

t73_group_5

(TMdRUoiDZpJfhAskotJZN9njWjpvbmGWsgg)

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Let $v2_struct_0 : \iota \Rightarrow o$ 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 $r1_struct_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k9_group_5 : \iota \Rightarrow \iota$ be given. Let $m2_finseq_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $u1_struct_0 : \iota \Rightarrow \iota$ be given. Let $k4_numbers : \iota$ be given. Let $k3_finseq_1 : \iota \Rightarrow \iota$ be given. Let $r1_tarski : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k10_xtuple_0 : \iota \Rightarrow \iota$ be given. Let $k6_group_5 : \iota \Rightarrow \iota$ be given. Let $k3_group_4 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k4_group_4 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $m1_group_2 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k8_group_5 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k5_group_5 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v15_algstr_0 : \iota \Rightarrow o$ be given. Let $k7_group_2 : \iota \Rightarrow \iota$ be given. Assume the following.

$$\begin{aligned}
& \forall X0. \forall X1. ((\neg v2_struct_0 X1) \wedge ((v2_group_1 X1) \wedge (\\
& \quad (v3_group_1 X1) \wedge (l3_algstr_0 X1)))) \Rightarrow (\forall X2. (m1_group_2 \\
& \quad X2 X1) \Rightarrow (\forall X3. (m1_group_2 X3 X1) \Rightarrow ((r1_struct_0 (k8_group_5 \\
& \quad X1 X2 X3) X0) \Leftrightarrow (\exists X4. (m2_finseq_1 X4 (u1_struct_0 X1)) \wedge (\exists X5. \\
& \quad (m2_finseq_1 X5 k4_numbers) \wedge ((k3_finseq_1 X4 = k3_finseq_1 X5) \wedge \\
& \quad ((r1_tarski (k10_xtuple_0 X4) (k5_group_5 X1 X2 X3)) \wedge (X0 = k3_group_4 \\
& \quad X1 (k4_group_4 X1 X5 X4))))))))))
\end{aligned} \tag{1}$$

Assume the following.

$$\begin{aligned}
& \forall X0. ((\neg v2_struct_0 X0) \wedge ((v2_group_1 X0) \wedge ((v3_group_1 \\
& \quad X0) \wedge (l3_algstr_0 X0)))) \Rightarrow ((v15_algstr_0 (k7_group_2 X0)) \wedge (m1_group_2 \\
& \quad (k7_group_2 X0) X0))
\end{aligned} \tag{2}$$

Assume the following.

$$\begin{aligned}
& \forall X0. ((\neg v2_struct_0 X0) \wedge ((v2_group_1 X0) \wedge ((v3_group_1 \\
& \quad X0) \wedge (l3_algstr_0 X0)))) \Rightarrow (k9_group_5 X0 = k8_group_5 X0 (k7_group_2 \\
& \quad X0) (k7_group_2 X0))
\end{aligned} \tag{3}$$

Assume the following.

$$\forall X0.((\neg v2_struct_0 X0) \wedge ((v2_group_1 X0) \wedge ((v3_group_1 X0) \wedge (l3_algstr_0 X0)))) \Rightarrow (k6_group_5 X0 = k5_group_5 X0 (k7_group_2 X0) (k7_group_2 X0)) \quad (4)$$

Theorem 1

$$\forall X0. \forall X1. ((\neg v2_struct_0 X1) \wedge ((v2_group_1 X1) \wedge ((v3_group_1 X1) \wedge (l3_algstr_0 X1)))) \Rightarrow ((r1_struct_0 (k9_group_5 X1) X0) \Leftrightarrow (\exists X2. (m2_finseq_1 X2 (u1_struct_0 X1)) \wedge (\exists X3. (m2_finseq_1 X3 k4_numbers) \wedge ((k3_finseq_1 X2 = k3_finseq_1 X3) \wedge ((r1_tarski (k10_xtuple_0 X2) (k6_group_5 X1)) \wedge (X0 = k3_group_4 X1 (k4_group_4 X1 X3 X2))))))))$$