

t25_uroots

(TMdA2a9JWczVBdSSeHHnBv6X1QCkNqUk7S6)

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Let $v2_struct_0 : \iota \Rightarrow o$ be given. Let $v13_algstr_0 : \iota \Rightarrow o$ be given. Let $v5_vectsp_1 : \iota \Rightarrow o$ be given. Let $v3_rlvect_1 : \iota \Rightarrow o$ be given. Let $v4_rlvect_1 : \iota \Rightarrow o$ be given. Let $l6_algstr_0 : \iota \Rightarrow o$ 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 $k5_numbers : \iota$ be given. Let $u1_struct_0 : \iota \Rightarrow \iota$ be given. Let $v1_algseq_1 : \iota \Rightarrow \iota \Rightarrow o$ 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 $k14_polynom3 : \iota \Rightarrow \iota$ be given. Let $k3_normsp_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k5_algstr_0 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k5_vfunct_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k4_algstr_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k4_ordinal1 : \iota$ be given. Let $v1_finset_1 : \iota \Rightarrow o$ be given. Let $v1_xbool_0 : \iota \Rightarrow o$ be given. Let $l2_algstr_0 : \iota \Rightarrow o$ be given. Let $v1_partfun1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $l5_algstr_0 : \iota \Rightarrow o$ be given. Let $v36_algstr_0 : \iota \Rightarrow o$ be given. Let $k2_normsp_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_algstr_0 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k6_algstr_0 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k11_polynom3 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k4_struct_0 : \iota \Rightarrow \iota$ be given. Let $k9_polynom3 : \iota \Rightarrow \iota$ be given. Let $k5_struct_0 : \iota \Rightarrow \iota$ be given. Let $k10_polynom3 : \iota \Rightarrow \iota$ be given. Assume the following.

$$\begin{aligned}
 & \forall X0. ((\neg v2_struct_0 X0) \wedge ((v13_algstr_0 X0) \wedge ((v5_vectsp_1 \\
 & X0) \wedge ((v3_rlvect_1 X0) \wedge ((v4_rlvect_1 X0) \wedge (l6_algstr_0 X0)))))) \Rightarrow \\
 & (\forall X1. ((v1_funct_1 X1) \wedge ((v1_funct_2 X1 k5_numbers (u1_struct_0 \\
 & X0)) \wedge ((v1_algseq_1 X1 X0) \wedge (m1_subset_1 X1 (k1_zfmisc_1 (k2_zfmisc_1 \\
 & k5_numbers (u1_struct_0 X0))))))) \Rightarrow (\forall X2. (m1_subset_1 \\
 & X2 (u1_struct_0 (k14_polynom3 X0))) \Rightarrow ((X1 = X2) \Rightarrow (k5_vfunct_1 k5_numbers \\
 & X0 X1 = k4_algstr_0 (k14_polynom3 X0) X2))))
 \end{aligned} \tag{1}$$

Assume the following.

$$k5_numbers = k4_ordinal1 \tag{2}$$

Assume the following.

$$\neg v1_finset_1 k4_ordinal1 \tag{3}$$

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.\forall X2.((\neg v1_xboole_0 X0)\wedge(((\neg v2_struct_0 \\ & X1)\wedge(l2_algstr_0 X1))\wedge((v1_funct_1 X2)\wedge((v1_funct_2 X2 X0 (u1_struct_0 \\ & X1))\wedge(m1_subset_1 X2 (k1_zfmisc_1 (k2_zfmisc_1 X0 (u1_struct_0 \\ & X1))))))))\Rightarrow((v1_funct_1 (k5_vfunct_1 X0 X1 X2))\wedge(v1_partfun1 \\ & (k5_vfunct_1 X0 X1 X2) X0)) \end{aligned} \quad (4)$$

Assume the following.

$$\forall X0.(l6_algstr_0 X0)\Rightarrow((l2_algstr_0 X0)\wedge(l5_algstr_0 X0)) \quad (5)$$

