

t37_polyform

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Let $v2_polyform : \iota \Rightarrow o$ be given. Let $v3_polyform : \iota \Rightarrow o$ be given. Let $v4_polyform : \iota \Rightarrow o$ be given. Let $l1_polyform : \iota \Rightarrow o$ be given. Let $v1_int_1 : \iota \Rightarrow o$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $u1_struct_0 : \iota \Rightarrow \iota$ be given. Let $k17_polyform : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k8_polyform : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k3_bspace : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k3_rlvect_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2_bspace : \iota$ be given. Let $k7_bspace : \iota \Rightarrow \iota$ be given. Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. (m1_subset_1 X1 (u1_struct_0 (k7_bspace \\ & X0))) \Rightarrow (\forall X2. (m1_subset_1 X2 (u1_struct_0 (k7_bspace X0))) \Rightarrow \\ & (\forall X3. (m1_subset_1 X3 X0) \Rightarrow (k3_bspace (k3_rlvect_1 (k7_bspace \\ & X0) X1 X2) X3 = k3_rlvect_1 k2_bspace (k3_bspace X1 X3) (k3_bspace \\ & X2 X3)))) \end{aligned} \tag{1}$$

Assume the following.

$$\begin{aligned} & \forall X0. ((v2_polyform X0) \wedge ((v3_polyform X0) \wedge ((v4_polyform \\ & X0) \wedge (l1_polyform X0)))) \Rightarrow (\forall X1. (v1_int_1 X1) \Rightarrow (k17_polyform \\ & X0 X1 = k7_bspace (k8_polyform X0 X1))) \end{aligned} \tag{2}$$

Theorem 1

$$\begin{aligned} & \forall X0. ((v2_polyform X0) \wedge ((v3_polyform X0) \wedge ((v4_polyform \\ & X0) \wedge (l1_polyform X0)))) \Rightarrow (\forall X1. (v1_int_1 X1) \Rightarrow (\forall X2. \\ & (m1_subset_1 X2 (u1_struct_0 (k17_polyform X0 X1))) \Rightarrow (\forall X3. \\ & (m1_subset_1 X3 (u1_struct_0 (k17_polyform X0 X1))) \Rightarrow (\forall X4. \\ & (m1_subset_1 X4 (k8_polyform X0 X1) \Rightarrow (k3_bspace (k3_rlvect_1 \\ & (k17_polyform X0 X1) X2 X3) X4 = k3_rlvect_1 k2_bspace (k3_bspace \\ & X2 X4) (k3_bspace X3 X4)))))) \end{aligned}$$