

t10_modelc.3

(TMWw8BzRSrUg2vFUyqXWoszxhX1bNb9fGie)

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Let $v1_modelc.2 : \iota \Rightarrow o$ be given. Let $m2_finseq.1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k5_numbers : \iota$ be given. Let $m1_subset.1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_zfmisc.1 : \iota \Rightarrow \iota$ be given. Let $k13_modelc.2 : \iota \Rightarrow \iota$ be given. Let $k18_modelc.3 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k7_subset.1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_tarski : \iota \Rightarrow \iota$ be given. Let $k9_real.1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k3_finseq.1 : \iota \Rightarrow \iota$ 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 $k10_xtuple.0 : \iota \Rightarrow \iota$ be given. Let $k1_modelc.3 : \iota \Rightarrow \iota$ be given. Let $v2_funct.1 : \iota \Rightarrow o$ be given. Let $k17_modelc.3 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $m1_finseq.1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_numbers : \iota$ be given. Assume the following.

$$\begin{aligned}
 & \forall X0.((v1_relat.1 X0) \wedge ((v1_funct.1 X0) \wedge (v1_finseq.1 X0))) \Rightarrow \\
 & \quad (\forall X1.((v1_modelc.2 X1) \wedge (m2_finseq.1 X1 k5_numbers)) \Rightarrow \\
 & \quad (\forall X2.((v1_modelc.2 X2) \wedge (m2_finseq.1 X2 k5_numbers)) \Rightarrow \\
 & \quad (\forall X3.(m1_subset.1 X3 (k1_zfmisc.1 (k13_modelc.2 X1)))) \Rightarrow \\
 & \quad (((k10_xtuple.0 X0 = k1_modelc.3 X1) \wedge ((v2_funct.1 X0) \wedge (X2 \in X3))) \Rightarrow \\
 & \quad (k17_modelc.3 X1 (k7_subset.1 (k13_modelc.2 X1) X3 (k1_tarski \\
 & \quad X2)) X0 = k9_real.1 (k17_modelc.3 X1 X3 X0) (k3_finseq.1 X2)))))) \Rightarrow
 \end{aligned} \tag{1}$$

Assume the following.

$$\forall X0. \forall X1. (m2_finseq.1 X1 X0) \Leftrightarrow (m1_finseq.1 X1 X0) \tag{2}$$

Assume the following.

$$\forall X0. ((v1_modelc.2 X0) \wedge (m1_finseq.1 X0 k5_numbers)) \Rightarrow (k1_modelc.3 X0 = k13_modelc.2 X0) \tag{3}$$

Assume the following.

$$\forall X0. \forall X1. \forall X2. (m1_subset.1 X1 (k1_zfmisc.1 X0)) \Rightarrow (m1_subset.1 (k7_subset.1 X0 X1 X2) (k1_zfmisc.1 X0)) \tag{4}$$

Assume the following.

$$\forall X0. \forall X1. (((v1_modelc.2 X0) \wedge (m1_finseq.1 X0 k5_numbers)) \wedge (m1_subset.1 X1 (k1_zfmisc.1 (k13_modelc.2 X0)))) \Rightarrow (m1_subset.1 (k18_modelc.3 X0 X1) k1_numbers) \tag{5}$$

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.\forall X2.(((v1_modelc_2 X0)\wedge(m1_finseq_1 \\ & X0 k5_numbers))\wedge((m1_subset_1 X1 (k1_zfmisc_1 (k13_modelc_2 \\ & X0)))\wedge((v1_relat_1 X2)\wedge((v1_funct_1 X2)\wedge(v1_finseq_1 X2))))))\Rightarrow \\ & (m1_subset_1 (k17_modelc_3 X0 X1 X2) k1_numbers) \end{aligned} \quad (6)$$

Assume the following.

$$\begin{aligned} & \forall X0.((v1_modelc_2 X0)\wedge(m2_finseq_1 X0 k5_numbers))\Rightarrow(\\ & \forall X1.(m1_subset_1 X1 (k1_zfmisc_1 (k13_modelc_2 X0)))\Rightarrow \\ & (\forall X2.(m1_subset_1 X2 k1_numbers)\Rightarrow((X2 = k18_modelc_3 X0 \\ & X1)\Leftrightarrow(\exists X3.((v1_relat_1 X3)\wedge((v1_funct_1 X3)\wedge(v1_finseq_1 \\ & X3))))\wedge((k10_xtuple_0 X3 = k1_modelc_3 X0)\wedge((v2_funct_1 X3)\wedge(\\ & X2 = k17_modelc_3 X0 X1 X3)))))) \end{aligned} \quad (7)$$

Theorem 1

$$\begin{aligned} & \forall X0.((v1_modelc_2 X0)\wedge(m2_finseq_1 X0 k5_numbers))\Rightarrow(\\ & \forall X1.((v1_modelc_2 X1)\wedge(m2_finseq_1 X1 k5_numbers))\Rightarrow(\\ & \forall X2.(m1_subset_1 X2 (k1_zfmisc_1 (k13_modelc_2 X0)))\Rightarrow \\ & ((X1 \in X2)\Rightarrow(k18_modelc_3 X0 (k7_subset_1 (k13_modelc_2 X0) X2 (\\ & k1_tarski X1)) = k9_real_1 (k18_modelc_3 X0 X2) (k3_finseq_1 X1)))) \end{aligned}$$