

l127_modelc_2

(TMdy8BHaFxa7GeYbDasUQLGbzuSPGwnUAbc)

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Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k25_modelc_2 : \iota \Rightarrow \iota$ be given. Let $k29_modelc_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k6_numbers : \iota$ be given. Let $v1_xcmplx_0 : \iota \Rightarrow o$ be given. Let $k2_xcmplx_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_xboole_0 : \iota$ 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 $k5_numbers : \iota$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $k2_zfmisc_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v7_ordinal1 : \iota \Rightarrow o$ be given. Let $k10_nat_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k9_nat_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k27_modelc_2 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k28_modelc_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k26_modelc_2 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1_relat_1 : \iota \Rightarrow o$ be given. Let $v4_relat_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v1_partfun1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_funct_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1_xreal_0 : \iota \Rightarrow o$ be given. Let $v5_relat_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0.(v1_xcmplx_0 X0) \Rightarrow (k2_xcmplx_0 X0 \ k6_numbers = X0) \quad (1)$$

Assume the following.

$$k6_numbers = k1_xboole_0 \quad (2)$$

Assume the following.

$$\begin{aligned} \forall X0.\forall X1.\forall X2.((\neg v1_xboole_0 X0) \wedge (((v1_funct_1 \\ X1) \wedge ((v1_funct_2 X1 \ k5_numbers X0) \wedge (m1_subset_1 X1 (k1_zfmisc_1 \\ (k2_zfmisc_1 k5_numbers X0)))))) \wedge (v7_ordinal1 X2))) \Rightarrow (k10_nat_1 \\ X0 X1 X2 = k9_nat_1 X1 X2) \end{aligned} \quad (3)$$

Assume the following.

$$v1_xboole_0 \ k1_xboole_0 \quad (4)$$

Assume the following.

$$\begin{aligned} \forall X0.\forall X1.(\neg v1_xboole_0 X0) \Rightarrow ((v1_funct_1 (k27_modelc_2 \\ X0 X1)) \wedge ((v1_funct_2 (k27_modelc_2 X0 X1) \ k5_numbers X0) \wedge (m1_subset_1 \\ (k27_modelc_2 X0 X1) (k1_zfmisc_1 (k2_zfmisc_1 k5_numbers X0)))))) \end{aligned} \quad (5)$$

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.\forall X2.((\neg v1_xboole_0 X0)\wedge(((v1_funct_1 \\ & X1)\wedge((v1_funct_2 X1 k5_numbers X0)\wedge(m1_subset_1 X1 (k1_zfmisc_1 \\ & (k2_zfmisc_1 k5_numbers X0))))\wedge(v7_ordinal1 X2)))\Rightarrow((v1_funct_1 \\ & (k10_nat_1 X0 X1 X2))\wedge((v1_funct_2 (k10_nat_1 X0 X1 X2) k5_numbers \\ & X0)\wedge(m1_subset_1 (k10_nat_1 X0 X1 X2) (k1_zfmisc_1 (k2_zfmisc_1 \\ & k5_numbers X0)))))) \end{aligned} \quad (6)$$

Assume the following.

$$\begin{aligned} & \forall X0.(\neg v1_xboole_0 X0)\Rightarrow(\forall X1.(m1_subset_1 X1 (k25_modelc_2 \\ & X0))\Rightarrow(\forall X2.(v7_ordinal1 X2)\Rightarrow(k29_modelc_2 X0 X1 X2 = k28_modelc_2 \\ & X0 X1 X2))) \end{aligned} \quad (7)$$

Assume the following.

$$\begin{aligned} & \forall X0.(\neg v1_xboole_0 X0)\Rightarrow(\forall X1.\forall X2.(v7_ordinal1 \\ & X2)\Rightarrow(k28_modelc_2 X0 X1 X2 = k26_modelc_2 X0 (k10_nat_1 X0 (k27_modelc_2 \\ & X0 X1) X2))) \end{aligned} \quad (8)$$

Assume the following.

$$\begin{aligned} & \forall X0.(\neg v1_xboole_0 X0)\Rightarrow(\forall X1.(m1_subset_1 X1 (k25_modelc_2 \\ & X0))\Rightarrow(k27_modelc_2 X0 X1 = X1)) \end{aligned} \quad (9)$$

Assume the following.

$$\begin{aligned} & \forall X0.(\neg v1_xboole_0 X0)\Rightarrow(\forall X1.(((v1_funct_1 X1)\wedge(\\ & (v1_funct_2 X1 k5_numbers X0)\wedge(m1_subset_1 X1 (k1_zfmisc_1 (k2_zfmisc_1 \\ & k5_numbers X0))))\Rightarrow(k26_modelc_2 X0 X1 = X1)) \end{aligned} \quad (10)$$

Assume the following.

$$\begin{aligned} & \forall X0.(((v1_relat_1 X0)\wedge((v4_relat_1 X0 k5_numbers)\wedge((v1_funct_1 \\ & X0)\wedge(v1_partfun1 X0 k5_numbers))))\Rightarrow(\forall X1.(v7_ordinal1 \\ & X1)\Rightarrow(\forall X2.(((v1_relat_1 X2)\wedge((v4_relat_1 X2 k5_numbers)\wedge \\ & ((v1_funct_1 X2)\wedge(v1_partfun1 X2 k5_numbers))))\Rightarrow((X2 = k9_nat_1 \\ & X0 X1)\Leftrightarrow(\forall X3.(v7_ordinal1 X3)\Rightarrow(k1_funct_1 X2 X3 = k1_funct_1 \\ & X0 (k2_xcmplx_0 X3 X1)))))) \end{aligned} \quad (11)$$

Assume the following.

$$\forall X0.(v1_xboole_0 X0)\Rightarrow(v7_ordinal1 X0) \quad (12)$$

Assume the following.

$$\forall X0.(v1_xreal_0 X0)\Rightarrow(v1_xcmplx_0 X0) \quad (13)$$

Assume the following.

$$\forall X0.\forall X1.(\neg v1_xboole_0 X1)\Rightarrow(\forall X2.(m1_subset_1 X2 (k1_zfmisc_1 (k2_zfmisc_1 X0 X1)))\Rightarrow((v1_funct_2 X2 X0 X1)\Rightarrow(v1_partfun1 X2 X0))) \quad (14)$$

Assume the following.

$$\forall X0.(v7_ordinal1 X0)\Rightarrow(v1_xreal_0 X0) \quad (15)$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.(m1_subset_1 X2 (k1_zfmisc_1 (k2_zfmisc_1 X0 X1)))\Rightarrow((v4_relat_1 X2 X0)\wedge(v5_relat_1 X2 X1)) \quad (16)$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.(m1_subset_1 X2 (k1_zfmisc_1 (k2_zfmisc_1 X0 X1)))\Rightarrow(v1_relat_1 X2) \quad (17)$$

Theorem 1

$$\forall X0.(\neg v1_xboole_0 X0)\Rightarrow(\forall X1.(m1_subset_1 X1 (k25_modelc_2 X0))\Rightarrow(k29_modelc_2 X0 X1 k6_numbers = X1))$$