

t23_polynom7 (TMXMHHJcbhnHXMWstuG- GTZg2K1J2hMU2J8a)

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Let $v2_struct_0 : \iota \Rightarrow o$ be given. Let $l2_struct_0 : \iota \Rightarrow o$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $u1_struct_0 : \iota \Rightarrow \iota$ be given. Let $k2_polynom7 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k4_polynom7 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k16_pre_poly : \iota \Rightarrow \iota$ be given. Let $k3_polynom7 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1_relat_1 : \iota \Rightarrow o$ be given. Let $v4_relat_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v1_funct_1 : \iota \Rightarrow o$ be given. Let $v1_partfun1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v4_valued_0 : \iota \Rightarrow o$ be given. Let $v2_pre_poly : \iota \Rightarrow o$ be given. Let $k1_polynom7 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ 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 $v4_polynom7 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $k2_zfmisc_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k3_polynom1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k7_polynom1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v3_polynom7 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k15_funct_7 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k8_funcop_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k5_numbers : \iota$ be given. Let $k6_numbers : \iota$ be given. Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. ((\neg v2_struct_0 X1) \wedge (l2_struct_0 X1)) \Rightarrow \\ & (\forall X2. (m1_subset_1 X2 (u1_struct_0 X1)) \Rightarrow (\forall X3. ((\\ & v1_relat_1 X3) \wedge ((v4_relat_1 X3 X0) \wedge ((v1_funct_1 X3) \wedge ((v1_partfun1 \\ & X3 X0) \wedge ((v4_valued_0 X3) \wedge (v2_pre_poly X3)))))) \Rightarrow (k3_polynom7 \\ & X0 X1 (k1_polynom7 X0 X1 X2 X3) = X2))) \end{aligned} \tag{1}$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. ((\neg v2_struct_0 X1) \wedge (l2_struct_0 X1)) \Rightarrow \\ & (\forall X2. ((v1_funct_1 X2) \wedge ((v1_funct_2 X2 (k15_pre_poly X0) \\ & (u1_struct_0 X1)) \wedge ((v4_polynom7 X2 X0 X1) \wedge (m1_subset_1 X2 (k1_zfmisc_1 \\ & (k2_zfmisc_1 (k15_pre_poly X0) (u1_struct_0 X1)))))) \Rightarrow ((k2_polynom7 \\ & X0 X1 X2 = k16_pre_poly X0) \wedge (k3_polynom7 X0 X1 X2 = k3_polynom1 X0 \\ & X1 X2 (k16_pre_poly X0)))) \end{aligned} \tag{2}$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. \forall X2. (((\neg v2_struct_0 X1) \wedge (l2_struct_0 \\ & X1)) \wedge (m1_subset_1 X2 (u1_struct_0 X1))) \Rightarrow ((v1_funct_1 (k4_polynom7 \\ & X0 X1 X2)) \wedge ((v1_funct_2 (k4_polynom7 X0 X1 X2) (k15_pre_poly X0) \\ & (u1_struct_0 X1)) \wedge (v4_polynom7 (k4_polynom7 X0 X1 X2) X0 X1))) \end{aligned} \quad (3)$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. ((\neg v2_struct_0 X1) \wedge (l2_struct_0 X1)) \Rightarrow \\ & ((v1_funct_1 (k7_polynom1 X0 X1)) \wedge ((v1_funct_2 (k7_polynom1 \\ & X0 X1) (k15_pre_poly X0) (u1_struct_0 X1)) \wedge (v4_polynom7 (k7_polynom1 \\ & X0 X1) X0 X1))) \end{aligned} \quad (4)$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. ((\neg v2_struct_0 X1) \wedge (l2_struct_0 X1)) \Rightarrow \\ & ((v1_funct_1 (k7_polynom1 X0 X1)) \wedge ((v1_funct_2 (k7_polynom1 \\ & X0 X1) (k15_pre_poly X0) (u1_struct_0 X1)) \wedge (m1_subset_1 (k7_polynom1 \\ & X0 X1) (k1_zfmisc_1 (k2_zfmisc_1 (k15_pre_poly X0) (u1_struct_0 \\ & X1)))))) \end{aligned} \quad (5)$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. \forall X2. (((\neg v2_struct_0 X1) \wedge (l2_struct_0 \\ & X1)) \wedge (m1_subset_1 X2 (u1_struct_0 X1))) \Rightarrow ((v1_funct_1 (k4_polynom7 \\ & X0 X1 X2)) \wedge ((v1_funct_2 (k4_polynom7 X0 X1 X2) (k15_pre_poly X0) \\ & (u1_struct_0 X1)) \wedge (m1_subset_1 (k4_polynom7 X0 X1 X2) (k1_zfmisc_1 \\ & (k2_zfmisc_1 (k15_pre_poly X0) (u1_struct_0 X1)))))) \end{aligned} \quad (6)$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. \forall X2. (((\neg v2_struct_0 X1) \wedge (l2_struct_0 \\ & X1)) \wedge ((v1_funct_1 X2) \wedge ((v1_funct_2 X2 (k15_pre_poly X0) (u1_struct_0 \\ & X1)) \wedge ((v3_polynom7 X2 X0 X1) \wedge (m1_subset_1 X2 (k1_zfmisc_1 (k2_zfmisc_1 \\ & (k15_pre_poly X0) (u1_struct_0 X1)))))))) \Rightarrow ((v1_relat_1 (k2_polynom7 \\ & X0 X1 X2)) \wedge ((v4_relat_1 (k2_polynom7 X0 X1 X2) X0) \wedge ((v1_funct_1 \\ & (k2_polynom7 X0 X1 X2)) \wedge ((v1_partfun1 (k2_polynom7 X0 X1 X2) X0) \wedge \\ & ((v4_valued_0 (k2_polynom7 X0 X1 X2)) \wedge (v2_pre_poly (k2_polynom7 \\ & X0 X1 X2)))))) \end{aligned} \quad (7)$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. ((\neg v2_struct_0 X1) \wedge (l2_struct_0 X1)) \Rightarrow \\ & (\forall X2. (m1_subset_1 X2 (u1_struct_0 X1)) \Rightarrow (k4_polynom7 X0 \\ & X1 X2 = k15_funct_7 (k15_pre_poly X0) (u1_struct_0 X1) (k7_polynom1 \\ & X0 X1) (k16_pre_poly X0) X2)) \end{aligned} \quad (8)$$

