

l29_modelc_1 (TMSAt- NyyL3mWk kbPSHG9EjCQfkSC9UnrVCA)

October 27, 2020

Let $v1_modelc_1 : \iota \Rightarrow o$ be given. Let $m2_finseq_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k5_numbers : \iota$ be given. Let $v7_modelc_1 : \iota \Rightarrow o$ be given. Let $k1_funct_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $np_1 : \iota$ be given. Let $np_4 : \iota$ 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 $k7_finseq_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k9_finseq_1 : \iota \Rightarrow \iota$ be given. Let $v2_xxreal_0 : \iota \Rightarrow o$ be given. Let $m2_subset_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_numbers : \iota$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $m1_finseq_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k5_finseq_1 : \iota \Rightarrow \iota$ be given. Let $k8_finseq_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k4_ordinal1 : \iota$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $k12_finseq_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v3_ordinal1 : \iota \Rightarrow o$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $k2_zfmisc_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k11_modelc_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0. \forall X1. ((v1_relat_1 X1) \wedge ((v1_funct_1 X1) \wedge (v1_finseq_1 X1))) \Rightarrow (k1_funct_1 (k7_finseq_1 (k9_finseq_1 X0) X1) np_1 = X0) \quad (1)$$

Assume the following.

$$\begin{aligned} & \forall X0. ((v1_relat_1 X0) \wedge ((v1_funct_1 X0) \wedge (v1_finseq_1 X0))) \Rightarrow \\ & (\forall X1. ((v1_relat_1 X1) \wedge ((v1_funct_1 X1) \wedge (v1_finseq_1 X1)))) \Rightarrow \\ & (\forall X2. ((v1_relat_1 X2) \wedge ((v1_funct_1 X2) \wedge (v1_finseq_1 X2)))) \Rightarrow \\ & (k7_finseq_1 (k7_finseq_1 X0 X1) X2 = k7_finseq_1 X0 (k7_finseq_1 X1 X2))) \end{aligned} \quad (2)$$

Assume the following.

$$((v2_xxreal_0 np_4) \wedge (m2_subset_1 np_4 k1_numbers k5_numbers)) \wedge ((m1_subset_1 np_4 k5_numbers) \wedge (m1_subset_1 np_4 k1_numbers)) \quad (3)$$

Assume the following.

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

Assume the following.

$$\forall X0. k9_finseq_1 X0 = k5_finseq_1 X0 \quad (5)$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.((m1_finseq_1 X1 X0)\wedge(m1_finseq_1 X2 X0))\Rightarrow(k8_finseq_1 X0 X1 X2 = k7_finseq_1 X1 X2) \quad (6)$$

Assume the following.

$$k5_numbers = k4_ordinal1 \quad (7)$$

Assume the following.

$$\forall X0.\forall X1.((\neg v1_xboole_0 X0)\wedge(m1_subset_1 X1 X0))\Rightarrow(k12_finseq_1 X0 X1 = k5_finseq_1 X1) \quad (8)$$

Assume the following.

$$(\neg v1_xboole_0 k4_ordinal1)\wedge(v3_ordinal1 k4_ordinal1) \quad (9)$$

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.

$$\forall X0.\forall X1.(m1_finseq_1 X1 X0)\Rightarrow((v1_relat_1 X1)\wedge((v1_funct_1 X1)\wedge(v1_finseq_1 X1))) \quad (11)$$

Assume the following.

$$\forall X0.(v1_relat_1 (k9_finseq_1 X0))\wedge(v1_funct_1 (k9_finseq_1 X0)) \quad (12)$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.((m1_finseq_1 X1 X0)\wedge(m1_finseq_1 X2 X0))\Rightarrow(m2_finseq_1 (k8_finseq_1 X0 X1 X2) X0) \quad (13)$$

Assume the following.

$$\forall X0.\forall X1.((\neg v1_xboole_0 X0)\wedge(m1_subset_1 X1 X0))\Rightarrow(m2_finseq_1 (k12_finseq_1 X0 X1) X0) \quad (14)$$

Assume the following.

$$\forall X0.((v1_modelc_1 X0)\wedge(m2_finseq_1 X0 k5_numbers))\Rightarrow((v7_modelc_1 X0)\Leftrightarrow(\exists X1.((v1_modelc_1 X1)\wedge(m2_finseq_1 X1 k5_numbers))\wedge(\exists X2.((v1_modelc_1 X2)\wedge(m2_finseq_1 X2 k5_numbers))\wedge(X0 = k11_modelc_1 X1 X2)))) \quad (15)$$

Assume the following.

$$\begin{aligned} \forall X0.(m2_finseq_1\ X0\ k5_numbers) \Rightarrow (\forall X1.(m2_finseq_1 \\ X1\ k5_numbers) \Rightarrow (k11_modelc_1\ X0\ X1 = k8_finseq_1\ k5_numbers\ (k8_finseq_1 \\ k5_numbers\ (k12_finseq_1\ k5_numbers\ np_4)\ X0)\ X1)) \end{aligned} \quad (16)$$

Theorem 1

$$\begin{aligned} \forall X0.((v1_modelc_1\ X0) \wedge (m2_finseq_1\ X0\ k5_numbers)) \Rightarrow (\\ (v7_modelc_1\ X0) \Rightarrow (k1_funct_1\ X0\ np_1 = np_4)) \end{aligned}$$