

t36_group_2 (TM- bqQU2ctiLtVfu67dwhViyRWE9UGyDPV9S)

October 27, 2020

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 $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $u1_struct_0 : \iota \Rightarrow \iota$ be given. Let $k5_group_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2_subset_1 : \iota \Rightarrow \iota$ be given. Let $k4_group_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $r1_tarski : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_xboole_0 : \iota$ be given. Let $k2_group_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $k6_domain_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_tarski : \iota \Rightarrow \iota$ be given. Let $l1_struct_0 : \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0. \forall X1. (m1_subset_1 X0 (k1_zfmisc_1 X1)) \Leftrightarrow (r1_tarski X0 X1) \quad (1)$$

Assume the following.

$$\begin{aligned} & \forall X0. ((\neg v2_struct_0 X0) \wedge ((v2_group_1 X0) \wedge ((v3_group_1 \\ & X0) \wedge (l3_algstr_0 X0)))) \Rightarrow (\forall X1. (m1_subset_1 X1 (k1_zfmisc_1 \\ & (u1_struct_0 X0))) \Rightarrow ((X1 \neq k1_xboole_0) \Rightarrow ((k2_group_2 X0 (k2_subset_1 \\ & (u1_struct_0 X0)) X1 = u1_struct_0 X0) \wedge (k2_group_2 X0 X1 (k2_subset_1 \\ & (u1_struct_0 X0)) = u1_struct_0 X0)))) \end{aligned} \quad (2)$$

Assume the following.

$$\forall X0. \forall X1. r1_tarski X0 X0 \quad (3)$$

Assume the following.

$$\forall X0. \forall X1. ((\neg v1_xboole_0 X0) \wedge (m1_subset_1 X1 X0)) \Rightarrow (k6_domain_1 X0 X1 = k1_tarski X1) \quad (4)$$

Assume the following.

$$\forall X0. \neg v1_xboole_0 (k1_tarski X0) \quad (5)$$

Assume the following.

$$\forall X0. ((\neg v2_struct_0 X0) \wedge (l1_struct_0 X0)) \Rightarrow (\neg v1_xboole_0 (u1_struct_0 X0)) \quad (6)$$

Assume the following.

$$v1_xboole_0 \ k1_xboole_0 \tag{7}$$

Assume the following.

$$\forall X0.(l3_algstr_0 \ X0) \Rightarrow (l1_struct_0 \ X0) \tag{8}$$

Assume the following.

$$\begin{aligned} \forall X0.\forall X1.((\neg v1_xboole_0 \ X0) \wedge (m1_subset_1 \ X1 \ X0)) \Rightarrow \\ (m1_subset_1 \ (k6_domain_1 \ X0 \ X1) \ (k1_zfmisc_1 \ X0)) \end{aligned} \tag{9}$$

Assume the following.

$$\begin{aligned} \forall X0.((\neg v2_struct_0 \ X0) \wedge (l3_algstr_0 \ X0)) \Rightarrow (\forall X1. \\ (m1_subset_1 \ X1 \ (u1_struct_0 \ X0)) \Rightarrow (\forall X2.(m1_subset_1 \ X2 \\ (k1_zfmisc_1 \ (u1_struct_0 \ X0))) \Rightarrow (k5_group_2 \ X0 \ X1 \ X2 = k2_group_2 \\ X0 \ X2 \ (k6_domain_1 \ (u1_struct_0 \ X0) \ X1)))) \end{aligned} \tag{10}$$

Assume the following.

$$\forall X0.k2_subset_1 \ X0 = X0 \tag{11}$$

Assume the following.

$$\begin{aligned} \forall X0.((\neg v2_struct_0 \ X0) \wedge (l3_algstr_0 \ X0)) \Rightarrow (\forall X1. \\ (m1_subset_1 \ X1 \ (u1_struct_0 \ X0)) \Rightarrow (\forall X2.(m1_subset_1 \ X2 \\ (k1_zfmisc_1 \ (u1_struct_0 \ X0))) \Rightarrow (k4_group_2 \ X0 \ X1 \ X2 = k2_group_2 \\ X0 \ (k6_domain_1 \ (u1_struct_0 \ X0) \ X1) \ X2))) \end{aligned} \tag{12}$$

Theorem 1

$$\begin{aligned} \forall X0.((\neg v2_struct_0 \ X0) \wedge ((v2_group_1 \ X0) \wedge ((v3_group_1 \\ X0) \wedge (l3_algstr_0 \ X0)))) \Rightarrow (\forall X1.(m1_subset_1 \ X1 \ (u1_struct_0 \\ X0)) \Rightarrow ((k5_group_2 \ X0 \ X1 \ (k2_subset_1 \ (u1_struct_0 \ X0)) = u1_struct_0 \\ X0) \wedge (k4_group_2 \ X0 \ X1 \ (k2_subset_1 \ (u1_struct_0 \ X0)) = u1_struct_0 \\ X0))) \end{aligned}$$