

t31_polynom1

(TMKasyvXzXCD3hvytcJSwWiq9BU8AXWmFqv)

October 27, 2020

Let $v3_ordinal1 : \iota \Rightarrow o$ be given. Let $v2_struct_0 : \iota \Rightarrow o$ be given. Let $v7_struct_0 : \iota \Rightarrow o$ be given. Let $v13_algstr_0 : \iota \Rightarrow o$ be given. Let $v3_group_1 : \iota \Rightarrow o$ be given. Let $v3_vectsp_1 : \iota \Rightarrow o$ be given. Let $v5_vectsp_1 : \iota \Rightarrow o$ be given. Let $v2_rlvect_1 : \iota \Rightarrow o$ 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 $k5_struct_0 : \iota \Rightarrow \iota$ be given. Let $k11_polynom1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k8_polynom1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v36_algstr_0 : \iota \Rightarrow o$ be given. Let $u1_struct_0 : \iota \Rightarrow \iota$ 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 $k15_pre_poly : \iota \Rightarrow \iota$ be given. Let $v1_polynom1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ 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 $k1_algstr_0 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k4_polynom1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k6_algstr_0 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k9_polynom1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k4_struct_0 : \iota \Rightarrow \iota$ be given. Let $k7_polynom1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. ((v3_ordinal1 X0) \wedge ((\neg v7_struct_0 X1) \wedge \\ & ((v13_algstr_0 X1) \wedge ((v3_vectsp_1 X1) \wedge ((v5_vectsp_1 X1) \wedge ((v3_rlvect_1 \\ & X1) \wedge ((v4_rlvect_1 X1) \wedge (l6_algstr_0 X1))))))) \Rightarrow ((\neg v2_struct_0 \\ & (k11_polynom1 X0 X1)) \wedge ((v36_algstr_0 (k11_polynom1 X0 X1)) \wedge \\ & l6_algstr_0 (k11_polynom1 X0 X1)))) \end{aligned} \tag{1}$$

Assume the following.

$$\begin{aligned}
& \forall X0.(v3_ordinal1\ X0) \Rightarrow (\forall X1.((\neg v7_struct_0\ X1) \wedge \\
& ((v13_algstr_0\ X1) \wedge ((v3_vectsp_1\ X1) \wedge ((v5_vectsp_1\ X1) \wedge ((v3_rlvect_1 \\
& X1) \wedge ((v4_rlvect_1\ X1) \wedge (l6_algstr_0\ X1)))))) \Rightarrow (\forall X2.(\\
& (\neg v2_struct_0\ X2) \wedge ((v36_algstr_0\ X2) \wedge (l6_algstr_0\ X2))) \Rightarrow ((\\
& X2 = k11_polynom1\ X0\ X1) \Leftrightarrow ((\forall X3.(X3 \in u1_struct_0\ X2) \Leftrightarrow ((v1_funct_1 \\
& X3) \wedge ((v1_funct_2\ X3\ (k15_pre_poly\ X0)\ (u1_struct_0\ X1)) \wedge ((v1_polynom1 \\
& X3\ (k15_pre_poly\ X0)\ X1) \wedge (m1_subset_1\ X3\ (k1_zfmisc_1\ (k2_zfmisc_1 \\
& (k15_pre_poly\ X0)\ (u1_struct_0\ X1)))))) \wedge ((\forall X3.(m1_subset_1 \\
& X3\ (u1_struct_0\ X2)) \Rightarrow (\forall X4.(m1_subset_1\ X4\ (u1_struct_0 \\
& X2)) \Rightarrow (\forall X5.((v1_funct_1\ X5) \wedge ((v1_funct_2\ X5\ (k15_pre_poly \\
& X0)\ (u1_struct_0\ X1)) \wedge ((v1_polynom1\ X5\ (k15_pre_poly\ X0)\ X1) \wedge \\
& (m1_subset_1\ X5\ (k1_zfmisc_1\ (k2_zfmisc_1\ (k15_pre_poly\ X0)\ (\\
& u1_struct_0\ X1)))))) \Rightarrow (\forall X6.((v1_funct_1\ X6) \wedge ((v1_funct_2 \\
& X6\ (k15_pre_poly\ X0)\ (u1_struct_0\ X1)) \wedge ((v1_polynom1\ X6\ (k15_pre_poly \\
& X0)\ X1) \wedge (m1_subset_1\ X6\ (k1_zfmisc_1\ (k2_zfmisc_1\ (k15_pre_poly \\
& X0)\ (u1_struct_0\ X1)))))) \Rightarrow (((X3 = X5) \wedge (X4 = X6)) \Rightarrow (k1_algstr_0 \\
& X2\ X3\ X4 = k4_polynom1\ X0\ X1\ X5\ X6)))) \wedge ((\forall X3.(m1_subset_1 \\
& X3\ (u1_struct_0\ X2)) \Rightarrow (\forall X4.(m1_subset_1\ X4\ (u1_struct_0 \\
& X2)) \Rightarrow (\forall X5.((v1_funct_1\ X5) \wedge ((v1_funct_2\ X5\ (k15_pre_poly \\
& X0)\ (u1_struct_0\ X1)) \wedge ((v1_polynom1\ X5\ (k15_pre_poly\ X0)\ X1) \wedge \\
& (m1_subset_1\ X5\ (k1_zfmisc_1\ (k2_zfmisc_1\ (k15_pre_poly\ X0)\ (\\
& u1_struct_0\ X1)))))) \Rightarrow (\forall X6.((v1_funct_1\ X6) \wedge ((v1_funct_2 \\
& X6\ (k15_pre_poly\ X0)\ (u1_struct_0\ X1)) \wedge ((v1_polynom1\ X6\ (k15_pre_poly \\
& X0)\ X1) \wedge (m1_subset_1\ X6\ (k1_zfmisc_1\ (k2_zfmisc_1\ (k15_pre_poly \\
& X0)\ (u1_struct_0\ X1)))))) \Rightarrow (((X3 = X5) \wedge (X4 = X6)) \Rightarrow (k6_algstr_0 \\
& X2\ X3\ X4 = k9_polynom1\ X0\ X1\ X5\ X6)))) \wedge ((k4_struct_0\ X2 = k7_polynom1 \\
& X0\ X1) \wedge (k5_struct_0\ X2 = k8_polynom1\ X0\ X1))))))
\end{aligned} \tag{2}$$

Theorem 1

$$\begin{aligned}
& \forall X0.(v3_ordinal1\ X0) \Rightarrow (\forall X1.((\neg v2_struct_0\ X1) \wedge \\
& ((\neg v7_struct_0\ X1) \wedge ((v13_algstr_0\ X1) \wedge ((v3_group_1\ X1) \wedge ((v3_vectsp_1 \\
& X1) \wedge ((v5_vectsp_1\ X1) \wedge ((v2_rlvect_1\ X1) \wedge ((v3_rlvect_1\ X1) \wedge \\
& ((v4_rlvect_1\ X1) \wedge (l6_algstr_0\ X1))))))))) \Rightarrow (k5_struct_0\ (\\
& k11_polynom1\ X0\ X1) = k8_polynom1\ X0\ X1)
\end{aligned}$$