

t9_polynom4
(TMY8DH23uG1Sw5P5mNSu6SjkSE59iyV7DVC)

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Let $v2_struct_0 : \iota \Rightarrow o$ be given. Let $v13_algstr_0 : \iota \Rightarrow o$ be given. Let $v3_rlvect_1 : \iota \Rightarrow o$ be given. Let $v4_rlvect_1 : \iota \Rightarrow o$ be given. Let $l2_algstr_0 : \iota \Rightarrow o$ be given. Let $v1_funct_1 : \iota \Rightarrow o$ be given. Let $v1_funct_2 : \iota \Rightarrow \iota \Rightarrow o$ 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 $r1_xxreal_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_algseq_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k3_normsp_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k5_vfunct_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2_normsp_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k4_ordinal1 : \iota$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $v3_ordinal1 : \iota \Rightarrow o$ be given. Let $v1_partfun1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Assume the following.

$$\begin{aligned} \forall X0. ((\neg v2_struct_0 X0) \wedge ((v13_algstr_0 X0) \wedge ((v3_rlvect_1 \\ X0) \wedge ((v4_rlvect_1 X0) \wedge (l2_algstr_0 X0)))))) \Rightarrow (\forall X1. ((v1_funct_1 \\ X1) \wedge ((v1_funct_2 X1 k5_numbers (u1_struct_0 X0)) \wedge ((v1_algseq_1 \\ X1 X0) \wedge (m1_subset_1 X1 (k1_zfmisc_1 (k2_zfmisc_1 k5_numbers (\\ u1_struct_0 X0))))))) \Rightarrow (k1_algseq_1 X0 (k5_vfunct_1 k5_numbers \\ X0 X1) = k1_algseq_1 X0 X1)) \end{aligned} \quad (1)$$

Assume the following.

$$\begin{aligned} \forall X0. ((\neg v2_struct_0 X0) \wedge ((v4_rlvect_1 X0) \wedge (l2_algstr_0 \\ X0))) \Rightarrow (\forall X1. ((v1_funct_1 X1) \wedge ((v1_funct_2 X1 k5_numbers \\ (u1_struct_0 X0)) \wedge ((v1_algseq_1 X1 X0) \wedge (m1_subset_1 X1 (k1_zfmisc_1 \\ (k2_zfmisc_1 k5_numbers (u1_struct_0 X0))))))) \Rightarrow (\forall X2. \\ ((v1_funct_1 X2) \wedge ((v1_funct_2 X2 k5_numbers (u1_struct_0 X0)) \wedge \\ ((v1_algseq_1 X2 X0) \wedge (m1_subset_1 X2 (k1_zfmisc_1 (k2_zfmisc_1 \\ k5_numbers (u1_struct_0 X0))))))) \Rightarrow (\forall X3. (m1_subset_1 \\ X3 k5_numbers) \Rightarrow (((r1_xxreal_0 (k1_algseq_1 X0 X1) X3) \wedge (r1_xxreal_0 \\ (k1_algseq_1 X0 X2) X3)) \Rightarrow (r1_xxreal_0 (k1_algseq_1 X0 (k2_normsp_1 \\ X0 X1 X2) X3)))))) \end{aligned} \quad (2)$$

Assume the following.

$$k5_numbers = k4_ordinal1 \quad (3)$$

Assume the following.

