrow (\forall X2. (m2_finseq_2 X2 X0 X1) \Leftrightarrow (m1_subset_1 X2 X1)) \quad (2)$$

Assume the following.

$$\forall X0. \forall X1. (m2_finseq_1 X1 X0) \Leftrightarrow (m1_finseq_1 X1 X0) \quad (3)$$

Assume the following.

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

Assume the following.

$$\forall X0. ((v1_relat_1 X0) \wedge ((v1_funct_1 X0) \wedge (v1_finseq_1 X0))) \Rightarrow (k3_finseq_1 X0 = k1_card_1 X0) \quad (5)$$

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.

$$\forall X0.((v1_relat_1 X0)\wedge((v1_funct_1 X0)\wedge(v2_margrel1 X0)))\Rightarrow(k19_margrel1 X0 = k18_margrel1 X0) \quad (7)$$

Assume the following.

$$(\neg v1_xboole_0 k4_ordinal1)\wedge(v3_ordinal1 k4_ordinal1) \quad (8)$$

Assume the following.

$$\forall X0.\forall X1.((v7_ordinal1 X0)\wedge(\neg v1_xboole_0 X1))\Rightarrow(\neg v1_xboole_0 (k4_finseq_2 X0 X1)) \quad (9)$$

Assume the following.

$$\forall X0.\forall X1.(m1_finseq_2 X1 X0)\Rightarrow(\exists X2.m2_finseq_2 X2 X0 X1) \quad (10)$$

Assume the following.

$$\forall X0.\forall X1.(m1_finseq_2 X1 X0)\Rightarrow(\forall X2.(m2_finseq_2 X2 X0 X1)\Rightarrow(m2_finseq_1 X2 X0)) \quad (11)$$

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.

$$\forall X0.\forall X1.(v7_ordinal1 X0)\Rightarrow(m1_finseq_2 (k4_finseq_2 X0 X1) X1) \quad (13)$$

Assume the following.

$$\forall X0.\forall X1.((m1_subset_1 X0 k5_numbers)\wedge(m1_subset_1 X1 k5_numbers))\Rightarrow((v1_relat_1 (k4_comput_1 X0 X1))\wedge((v4_relat_1 (k4_comput_1 X0 X1) (k3_finseq_2 k5_numbers))\wedge((v1_funct_1 (k4_comput_1 X0 X1))\wedge((v4_valued_0 (k4_comput_1 X0 X1))\wedge(v2_margrel1 (k4_comput_1 X0 X1)))))) \quad (14)$$

Assume the following.

$$\forall X0.((v1_relat_1 X0)\wedge(v2_margrel1 X0))\Rightarrow(v7_ordinal1 (k18_margrel1 X0)) \quad (15)$$

Assume the following.

$$\begin{aligned}
& \forall X0.(m1_subset_1 X0 k5_numbers) \Rightarrow (\forall X1.(m1_subset_1 \\
& X1 k5_numbers) \Rightarrow (\forall X2.((v1_relat_1 X2) \wedge ((v4_relat_1 X2 \\
& (k3_finseq_2 k5_numbers)) \wedge (v1_funct_1 X2) \wedge ((v4_valued_0 X2) \wedge \\
& (v2_margrel1 X2)))) \Rightarrow ((X2 = k4_comput_1 X0 X1) \Leftrightarrow ((k1_relset_1 \\
& (k3_finseq_2 k5_numbers) X2 = k4_finseq_2 X0 k5_numbers) \wedge (\forall X3. \\
& (m2_finseq_2 X3 k5_numbers (k4_finseq_2 X0 k5_numbers) \Rightarrow (k1_recdef_1 \\
& X2 X3 = k2_nat_1 (k7_partfun1 k5_numbers X3 X1) np_1))))))
\end{aligned} \tag{16}$$

Assume the following.

$$\forall X0.\forall X1.(v3_card_1 X1 X0) \Leftrightarrow (k1_card_1 X1 = X0) \tag{17}$$

Assume the following.

$$\begin{aligned}
& \forall X0.((v1_relat_1 X0) \wedge (v2_margrel1 X0)) \Rightarrow (\forall X1.(\\
& v7_ordinal1 X1) \Rightarrow (((\exists X2.((v1_relat_1 X2) \wedge ((v1_funct_1 \\
& X2) \wedge (v1_finseq_1 X2))) \wedge (X2 \in k9_xtuple_0 X0)) \Rightarrow ((X1 = k18_margrel1 \\
& X0) \Leftrightarrow (\forall X2.((v1_relat_1 X2) \wedge ((v1_funct_1 X2) \wedge (v1_finseq_1 \\
& X2))) \Rightarrow ((X2 \in k9_xtuple_0 X0) \Rightarrow (X1 = k3_finseq_1 X2)))))) \wedge ((\forall X2. \\
& ((v1_relat_1 X2) \wedge ((v1_funct_1 X2) \wedge (v1_finseq_1 X2))) \Rightarrow (\neg X2 \in \\
& k9_xtuple_0 X0)) \Rightarrow ((X1 = k18_margrel1 X0) \Leftrightarrow (X1 = k6_numbers))))))
\end{aligned} \tag{18}$$

Assume the following.

$$\forall X0.(m1_subset_1 X0 k4_ordinal1) \Rightarrow (v7_ordinal1 X0) \tag{19}$$

Assume the following.

$$\begin{aligned}
& \forall X0.\forall X1.((\neg v1_xboole_0 X0) \wedge (v7_ordinal1 X1)) \Rightarrow \\
& (\forall X2.(m1_subset_1 X2 (k4_finseq_2 X1 X0)) \Rightarrow (v3_card_1 X2 \\
& X1))
\end{aligned} \tag{20}$$

Theorem 1

$$\begin{aligned}
& \forall X0.(m1_subset_1 X0 k5_numbers) \Rightarrow (\forall X1.(m1_subset_1 \\
& X1 k5_numbers) \Rightarrow (k19_margrel1 (k4_comput_1 X0 X1) = X0))
\end{aligned}$$