

t28_modelc_1

(TMUfGHx9u5CX6CFq6DvtxhYXPTGn8hn3aLv)

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Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $v1_partfun1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $k2_zfmisc_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k30_modelc_1 : \iota \Rightarrow \iota$ be given. Let $u1_struct_0 : \iota \Rightarrow \iota$ be given. Let $k48_modelc_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $r3_modelc_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k25_modelc_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k4_tarski : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_xboole_0 : \iota$ be given. Let $m1_modelc_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k3_funct_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k5_numbers : \iota$ be given. Let $k6_numbers : \iota$ be given. Let $np_1 : \iota$ 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 $np_0 : \iota$ be given. Let $k2_xcmplx_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k4_ordinal1 : \iota$ be given. Let $v7_ordinal1 : \iota \Rightarrow o$ be given. Let $k2_nat_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v3_ordinal1 : \iota \Rightarrow o$ be given. Let $v1_funct_1 : \iota \Rightarrow o$ be given. Let $v1_funct_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k2_tarski : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_tarski : \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0.(v1_xboole_0 X0) \Rightarrow (X0 = k1_xboole_0) \tag{1}$$

Assume the following.

$$\begin{aligned} & \forall X0.(\neg v1_xboole_0 X0) \Rightarrow (\forall X1.((v1_partfun1 X1 X0) \wedge \\ & (m1_subset_1 X1 (k1_zfmisc_1 (k2_zfmisc_1 X0 X0)))) \Rightarrow (\forall X2. \\ & (m1_subset_1 X2 X0) \Rightarrow (\forall X3.(m1_subset_1 X3 X0) \Rightarrow (\neg(k4_tarski \\ & X2 X3 \in X1) \wedge (\forall X4.(m1_modelc_1 X4 X0 X1) \Rightarrow (\neg(k3_funct_2 k5_numbers \\ & X0 X4 k6_numbers = X2) \wedge (k3_funct_2 k5_numbers X0 X4 np_1 = X3)))))))) \end{aligned} \tag{2}$$

Assume the following.

$$\begin{aligned}
& \forall X0.(\neg v1_xboole_0 X0) \Rightarrow (\forall X1.((v1_partfun1 X1 X0) \wedge \\
& (m1_subset_1 X1 (k1_zfmisc_1 (k2_zfmisc_1 X0 X0)))) \Rightarrow (\forall X2. \\
& (m1_subset_1 X2 X0) \Rightarrow (\forall X3.((\neg v1_xboole_0 X3) \wedge (m1_subset_1 \\
& X3 (k1_zfmisc_1 (k30_modelc_1 X0)))) \Rightarrow (\forall X4.(m1_subset_1 \\
& X4 (u1_struct_0 (k48_modelc_1 X0 X1 X3))) \Rightarrow ((r3_modelc_1 X0 X1 X3 \\
& X2 (k25_modelc_1 (k48_modelc_1 X0 X1 X3) X4)) \Leftrightarrow (\exists X5.(m1_modelc_1 \\
& X5 X0 X1) \wedge ((k3_funct_2 k5_numbers X0 X5 k6_numbers = X2) \wedge (r3_modelc_1 \\
& X0 X1 X3 (k3_funct_2 k5_numbers X0 X5 np_1) X4))))))
\end{aligned} \tag{3}$$

Assume the following.

$$\begin{aligned}
& ((v2_xxreal_0 np_1) \wedge (m2_subset_1 np_1 k1_numbers k5_numbers)) \wedge \\
& ((m1_subset_1 np_1 k5_numbers) \wedge (m1_subset_1 np_1 k1_numbers))
\end{aligned} \tag{4}$$

Assume the following.

$$\begin{aligned}
& (m2_subset_1 np_0 k1_numbers k5_numbers) \wedge ((m1_subset_1 np_0 \\
& k5_numbers) \wedge (m1_subset_1 np_0 k1_numbers))
\end{aligned} \tag{5}$$

Assume the following.

$$v1_xboole_0 np_0 \tag{6}$$

Assume the following.

$$k2_xcmplx_0 np_1 np_0 = np_1 \tag{7}$$

Assume the following.

$$k6_numbers = k1_xboole_0 \tag{8}$$

Assume the following.

$$k5_numbers = k4_ordinal1 \tag{9}$$

Assume the following.