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.\forall X2.((\neg v1_xboole_0 X0)\wedge(((\neg v2_struct_0 \\ & X1)\wedge(l2_algstr_0 X1))\wedge((v1_funct_1 X2)\wedge(m1_subset_1 X2 (k1_zfmisc_1 \\ & (k2_zfmisc_1 X0 (u1_struct_0 X1))))))))\Rightarrow((v1_funct_1 (k5_vfunct_1 \\ & X0 X1 X2))\wedge(m1_subset_1 (k5_vfunct_1 X0 X1 X2) (k1_zfmisc_1 (k2_zfmisc_1 \\ & X0 (u1_struct_0 X1)))))) \end{aligned} \quad (6)$$

Assume the following.

$$\forall X0.\forall X1.((l2_algstr_0 X0)\wedge(m1_subset_1 X1 (u1_struct_0 X0)))\Rightarrow(m1_subset_1 (k4_algstr_0 X0 X1) (u1_struct_0 X0)) \quad (7)$$

Assume the following.

$$\begin{aligned} & \forall X0.((\neg v2_struct_0 X0)\wedge((v13_algstr_0 X0)\wedge((v5_vectsp_1 \\ & X0)\wedge((v3_rlvect_1 X0)\wedge((v4_rlvect_1 X0)\wedge(l6_algstr_0 X0))))))\Rightarrow \\ & ((\neg v2_struct_0 (k14_polynom3 X0))\wedge((v36_algstr_0 (k14_polynom3 \\ & X0))\wedge(l6_algstr_0 (k14_polynom3 X0)))) \end{aligned} \quad (8)$$

Assume the following.

$$\begin{aligned} & \forall X0.((\neg v2_struct_0 X0)\wedge(l2_algstr_0 X0))\Rightarrow(\forall X1. \\ & ((v1_funct_1 X1)\wedge((v1_funct_2 X1 k5_numbers (u1_struct_0 X0))\wedge \\ & (m1_subset_1 X1 (k1_zfmisc_1 (k2_zfmisc_1 k5_numbers (u1_struct_0 \\ & X0))))))\Rightarrow(\forall X2.((v1_funct_1 X2)\wedge((v1_funct_2 X2 k5_numbers \\ & (u1_struct_0 X0))\wedge(m1_subset_1 X2 (k1_zfmisc_1 (k2_zfmisc_1 \\ & k5_numbers (u1_struct_0 X0))))))\Rightarrow(k3_normsp_1 X0 X1 X2 = k2_normsp_1 \\ & X0 X1 (k5_vfunct_1 k5_numbers X0 X2)))) \end{aligned} \quad (9)$$

Assume the following.

$$\begin{aligned} & \forall X0.(l2_algstr_0 X0)\Rightarrow(\forall X1.(m1_subset_1 X1 (u1_struct_0 \\ & X0))\Rightarrow(\forall X2.(m1_subset_1 X2 (u1_struct_0 X0))\Rightarrow(k5_algstr_0 \\ & X0 X1 X2 = k1_algstr_0 X0 X1 (k4_algstr_0 X0 X2)))) \end{aligned} \quad (10)$$

Assume the following.

