

t15_polynom7

(TMPH5k1xWjbCTPHDVHPr5qV8isBbCxJTxq7)

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Let $v2_struct_0 : \iota \Rightarrow o$ be given. Let $l2_struct_0 : \iota \Rightarrow o$ be given. Let $v1_funct_1 : \iota \Rightarrow o$ be given. Let $v1_funct_2 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k15_pre_poly : \iota \Rightarrow \iota$ be given. Let $u1_struct_0 : \iota \Rightarrow \iota$ be given. Let $v4_polynom7 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ 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 $k2_polynom1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_xboole_0 : \iota$ be given. Let $k6_domain_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k16_pre_poly : \iota \Rightarrow \iota$ be given. Let $r2_funct_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k7_polynom1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. ((\neg v2_struct_0 X1) \wedge (l2_struct_0 X1)) \Rightarrow \\ & (\forall X2. ((v1_funct_1 X2) \wedge ((v1_funct_2 X2 (k15_pre_poly X0) \\ & (u1_struct_0 X1)) \wedge (m1_subset_1 X2 (k1_zfmisc_1 (k2_zfmisc_1 \\ & (k15_pre_poly X0) (u1_struct_0 X1)))))) \Rightarrow ((r2_funct_2 (k15_pre_poly \\ & X0) (u1_struct_0 X1) X2 (k7_polynom1 X0 X1)) \Leftrightarrow (k2_polynom1 (k15_pre_poly \\ & X0) X1 X2 = k1_xboole_0))) \end{aligned} \tag{1}$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. ((\neg v2_struct_0 X1) \wedge (l2_struct_0 X1)) \Rightarrow \\ & (\forall X2. ((v1_funct_1 X2) \wedge ((v1_funct_2 X2 (k15_pre_poly X0) \\ & (u1_struct_0 X1)) \wedge (m1_subset_1 X2 (k1_zfmisc_1 (k2_zfmisc_1 \\ & (k15_pre_poly X0) (u1_struct_0 X1)))))) \Rightarrow (((v1_funct_1 X2) \wedge \\ & (v1_funct_2 X2 (k15_pre_poly X0) (u1_struct_0 X1)) \wedge (v4_polynom7 \\ & X2 X0 X1) \wedge (m1_subset_1 X2 (k1_zfmisc_1 (k2_zfmisc_1 (k15_pre_poly \\ & X0) (u1_struct_0 X1)))))) \Leftrightarrow ((r2_funct_2 (k15_pre_poly X0) (u1_struct_0 \\ & X1) X2 (k7_polynom1 X0 X1)) \vee (k2_polynom1 (k15_pre_poly X0) X1 X2 = \\ & k6_domain_1 (k15_pre_poly X0) (k16_pre_poly X0)))) \end{aligned} \tag{2}$$

Theorem 1

$$\begin{aligned} & \forall X0. \forall X1. ((\neg v2_struct_0 X1) \wedge (l2_struct_0 X1)) \Rightarrow \\ & (\forall X2. ((v1_funct_1 X2) \wedge ((v1_funct_2 X2 (k15_pre_poly X0) \\ & (u1_struct_0 X1)) \wedge ((v4_polynom7 X2 X0 X1) \wedge (m1_subset_1 X2 (k1_zfmisc_1 \\ & (k2_zfmisc_1 (k15_pre_poly X0) (u1_struct_0 X1))))))) \Rightarrow ((k2_polynom1 \\ & (k15_pre_poly X0) X1 X2 = k1_xboole_0) \vee (k2_polynom1 (k15_pre_poly \\ & X0) X1 X2 = k6_domain_1 (k15_pre_poly X0) (k16_pre_poly X0)))) \end{aligned}$$