

t26_grouppp_1
(TMVEez77k4FQsipjiJwfiZQmKi7jj9MFiXc)

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Let $v2_struct_0 : \iota \Rightarrow o$ be given. Let $v8_struct_0 : \iota \Rightarrow o$ be given. Let $v2_group_1 : \iota \Rightarrow o$ be given. Let $v3_group_1 : \iota \Rightarrow o$ be given. Let $l3_algstr_0 : \iota \Rightarrow o$ be given. Let $v7_ordinal1 : \iota \Rightarrow o$ be given. Let $v1_int_2 : \iota \Rightarrow o$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $u1_struct_0 : \iota \Rightarrow \iota$ be given. Let $v2_group_10 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k2_grouppp_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $np_2 : \iota$ be given. Let $k6_group_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_newton : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v5_group_1 : \iota \Rightarrow o$ be given. Let $v1_gr_cy_1 : \iota \Rightarrow o$ be given. Let $k7_group_1 : \iota \Rightarrow \iota$ be given. Let $l1_struct_0 : \iota \Rightarrow o$ be given. Let $k7_struct_0 : \iota \Rightarrow \iota$ be given. Let $k1_grouppp_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\begin{aligned} \forall X0.((\neg v2_struct_0 X0) \wedge ((v8_struct_0 X0) \wedge ((v2_group_1 \\ X0) \wedge ((v3_group_1 X0) \wedge (l3_algstr_0 X0)))))) \Rightarrow ((v1_gr_cy_1 X0) \Leftrightarrow \\ (\exists X1.(m1_subset_1 X1 (u1_struct_0 X0)) \wedge (k6_group_1 X0 \\ X1 = k7_group_1 X0))) \end{aligned} \quad (1)$$

Assume the following.

$$\forall X0.((v8_struct_0 X0) \wedge (l1_struct_0 X0)) \Rightarrow (k7_group_1 \\ X0 = k7_struct_0 X0) \quad (2)$$

Assume the following.

$$\begin{aligned} \forall X0. \forall X1.(((v7_ordinal1 X0) \wedge (v1_int_2 X0)) \wedge ((\neg \\ v2_struct_0 X1) \wedge ((v2_group_1 X1) \wedge ((v3_group_1 X1) \wedge (l3_algstr_0 \\ X1)))))) \Rightarrow (k2_grouppp_1 X0 X1 = k1_grouppp_1 X0 X1) \end{aligned} \quad (3)$$

Assume the following.

$$\forall X0.(l3_algstr_0 X0) \Rightarrow (l1_struct_0 X0) \quad (4)$$

Assume the following.

$$\begin{aligned} \forall X0.((v7_ordinal1 X0) \wedge (v1_int_2 X0)) \Rightarrow (\forall X1.((\neg \\ v2_struct_0 X1) \wedge ((v2_group_1 X1) \wedge ((v3_group_1 X1) \wedge (l3_algstr_0 \\ X1)))))) \Rightarrow ((v2_group_10 X1 X0) \Rightarrow (\forall X2.(v7_ordinal1 X2) \Rightarrow ((\\ X2 = k1_grouppp_1 X0 X1) \Leftrightarrow (k7_struct_0 X1 = k1_newton X0 X2)))) \end{aligned} \quad (5)$$

Assume the following.

$$\begin{aligned} \forall X0.(v7_ordinal1\ X0) \Rightarrow (\forall X1.((\neg v2_struct_0\ X1) \wedge \\ ((v2_group_1\ X1) \wedge ((v3_group_1\ X1) \wedge (l3_algstr_0\ X1)))) \Rightarrow ((v2_group_10 \\ X1\ X0) \Leftrightarrow (\exists X2.(v7_ordinal1\ X2) \wedge (k7_struct_0\ X1 = k1_newton \\ X0\ X2)))) \end{aligned} \quad (6)$$

Assume the following.

$$\begin{aligned} \forall X0.(l3_algstr_0\ X0) \Rightarrow (((\neg v2_struct_0\ X0) \wedge ((v2_group_1 \\ X0) \wedge ((v3_group_1\ X0) \wedge (v1_gr_cy_1\ X0)))) \Rightarrow ((\neg v2_struct_0\ X0) \wedge \\ ((v2_group_1\ X0) \wedge ((v3_group_1\ X0) \wedge (v5_group_1\ X0)))) \end{aligned} \quad (7)$$

Theorem 1

$$\begin{aligned} \forall X0.((\neg v2_struct_0\ X0) \wedge ((v8_struct_0\ X0) \wedge ((v2_group_1 \\ X0) \wedge ((v3_group_1\ X0) \wedge (l3_algstr_0\ X0)))) \Rightarrow (\forall X1.((v7_ordinal1 \\ X1) \wedge (v1_int_2\ X1)) \Rightarrow (\forall X2.(m1_subset_1\ X2\ (u1_struct_0 \\ X0)) \Rightarrow (((v2_group_10\ X0\ X1) \wedge ((k2_groupp_1\ X1\ X0 = np_2) \wedge (k6_group_1 \\ X0\ X2 = k1_newton\ X1\ np_2))) \Rightarrow (v5_group_1\ X0)))) \end{aligned}$$