$$\begin{aligned}
& \forall X0.((\neg v2_struct_0 X0) \wedge ((v13_algstr_0 X0) \wedge ((v5_vectsp_1 \\
& X0) \wedge ((v3_rlvect_1 X0) \wedge ((v4_rlvect_1 X0) \wedge (l6_algstr_0 X0)))))) \Rightarrow \\
& (\forall X1.((\neg v2_struct_0 X1) \wedge ((v36_algstr_0 X1) \wedge (l6_algstr_0 \\
& X1)))) \Rightarrow ((X1 = k14_polynom3 X0) \Leftrightarrow ((\forall X2.(X2 \in u1_struct_0 X1) \Leftrightarrow \\
& ((v1_funct_1 X2) \wedge ((v1_funct_2 X2 k5_numbers (u1_struct_0 X0)) \wedge \\
& ((v1_algseq_1 X2 X0) \wedge (m1_subset_1 X2 (k1_zfmisc_1 (k2_zfmisc_1 \\
& k5_numbers (u1_struct_0 X0)))))))))) \wedge ((\forall X2.(m1_subset_1 \\
& X2 (u1_struct_0 X1)) \Rightarrow (\forall X3.(m1_subset_1 X3 (u1_struct_0 \\
& X1)) \Rightarrow (\forall X4.((v1_funct_1 X4) \wedge ((v1_funct_2 X4 k5_numbers \\
& (u1_struct_0 X0)) \wedge (m1_subset_1 X4 (k1_zfmisc_1 (k2_zfmisc_1 \\
& k5_numbers (u1_struct_0 X0)))))) \Rightarrow (\forall X5.((v1_funct_1 X5) \wedge \\
& ((v1_funct_2 X5 k5_numbers (u1_struct_0 X0)) \wedge (m1_subset_1 X5 \\
& (k1_zfmisc_1 (k2_zfmisc_1 k5_numbers (u1_struct_0 X0)))))) \Rightarrow \\
& (((X2 = X4) \wedge (X3 = X5)) \Rightarrow (k1_algstr_0 X1 X2 X3 = k2_normsp_1 X0 X4 X5)))))) \wedge \\
& ((\forall X2.(m1_subset_1 X2 (u1_struct_0 X1)) \Rightarrow (\forall X3.(\\
& m1_subset_1 X3 (u1_struct_0 X1)) \Rightarrow (\forall X4.((v1_funct_1 X4) \wedge \\
& ((v1_funct_2 X4 k5_numbers (u1_struct_0 X0)) \wedge (m1_subset_1 X4 \\
& (k1_zfmisc_1 (k2_zfmisc_1 k5_numbers (u1_struct_0 X0)))))) \Rightarrow \\
& (\forall X5.((v1_funct_1 X5) \wedge ((v1_funct_2 X5 k5_numbers (u1_struct_0 \\
& X0)) \wedge (m1_subset_1 X5 (k1_zfmisc_1 (k2_zfmisc_1 k5_numbers (u1_struct_0 \\
& X0)))))) \Rightarrow (((X2 = X4) \wedge (X3 = X5)) \Rightarrow (k6_algstr_0 X1 X2 X3 = k11_polynom3 \\
& X0 X4 X5)))))) \wedge ((k4_struct_0 X1 = k9_polynom3 X0) \wedge (k5_struct_0 \\
& X1 = k10_polynom3 X0))))))
\end{aligned} \tag{11}$$

Assume the following.

$$\begin{aligned}
& \forall X0. \forall X1. \forall X2. (m1_subset_1 X2 (k1_zfmisc_1 \\
& (k2_zfmisc_1 X0 X1))) \Rightarrow ((v1_partfun1 X2 X0) \Rightarrow (v1_funct_2 X2 X0 X1))
\end{aligned} \tag{12}$$

Assume the following.

$$\forall X0. (v1_xboole_0 X0) \Rightarrow (v1_finset_1 X0) \tag{13}$$

Theorem 1

$$\begin{aligned}
& \forall X0.((\neg v2_struct_0 X0) \wedge ((v13_algstr_0 X0) \wedge ((v5_vectsp_1 \\
& X0) \wedge ((v3_rlvect_1 X0) \wedge ((v4_rlvect_1 X0) \wedge (l6_algstr_0 X0)))))) \Rightarrow \\
& (\forall X1.((v1_funct_1 X1) \wedge ((v1_funct_2 X1 k5_numbers (u1_struct_0 \\
& X0)) \wedge ((v1_algseq_1 X1 X0) \wedge (m1_subset_1 X1 (k1_zfmisc_1 (k2_zfmisc_1 \\
& k5_numbers (u1_struct_0 X0)))))) \Rightarrow (\forall X2.((v1_funct_1 \\
& X2) \wedge ((v1_funct_2 X2 k5_numbers (u1_struct_0 X0)) \wedge ((v1_algseq_1 \\
& X2 X0) \wedge (m1_subset_1 X2 (k1_zfmisc_1 (k2_zfmisc_1 k5_numbers (\\
& u1_struct_0 X0)))))) \Rightarrow (\forall X3.(m1_subset_1 X3 (u1_struct_0 \\
& (k14_polynom3 X0)) \Rightarrow (\forall X4.(m1_subset_1 X4 (u1_struct_0 \\
& (k14_polynom3 X0)) \Rightarrow (((X1 = X3) \wedge (X2 = X4)) \Rightarrow (k3_normsp_1 X0 X1 X2 = \\
& k5_algstr_0 (k14_polynom3 X0) X3 X4))))))
\end{aligned}$$