

t38_abcmiz_1 (TMUA- muUJ6fPnh4r9VziPfKyhXHwiNwnnCEq)

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Let $v1_instal1 : \iota \Rightarrow o$ be given. Let $v1_abcmiz_1 : \iota \Rightarrow o$ be given. Let $l1_msualg_1 : \iota \Rightarrow o$ be given. Let $k1_msualg_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k15_abcmiz_1 : \iota \Rightarrow \iota$ be given. Let $k3_pre_poly : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $u1_struct_0 : \iota \Rightarrow \iota$ be given. Let $k13_abcmiz_1 : \iota \Rightarrow \iota$ be given. Let $k2_msualg_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k16_abcmiz_1 : \iota \Rightarrow \iota$ be given. Let $k4_pre_poly : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k12_abcmiz_1 : \iota \Rightarrow \iota$ be given. Let $k9_finseq_1 : \iota \Rightarrow \iota$ be given. Let $k5_finseq_1 : \iota \Rightarrow \iota$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k10_finseq_1 : \iota \Rightarrow \iota \Rightarrow \iota$ 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 $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $k2_zfmisc_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k3_funct_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_funct_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_enumset1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1_relat_1 : \iota \Rightarrow o$ be given. Let $v3_relat_1 : \iota \Rightarrow o$ be given. Let $u2_msualg_1 : \iota \Rightarrow \iota$ be given. Let $u4_struct_0 : \iota \Rightarrow \iota$ be given. Let $u1_msualg_1 : \iota \Rightarrow \iota$ be given. Let $k3_finseq_2 : \iota \Rightarrow \iota$ be given. Let $k7_finseq_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k6_abcmiz_1 : \iota$ be given. Let $k7_abcmiz_1 : \iota$ be given. Let $k8_abcmiz_1 : \iota$ be given. Let $r1_tarski : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k2_tarski : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k9_abcmiz_1 : \iota$ be given. Let $k10_abcmiz_1 : \iota$ be given. Let $k1_tarski : \iota \Rightarrow \iota$ be given. Let $np_1 : \iota$ be given. Let $k6_numbers : \iota$ be given. Let $np_2 : \iota$ be given. Let $v2_struct_0 : \iota \Rightarrow o$ be given. Let $v11_struct_0 : \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0. k9_finseq_1 X0 = k5_finseq_1 X0 \quad (1)$$

Assume the following.

$$\forall X0. \forall X1. \forall X2. ((\neg v1_xboole_0 X0) \wedge (m1_subset_1 X1 X0) \wedge (m1_subset_1 X2 X0)) \Rightarrow (k4_pre_poly X0 X1 X2 = k10_finseq_1 X1 X2) \quad (2)$$

Assume the following.

$$\forall X0. \forall X1. ((\neg v1_xboole_0 X0) \wedge (m1_subset_1 X1 X0)) \Rightarrow (k3_pre_poly X0 X1 = k5_finseq_1 X1) \quad (3)$$

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.\forall X2.\forall X3.((\neg v1_xboole_0 X0)\wedge \\ & (((v1_funct_1 X2)\wedge((v1_funct_2 X2 X0 X1)\wedge(m1_subset_1 X2 (k1_zfmisc_1 \\ & (k2_zfmisc_1 X0 X1))))))\wedge(m1_subset_1 X3 X0)))\Rightarrow(k3_funct_2 X0 \\ & X1 X2 X3 = k1_funct_1 X2 X3) \end{aligned} \quad (4)$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.\neg v1_xboole_0 (k1_enumset1 X0 X1 X2) \quad (5)$$

Assume the following.

$$\forall X0.\forall X1.((v1_relat_1 X0)\wedge((v3_relat_1 X0)\wedge(v1_funct_1 X0)))\Rightarrow(v1_xboole_0 (k1_funct_1 X0 X1)) \quad (6)$$

Assume the following.

$$\forall X0.\forall X1.\neg v1_xboole_0 (k10_finseq_1 X0 X1) \quad (7)$$

Assume the following.

$$\begin{aligned} & \forall X0.(l1_msualg_1 X0)\Rightarrow((v1_funct_1 (u2_msualg_1 X0))\wedge \\ & ((v1_funct_2 (u2_msualg_1 X0) (u4_struct_0 X0) (u1_struct_0 X0))\wedge \\ & (m1_subset_1 (u2_msualg_1 X0) (k1_zfmisc_1 (k2_zfmisc_1 (u4_struct_0 X0) (u1_struct_0 X0)))))) \end{aligned} \quad (8)$$

