

t72_group_2
(TMY18ia6q99YU7sLFHTobpZco8191h3tx5n)

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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 $m1_group_2 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $r1_xxreal_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k7_group_1 : \iota \Rightarrow \iota$ be given. Let $r1_ordinal1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k7_struct_0 : \iota \Rightarrow \iota$ be given. Let $v7_ordinal1 : \iota \Rightarrow o$ be given. Let $l1_struct_0 : \iota \Rightarrow o$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0.((\neg v2_struct_0 X0) \wedge ((v2_group_1 X0) \wedge ((v3_group_1 X0) \wedge (l3_algstr_0 X0)))) \Rightarrow (\forall X1.(m1_group_2 X1 X0) \Rightarrow (r1_ordinal1 (k7_struct_0 X1) (k7_struct_0 X0))) \quad (1)$$

Assume the following.

$$\forall X0.(v7_ordinal1 X0) \Rightarrow (\forall X1.(v7_ordinal1 X1) \Rightarrow ((r1_xxreal_0 X0 X1) \Leftrightarrow (r1_ordinal1 X0 X1))) \quad (2)$$

Assume the following.

$$\forall X0.((\neg v2_struct_0 X0) \wedge ((v2_group_1 X0) \wedge (l3_algstr_0 X0))) \Rightarrow (\forall X1.(m1_group_2 X1 X0) \Rightarrow ((v8_struct_0 X0) \Rightarrow (v8_struct_0 X1))) \quad (3)$$

Assume the following.

$$\forall X0.((v8_struct_0 X0) \wedge (l1_struct_0 X0)) \Rightarrow (k7_group_1 X0 = k7_struct_0 X0) \quad (4)$$

Assume the following.

$$\forall X0.((\neg v2_struct_0 X0) \wedge ((v8_struct_0 X0) \wedge (l1_struct_0 X0))) \Rightarrow ((\neg v1_xboole_0 (k7_struct_0 X0)) \wedge (v7_ordinal1 (k7_struct_0 X0))) \quad (5)$$

Assume the following.

$$\forall X0.((\neg v2_struct_0 X0) \wedge ((v2_group_1 X0) \wedge (l3_algstr_0 X0))) \Rightarrow (\forall X1.(m1_group_2 X1 X0) \Rightarrow ((\neg v2_struct_0 X1) \wedge ((v2_group_1 X1) \wedge (l3_algstr_0 X1)))) \quad (6)$$

Assume the following.

$$\forall X0.(l3_algstr_0 X0)\Rightarrow(l1_struct_0 X0) \quad (7)$$

Theorem 1

$$\begin{aligned} \forall X0.((\neg v2_struct_0 X0)\wedge((v8_struct_0 X0)\wedge((v2_group_1 \\ X0)\wedge((v3_group_1 X0)\wedge(l3_algstr_0 X0))))))\Rightarrow(\forall X1.(m1_group_2 \\ X1 X0)\Rightarrow(r1_xxreal_0 (k7_group_1 X1) (k7_group_1 X0))) \end{aligned}$$