

t71_fvaluat1 (TMa- Ditbdaf4aMGYZejPDVfVnu5hzkSMEvRM)

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Let $v7_ordinal1 : \iota \Rightarrow o$ be given. Let $v2_struct_0 : \iota \Rightarrow o$ be given. Let $v6_struct_0 : \iota \Rightarrow o$ be given. Let $v13_algstr_0 : \iota \Rightarrow o$ be given. Let $v3_group_1 : \iota \Rightarrow o$ be given. Let $v5_vectsp_1 : \iota \Rightarrow o$ 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 $v1_realset2 : \iota \Rightarrow o$ be given. Let $l6_algstr_0 : \iota \Rightarrow o$ be given. Let $m1_fvaluat1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v3_fvaluat1 : \iota \Rightarrow o$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $u1_struct_0 : \iota \Rightarrow \iota$ be given. Let $k7_fvaluat1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k4_struct_0 : \iota \Rightarrow \iota$ be given. Let $k1_binop_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k4_group_1 : \iota \Rightarrow \iota$ be given. Let $v1_int_1 : \iota \Rightarrow o$ be given. Let $k3_fvaluat1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\begin{aligned} \forall X0. (&(\neg v2_struct_0 X0) \wedge ((\neg v6_struct_0 X0) \wedge ((v13_algstr_0 \\ &X0) \wedge ((v3_group_1 X0) \wedge ((v5_vectsp_1 X0) \wedge ((v2_rlvect_1 X0) \wedge \\ &(v3_rlvect_1 X0) \wedge ((v4_rlvect_1 X0) \wedge ((v1_realset2 X0) \wedge (l6_algstr_0 \\ &X0)))))))))) \Rightarrow (\forall X1. (m1_fvaluat1 X1 X0) \Rightarrow ((v3_fvaluat1 \\ &X0) \Rightarrow (\forall X2. (m1_subset_1 X2 (u1_struct_0 (k7_fvaluat1 X0 \\ &X1))) \Rightarrow (m1_subset_1 X2 (u1_struct_0 X0)))))) \end{aligned} \quad (1)$$

Assume the following.

$$\begin{aligned} \forall X0. (v1_int_1 X0) \Rightarrow (\forall X1. (&(\neg v2_struct_0 X1) \wedge ((\neg \\ &v6_struct_0 X1) \wedge ((v13_algstr_0 X1) \wedge ((v3_group_1 X1) \wedge ((v5_vectsp_1 \\ &X1) \wedge ((v2_rlvect_1 X1) \wedge ((v3_rlvect_1 X1) \wedge ((v4_rlvect_1 X1) \wedge \\ &((v1_realset2 X1) \wedge (l6_algstr_0 X1)))))))))) \Rightarrow (\forall X2. (m1_subset_1 \\ &X2 (u1_struct_0 X1)) \Rightarrow (\neg (X2 \neq k4_struct_0 X1) \wedge (k3_fvaluat1 X1 X2 \\ &X0 = k4_struct_0 X1)))) \end{aligned} \quad (2)$$

Assume the following.

$$\begin{aligned} \forall X0. (&(\neg v2_struct_0 X0) \wedge (l6_algstr_0 X0)) \Rightarrow (\forall X1. \\ &(m1_subset_1 X1 (u1_struct_0 X0)) \Rightarrow (\forall X2. (v7_ordinal1 X2) \Rightarrow \\ &(k3_fvaluat1 X0 X1 X2 = k1_binop_1 (k4_group_1 X0) X1 X2))) \end{aligned} \quad (3)$$

Assume the following.

$$\forall X0. (v7_ordinal1 X0) \Rightarrow (v1_int_1 X0) \quad (4)$$

Theorem 1

$$\begin{aligned} \forall X0.(v7_ordinal1\ X0) \Rightarrow (\forall X1.((\neg v2_struct_0\ X1) \wedge \\ ((\neg v6_struct_0\ X1) \wedge (v13_algstr_0\ X1) \wedge (v3_group_1\ X1) \wedge (v5_vectsp_1 \\ X1) \wedge (v2_rlvect_1\ X1) \wedge (v3_rlvect_1\ X1) \wedge (v4_rlvect_1\ X1) \wedge \\ ((v1_realset2\ X1) \wedge (l6_algstr_0\ X1)))))) \Rightarrow (\forall X2.(m1_fvaluat1 \\ X2\ X1) \Rightarrow (v3_fvaluat1\ X1) \Rightarrow (\forall X3.(m1_subset_1\ X3\ (u1_struct_0 \\ (k7_fvaluat1\ X1\ X2))) \Rightarrow (\neg(X3 \neq k4_struct_0\ X1) \wedge (k1_binop_1\ (k4_group_1 \\ X1)\ X3\ X0 = k4_struct_0\ X1)))))) \end{aligned}$$