$$\begin{aligned}
& \forall X0. \forall X1. ((m1_subset_1 X0 k5_numbers) \wedge (v7_ordinal1 \\
& X1)) \Rightarrow (k2_nat_1 X0 X1 = k2_xcmplx_0 X0 X1)
\end{aligned} \tag{10}$$

Assume the following.

$$(\neg v1_xboole_0 k4_ordinal1) \wedge (v3_ordinal1 k4_ordinal1) \tag{11}$$

Assume the following.

$$\begin{aligned}
& \forall X0. \forall X1. ((\neg v1_xboole_0 X0) \wedge ((v1_partfun1 X1 X0) \wedge \\
& (m1_subset_1 X1 (k1_zfmisc_1 (k2_zfmisc_1 X0 X0)))) \Rightarrow (\forall X2. \\
& (m1_modelc_1 X2 X0 X1) \Rightarrow ((v1_funct_1 X2) \wedge ((v1_funct_2 X2 k5_numbers \\
& X0) \wedge (m1_subset_1 X2 (k1_zfmisc_1 (k2_zfmisc_1 k5_numbers X0))))))
\end{aligned} \tag{12}$$

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.\forall X2.\forall X3.((\neg v1_xboole_0 X0)\wedge \\ & (((v1_funct_1 X2)\wedge((v1_funct_2 X2 X0 X1)\wedge(m1_subset_1 X2 (k1_zfmisc_1 \\ & (k2_zfmisc_1 X0 X1))))))\wedge(m1_subset_1 X3 X0))\Rightarrow(m1_subset_1 (\\ & k3_funct_2 X0 X1 X2 X3) X1) \end{aligned} \quad (13)$$

Assume the following.

$$\forall X0.\forall X1.k4_tarski X0 X1 = k2_tarski (k2_tarski X0 X1) (k1_tarski X0) \quad (14)$$

Assume the following.

$$\begin{aligned} & \forall X0.(\neg v1_xboole_0 X0)\Rightarrow(\forall X1.((v1_partfun1 X1 X0)\wedge \\ & (m1_subset_1 X1 (k1_zfmisc_1 (k2_zfmisc_1 X0 X0))))\Rightarrow(\forall X2. \\ & ((v1_funct_1 X2)\wedge((v1_funct_2 X2 k5_numbers X0)\wedge(m1_subset_1 \\ & X2 (k1_zfmisc_1 (k2_zfmisc_1 k5_numbers X0))))\Rightarrow((m1_modelc_1 \\ & X2 X0 X1)\Leftrightarrow(\forall X3.(m1_subset_1 X3 k5_numbers)\Rightarrow(k4_tarski \\ & (k3_funct_2 k5_numbers X0 X2 X3) (k3_funct_2 k5_numbers X0 X2 (k2_nat_1 \\ & X3 np_1)) \in X1)))))) \end{aligned} \quad (15)$$

Assume the following.

$$\forall X0.\forall X1.k2_tarski X0 X1 = k2_tarski X1 X0 \quad (16)$$

Assume the following.

$$\forall X0.\forall X1.((m1_subset_1 X0 k5_numbers)\wedge(v7_ordinal1 X1))\Rightarrow(k2_nat_1 X0 X1 = k2_nat_1 X1 X0) \quad (17)$$

Assume the following.

$$\forall X0.(m1_subset_1 X0 k4_ordinal1)\Rightarrow(v7_ordinal1 X0) \quad (18)$$

Theorem 1

$$\begin{aligned} & \forall X0.(\neg v1_xboole_0 X0)\Rightarrow(\forall X1.((v1_partfun1 X1 X0)\wedge \\ & (m1_subset_1 X1 (k1_zfmisc_1 (k2_zfmisc_1 X0 X0))))\Rightarrow(\forall X2. \\ & (m1_subset_1 X2 X0)\Rightarrow(\forall X3.((\neg v1_xboole_0 X3)\wedge(m1_subset_1 \\ & X3 (k1_zfmisc_1 (k30_modelc_1 X0))))\Rightarrow(\forall X4.(m1_subset_1 \\ & X4 (u1_struct_0 (k48_modelc_1 X0 X1 X3))\Rightarrow((r3_modelc_1 X0 X1 X3 \\ & X2 (k25_modelc_1 (k48_modelc_1 X0 X1 X3) X4)\Leftrightarrow(\exists X5.(m1_subset_1 \\ & X5 X0)\wedge((k4_tarski X2 X5 \in X1)\wedge(r3_modelc_1 X0 X1 X3 X5 X4)))))))))) \end{aligned}$$