$$(\neg v1_xboole_0 \ k4_ordinal1) \wedge (v3_ordinal1 \ k4_ordinal1) \quad (4)$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. \forall X2. ((\neg v1_xboole_0 \ X0) \wedge (((\neg v2_struct_0 \\ & X1) \wedge (l2_algstr_0 \ X1)) \wedge ((v1_funct_1 \ X2) \wedge ((v1_funct_2 \ X2 \ X0 \ (u1_struct_0 \\ & X1)) \wedge (m1_subset_1 \ X2 \ (k1_zfmisc_1 \ (k2_zfmisc_1 \ X0 \ (u1_struct_0 \\ & X1)))))) \Rightarrow ((v1_funct_1 \ (k5_vfunct_1 \ X0 \ X1 \ X2)) \wedge (v1_partfun1 \\ & (k5_vfunct_1 \ X0 \ X1 \ X2) \ X0)) \end{aligned} \quad (5)$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. (((\neg v2_struct_0 \ X0) \wedge ((v13_algstr_0 \ X0) \wedge \\ & ((v3_rlvect_1 \ X0) \wedge ((v4_rlvect_1 \ X0) \wedge (l2_algstr_0 \ X0)))) \wedge (\\ & (v1_funct_1 \ X1) \wedge ((v1_funct_2 \ X1 \ k5_numbers \ (u1_struct_0 \ X0)) \wedge \\ & ((v1_algseq_1 \ X1 \ X0) \wedge (m1_subset_1 \ X1 \ (k1_zfmisc_1 \ (k2_zfmisc_1 \\ & k5_numbers \ (u1_struct_0 \ X0)))))) \Rightarrow ((v1_funct_1 \ (k5_vfunct_1 \\ & k5_numbers \ X0 \ X1)) \wedge (v1_algseq_1 \ (k5_vfunct_1 \ k5_numbers \ X0 \ X1) \\ & X0)) \end{aligned} \quad (6)$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. \forall X2. ((\neg v1_xboole_0 \ X0) \wedge (((\neg v2_struct_0 \\ & X1) \wedge (l2_algstr_0 \ X1)) \wedge ((v1_funct_1 \ X2) \wedge (m1_subset_1 \ X2 \ (k1_zfmisc_1 \\ & (k2_zfmisc_1 \ X0 \ (u1_struct_0 \ X1)))))) \Rightarrow ((v1_funct_1 \ (k5_vfunct_1 \\ & X0 \ X1 \ X2)) \wedge (m1_subset_1 \ (k5_vfunct_1 \ X0 \ X1 \ X2) \ (k1_zfmisc_1 \ (k2_zfmisc_1 \\ & X0 \ (u1_struct_0 \ X1)))))) \end{aligned} \quad (7)$$

Assume the following.

$$\begin{aligned} & \forall X0. ((\neg v2_struct_0 \ X0) \wedge (l2_algstr_0 \ X0)) \Rightarrow (\forall X1. \\ & ((v1_funct_1 \ X1) \wedge ((v1_funct_2 \ X1 \ k5_numbers \ (u1_struct_0 \ X0)) \wedge \\ & (m1_subset_1 \ X1 \ (k1_zfmisc_1 \ (k2_zfmisc_1 \ k5_numbers \ (u1_struct_0 \\ & X0)))))) \Rightarrow (\forall X2. ((v1_funct_1 \ X2) \wedge ((v1_funct_2 \ X2 \ k5_numbers \\ & (u1_struct_0 \ X0)) \wedge (m1_subset_1 \ X2 \ (k1_zfmisc_1 \ (k2_zfmisc_1 \\ & k5_numbers \ (u1_struct_0 \ X0)))))) \Rightarrow (k3_normsp_1 \ X0 \ X1 \ X2 = k2_normsp_1 \\ & X0 \ X1 \ (k5_vfunct_1 \ k5_numbers \ X0 \ X2))) \end{aligned} \quad (8)$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. \forall X2. (m1_subset_1 \ X2 \ (k1_zfmisc_1 \\ & (k2_zfmisc_1 \ X0 \ X1))) \Rightarrow ((v1_partfun1 \ X2 \ X0) \Rightarrow (v1_funct_2 \ X2 \ X0 \ X1)) \end{aligned} \quad (9)$$

Theorem 1

$$\begin{aligned} & \forall X0.((\neg v2_struct_0 X0) \wedge ((v13_algstr_0 X0) \wedge ((v3_rlvect_1 \\ & X0) \wedge ((v4_rlvect_1 X0) \wedge (l2_algstr_0 X0)))))) \Rightarrow (\forall X1.((v1_funct_1 \\ & X1) \wedge ((v1_funct_2 X1 k5_numbers (u1_struct_0 X0)) \wedge ((v1_algseq_1 \\ & X1 X0) \wedge (m1_subset_1 X1 (k1_zfmisc_1 (k2_zfmisc_1 k5_numbers (\\ & u1_struct_0 X0))))))) \Rightarrow (\forall X2.((v1_funct_1 X2) \wedge ((v1_funct_2 \\ & X2 k5_numbers (u1_struct_0 X0)) \wedge ((v1_algseq_1 X2 X0) \wedge (m1_subset_1 \\ & X2 (k1_zfmisc_1 (k2_zfmisc_1 k5_numbers (u1_struct_0 X0))))))) \Rightarrow \\ & (\forall X3.(m1_subset_1 X3 k5_numbers) \Rightarrow (((r1_xxreal_0 (k1_algseq_1 \\ & X0 X1) X3) \wedge (r1_xxreal_0 (k1_algseq_1 X0 X2) X3)) \Rightarrow (r1_xxreal_0 \\ & (k1_algseq_1 X0 (k3_normsp_1 X0 X1 X2)) X3)))) \end{aligned}$$