

t3_hurwitz

(TMUPS7EvAj9NNHTauMBKLMn739GUnaVURMq)

October 27, 2020

Let $v2_struct_0 : \iota \Rightarrow o$ be given. Let $v3_group_1 : \iota \Rightarrow o$ be given. Let $v4_vectsp_1 : \iota \Rightarrow o$ be given. Let $l4_algstr_0 : \iota \Rightarrow o$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $u1_struct_0 : \iota \Rightarrow \iota$ be given. Let $k5_numbers : \iota$ be given. Let $k6_algstr_0 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2_binop_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k4_group_1 : \iota \Rightarrow \iota$ be given. Let $k2_nat_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1_group_1 : \iota \Rightarrow o$ be given. Let $l3_algstr_0 : \iota \Rightarrow o$ be given. Let $l3_struct_0 : \iota \Rightarrow o$ be given. Assume the following.

$$\begin{aligned} \forall X0. (&(\neg v2_struct_0 X0) \wedge ((v1_group_1 X0) \wedge ((v3_group_1 \\ &X0) \wedge (l3_algstr_0 X0)))) \Rightarrow (\forall X1. (m1_subset_1 X1 (u1_struct_0 \\ &X0)) \Rightarrow (\forall X2. (m1_subset_1 X2 k5_numbers) \Rightarrow (\forall X3. (m1_subset_1 \\ &X3 k5_numbers) \Rightarrow (k2_binop_1 (u1_struct_0 X0) k5_numbers (u1_struct_0 \\ &X0) (k4_group_1 X0) X1 (k2_nat_1 X2 X3) = k6_algstr_0 X0 (k2_binop_1 \\ &(u1_struct_0 X0) k5_numbers (u1_struct_0 X0) (k4_group_1 X0) X1 \\ &X2) (k2_binop_1 (u1_struct_0 X0) k5_numbers (u1_struct_0 X0) (\\ &k4_group_1 X0) X1 X3)))))) \end{aligned} \tag{1}$$

Assume the following.

$$\forall X0. (l4_algstr_0 X0) \Rightarrow ((l3_struct_0 X0) \wedge (l3_algstr_0 X0)) \tag{2}$$

Assume the following.

$$\forall X0. (l4_algstr_0 X0) \Rightarrow (((\neg v2_struct_0 X0) \wedge (v4_vectsp_1 X0)) \Rightarrow ((\neg v2_struct_0 X0) \wedge (v1_group_1 X0))) \tag{3}$$

Theorem 1

$$\begin{aligned} \forall X0. (&(\neg v2_struct_0 X0) \wedge ((v3_group_1 X0) \wedge ((v4_vectsp_1 \\ &X0) \wedge (l4_algstr_0 X0)))) \Rightarrow (\forall X1. (m1_subset_1 X1 (u1_struct_0 \\ &X0)) \Rightarrow (\forall X2. (m1_subset_1 X2 k5_numbers) \Rightarrow (\forall X3. (m1_subset_1 \\ &X3 k5_numbers) \Rightarrow (k6_algstr_0 X0 (k2_binop_1 (u1_struct_0 X0) k5_numbers \\ &(u1_struct_0 X0) (k4_group_1 X0) X1 X2) (k2_binop_1 (u1_struct_0 \\ &X0) k5_numbers (u1_struct_0 X0) (k4_group_1 X0) X1 X3) = k2_binop_1 \\ &(u1_struct_0 X0) k5_numbers (u1_struct_0 X0) (k4_group_1 X0) X1 \\ &(k2_nat_1 X2 X3)))))) \end{aligned}$$