

t12_rusub_2

(TMctSRCca9dEi58DnooV3WHjBhyDTXj32qL)

October 27, 2020

Let $v2_struct_0 : \iota \Rightarrow o$ be given. Let $v13_algstr_0 : \iota \Rightarrow o$ 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 $v5_rlvect_1 : \iota \Rightarrow o$ be given. Let $v6_rlvect_1 : \iota \Rightarrow o$ be given. Let $v7_rlvect_1 : \iota \Rightarrow o$ be given. Let $v8_rlvect_1 : \iota \Rightarrow o$ be given. Let $v1_bhspl_1 : \iota \Rightarrow o$ be given. Let $v2_bhspl_1 : \iota \Rightarrow o$ be given. Let $l1_bhspl_1 : \iota \Rightarrow o$ be given. Let $k1_rusub_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2_rusub_1 : \iota \Rightarrow \iota$ be given. Let $m1_rusub_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $g1_bhspl_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $u1_struct_0 : \iota \Rightarrow \iota$ be given. Let $u2_struct_0 : \iota \Rightarrow \iota$ be given. Let $u1_algstr_0 : \iota \Rightarrow \iota$ be given. Let $u1_rlvect_1 : \iota \Rightarrow \iota$ be given. Let $u1_bhspl_1 : \iota \Rightarrow \iota$ be given. Assume the following.

$$\begin{aligned} & \forall X0. ((\neg v2_struct_0 X0) \wedge (v13_algstr_0 X0) \wedge (v2_rlvect_1 X0) \wedge (v3_rlvect_1 X0) \wedge (v4_rlvect_1 X0) \wedge (v5_rlvect_1 X0) \wedge \\ & ((v6_rlvect_1 X0) \wedge (v7_rlvect_1 X0) \wedge (v8_rlvect_1 X0) \wedge (v2_bhspl_1 X0) \wedge (l1_bhspl_1 X0)))))) \Rightarrow (\forall X1. (m1_rusub_1 X1 X0) \Rightarrow \\ & ((k1_rusub_2 X0 (k2_rusub_1 X0) X1 = g1_bhspl_1 (u1_struct_0 X0) (u2_struct_0 X0) (u1_algstr_0 X0) (u1_rlvect_1 X0) (u1_bhspl_1 X0)) \wedge \\ & (k1_rusub_2 X0 X1 (k2_rusub_1 X0) = g1_bhspl_1 (u1_struct_0 X0) (u2_struct_0 X0) (u1_algstr_0 X0) (u1_rlvect_1 X0) (u1_bhspl_1 X0)))))) \end{aligned} \quad (1)$$

Assume the following.

$$\begin{aligned} & \forall X0. ((\neg v2_struct_0 X0) \wedge (v13_algstr_0 X0) \wedge (v2_rlvect_1 X0) \wedge (v3_rlvect_1 X0) \wedge (v4_rlvect_1 X0) \wedge (v5_rlvect_1 X0) \wedge \\ & ((v6_rlvect_1 X0) \wedge (v7_rlvect_1 X0) \wedge (v8_rlvect_1 X0) \wedge (v2_bhspl_1 X0) \wedge (l1_bhspl_1 X0)))))) \Rightarrow ((v1_bhspl_1 (k2_rusub_1 X0)) \wedge \\ & (m1_rusub_1 (k2_rusub_1 X0) X0)) \end{aligned} \quad (2)$$

Assume the following.

$$\begin{aligned} & \forall X0. (l1_bhspl_1 X0) \Rightarrow ((v1_bhspl_1 X0) \Rightarrow (X0 = g1_bhspl_1 (u1_struct_0 X0) (u2_struct_0 X0) (u1_algstr_0 X0) (u1_rlvect_1 X0) (u1_bhspl_1 X0))) \end{aligned} \quad (3)$$

Theorem 1

$$\begin{aligned} \forall X0. (&(\neg v2_struct_0 X0) \wedge (v13_algstr_0 X0) \wedge (v2_rlvect_1 \\ &X0) \wedge (v3_rlvect_1 X0) \wedge (v4_rlvect_1 X0) \wedge (v5_rlvect_1 X0) \wedge \\ &((v6_rlvect_1 X0) \wedge (v7_rlvect_1 X0) \wedge (v8_rlvect_1 X0) \wedge (v1_bhsp_1 \\ &X0) \wedge (v2_bhsp_1 X0) \wedge (l1_bhsp_1 X0)))))) \Rightarrow (k1_rusub_2 \\ &X0 (k2_rusub_1 X0) (k2_rusub_1 X0) = X0) \end{aligned}$$