Assume the following.

$$\begin{aligned}
& \forall X0.\forall X1.((\neg v2_struct_0 X1)\wedge(l2_struct_0 X1))\Rightarrow \\
& (\forall X2.(m1_subset_1 X2 (u1_struct_0 X1))\Rightarrow(\forall X3.((\\
& v1_relat_1 X3)\wedge((v4_relat_1 X3 X0)\wedge((v1_funct_1 X3)\wedge((v1_partfun1 \\
& X3 X0)\wedge((v4_valued_0 X3)\wedge(v2_pre_poly X3))))))\Rightarrow(k1_polynom7 \\
& X0 X1 X2 X3 = k15_funct_7 (k15_pre_poly X0) (u1_struct_0 X1) (k7_polynom1 \\
& X0 X1) X3 X2)))
\end{aligned} \tag{9}$$

Assume the following.

$$\forall X0.k16_pre_poly X0 = k8_funcop_1 k5_numbers X0 k6_numbers \tag{10}$$

Assume the following.

$$\begin{aligned}
& \forall X0.\forall X1.((\neg v2_struct_0 X1)\wedge(l2_struct_0 X1))\Rightarrow \\
& (\forall X2.(m1_subset_1 X2 (k1_zfmisc_1 (k2_zfmisc_1 (k15_pre_poly \\
& X0) (u1_struct_0 X1))))\Rightarrow(((v1_funct_1 X2)\wedge((v1_funct_2 X2 (k15_pre_poly \\
& X0) (u1_struct_0 X1))\wedge(v4_polynom7 X2 X0 X1)))\Rightarrow((v1_funct_1 X2)\wedge \\
& ((v1_funct_2 X2 (k15_pre_poly X0) (u1_struct_0 X1))\wedge(v3_polynom7 \\
& X2 X0 X1))))))
\end{aligned} \tag{11}$$

Theorem 1

$$\begin{aligned}
& \forall X0.\forall X1.((\neg v2_struct_0 X1)\wedge(l2_struct_0 X1))\Rightarrow \\
& (\forall X2.(m1_subset_1 X2 (u1_struct_0 X1))\Rightarrow((k2_polynom7 \\
& X0 X1 (k4_polynom7 X0 X1 X2) = k16_pre_poly X0)\wedge(k3_polynom7 X0 X1 \\
& (k4_polynom7 X0 X1 X2) = X2)))
\end{aligned}$$