Assume the following.

$$\begin{aligned} & \forall X0.(l1_msualg_1 X0)\Rightarrow((v1_funct_1 (u1_msualg_1 X0))\wedge \\ & ((v1_funct_2 (u1_msualg_1 X0) (u4_struct_0 X0) (k3_finseq_2 (u1_struct_0 X0)))\wedge(m1_subset_1 (u1_msualg_1 X0) (k1_zfmisc_1 \\ & (k2_zfmisc_1 (u4_struct_0 X0) (k3_finseq_2 (u1_struct_0 X0)))))) \end{aligned} \quad (9)$$

Assume the following.

$$\forall X0.((v1_instalg1 X0)\wedge((v1_abcmiz_1 X0)\wedge(l1_msualg_1 X0)))\Rightarrow(m1_subset_1 (k16_abcmiz_1 X0) (u4_struct_0 X0)) \quad (10)$$

Assume the following.

$$\forall X0.((v1_instalg1 X0)\wedge((v1_abcmiz_1 X0)\wedge(l1_msualg_1 X0)))\Rightarrow(m1_subset_1 (k15_abcmiz_1 X0) (u4_struct_0 X0)) \quad (11)$$

Assume the following.

$$\forall X0.((v1_instalg1 X0)\wedge((v1_abcmiz_1 X0)\wedge(l1_msualg_1 X0)))\Rightarrow(m1_subset_1 (k13_abcmiz_1 X0) (u1_struct_0 X0)) \quad (12)$$

Assume the following.

$$\forall X0.((v1_instalg1\ X0)\wedge((v1_abcmiz_1\ X0)\wedge(l1_msualg_1\ X0)))\Rightarrow(m1_subset_1\ (k12_abcmiz_1\ X0)\ (u1_struct_0\ X0)) \quad (13)$$

Assume the following.

$$\forall X0.\forall X1.k10_finseq_1\ X0\ X1 = k7_finseq_1\ (k9_finseq_1\ X0)\ (k9_finseq_1\ X1) \quad (14)$$

Assume the following.

$$\begin{aligned} &\forall X0.((v1_instalg1\ X0)\wedge(l1_msualg_1\ X0))\Rightarrow((v1_abcmiz_1\ X0)\Leftrightarrow((u1_struct_0\ X0 = k1_enumset1\ k6_abcmiz_1\ k7_abcmiz_1\ k8_abcmiz_1)\wedge \\ &\quad ((r1_tarski\ (k2_tarski\ k9_abcmiz_1\ k10_abcmiz_1)\ (u4_struct_0\ X0))\wedge((k1_funct_1\ (u1_msualg_1\ X0)\ k9_abcmiz_1 = k10_finseq_1 \\ &\quad k7_abcmiz_1\ k6_abcmiz_1)\wedge((k1_funct_1\ (u1_msualg_1\ X0)\ k10_abcmiz_1 = \\ &\quad k9_finseq_1\ k7_abcmiz_1)\wedge((k1_funct_1\ (u2_msualg_1\ X0)\ k9_abcmiz_1 = \\ &\quad k6_abcmiz_1)\wedge((k1_funct_1\ (u2_msualg_1\ X0)\ k10_abcmiz_1 = k7_abcmiz_1)\wedge \\ &\quad (\forall X1.(m1_subset_1\ X1\ (u4_struct_0\ X0))\Rightarrow(\neg(X1\neq k9_abcmiz_1)\wedge \\ &\quad ((X1\neq k10_abcmiz_1)\wedge(\neg k1_funct_1\ (u1_msualg_1\ X0)\ X1 \in k3_finseq_2 \\ &\quad (k1_tarski\ k8_abcmiz_1)))))))))) \end{aligned} \quad (15)$$

Assume the following.

$$k10_abcmiz_1 = np_1 \quad (16)$$

Assume the following.

$$k9_abcmiz_1 = k6_numbers \quad (17)$$

Assume the following.

$$k8_abcmiz_1 = np_2 \quad (18)$$

Assume the following.

$$k7_abcmiz_1 = np_1 \quad (19)$$

Assume the following.

$$k6_abcmiz_1 = k6_numbers \quad (20)$$

Assume the following.

$$\begin{aligned} &\forall X0.((\neg v2_struct_0\ X0)\wedge((\neg v11_struct_0\ X0)\wedge(l1_msualg_1\ X0)))\Rightarrow(\forall X1.(m1_subset_1\ X1\ (u4_struct_0\ X0))\Rightarrow(k2_msualg_1\ X0\ X1 = k3_funct_2\ (u4_struct_0\ X0)\ (u1_struct_0\ X0)\ (u2_msualg_1\ X0)\ X1)) \end{aligned} \quad (21)$$

Assume the following.

$$\begin{aligned} \forall X0.((\neg v2_struct_0 X0) \wedge ((\neg v11_struct_0 X0) \wedge (l1_msualg_1 \\ X0))) \Rightarrow (\forall X1.(m1_subset_1 X1 (u4_struct_0 X0)) \Rightarrow (k1_msualg_1 \\ X0 X1 = k3_funct_2 (u4_struct_0 X0) (k3_finseq_2 (u1_struct_0 X0)) \\ (u1_msualg_1 X0) X1)) \end{aligned} \quad (22)$$

Assume the following.

$$\forall X0.((v1_instalq1 X0) \wedge ((v1_abcmiz_1 X0) \wedge (l1_msualg_1 \\ X0))) \Rightarrow (k16_abcmiz_1 X0 = k9_abcmiz_1) \quad (23)$$

Assume the following.

$$\forall X0.((v1_instalq1 X0) \wedge ((v1_abcmiz_1 X0) \wedge (l1_msualg_1 \\ X0))) \Rightarrow (k15_abcmiz_1 X0 = k10_abcmiz_1) \quad (24)$$

Assume the following.

$$\forall X0.((v1_instalq1 X0) \wedge ((v1_abcmiz_1 X0) \wedge (l1_msualg_1 \\ X0))) \Rightarrow (k13_abcmiz_1 X0 = k7_abcmiz_1) \quad (25)$$

Assume the following.

$$\forall X0.((v1_instalq1 X0) \wedge ((v1_abcmiz_1 X0) \wedge (l1_msualg_1 \\ X0))) \Rightarrow (k12_abcmiz_1 X0 = k6_abcmiz_1) \quad (26)$$

Assume the following.

$$\forall X0.(l1_msualg_1 X0) \Rightarrow (((v1_instalq1 X0) \wedge (v1_abcmiz_1 \\ X0)) \Rightarrow ((\neg v2_struct_0 X0) \wedge ((\neg v11_struct_0 X0) \wedge (v1_instalq1 X0)))) \quad (27)$$

Assume the following.

$$\forall X0.\forall X1.(v1_xboole_0 X0) \Rightarrow (\forall X2.(m1_subset_1 \\ X2 (k1_zfmisc_1 (k2_zfmisc_1 X0 X1))) \Rightarrow (v1_xboole_0 X2)) \quad (28)$$

Assume the following.

$$\forall X0.((v1_xboole_0 X0) \wedge (v1_relat_1 X0)) \Rightarrow ((v1_relat_1 \\ X0) \wedge (v3_relat_1 X0)) \quad (29)$$

Assume the following.

$$\forall X0.(v1_xboole_0 X0) \Rightarrow (v1_relat_1 X0) \quad (30)$$

Assume the following.

$$\forall X0.(v1_xboole_0 X0) \Rightarrow (v1_funct_1 X0) \quad (31)$$

Theorem 1

$$\begin{aligned} \forall X0.((v1_instalq1 X0) \wedge ((v1_abcmiz_1 X0) \wedge (l1_msualg_1 \\ X0))) \Rightarrow (((k1_msualg_1 X0 (k15_abcmiz_1 X0) = k3_pre_poly (u1_struct_0 \\ X0) (k13_abcmiz_1 X0)) \wedge ((k2_msualg_1 X0 (k15_abcmiz_1 X0) = k13_abcmiz_1 \\ X0) \wedge ((k1_msualg_1 X0 (k16_abcmiz_1 X0) = k4_pre_poly (u1_struct_0 \\ X0) (k13_abcmiz_1 X0) (k12_abcmiz_1 X0)) \wedge (k2_msualg_1 X0 (k16_abcmiz_1 \\ X0) = k12_abcmiz_1 X0)))) \end{aligned}$$