

t19_waybel24

(TMJM5RQG3U9VqE3CXDEz7AjtRJDLNkoxVVe)

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Let $v2_struct_0 : \iota \Rightarrow o$ be given. Let $l1_orders_2 : \iota \Rightarrow o$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $u1_struct_0 : \iota \Rightarrow \iota$ be given. Let $k6_yellow_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1_funct_1 : \iota \Rightarrow o$ be given. Let $v1_funct_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $k2_zfmisc_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $r1_tarski : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_xboole_0 : \iota$ be given. Let $k1_funct_2 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $k5_yellow_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k7_funcop_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0. \forall X1. \forall X2. (r1_tarski X0 X1) \Rightarrow ((r1_tarski (k2_zfmisc_1 X0 X2) (k2_zfmisc_1 X1 X2)) \wedge (r1_tarski (k2_zfmisc_1 X2 X0) (k2_zfmisc_1 X2 X1))) \quad (1)$$

Assume the following.

$$\forall X0. \forall X1. \forall X2. ((v1_funct_1 X2) \wedge ((v1_funct_2 X2 X0 X1) \wedge (m1_subset_1 X2 (k1_zfmisc_1 (k2_zfmisc_1 X0 X1)))) \Rightarrow (((X1 = k1_xboole_0) \Rightarrow (X0 = k1_xboole_0)) \Rightarrow (X2 \in k1_funct_2 X0 X1))) \quad (2)$$

Assume the following.

$$\forall X0. \forall X1. \neg (v1_xboole_0 X0) \wedge ((X0 \neq X1) \wedge (v1_xboole_0 X1)) \quad (3)$$

Assume the following.

$$\forall X0. \forall X1. \forall X2. \neg (X0 \in X1) \wedge ((m1_subset_1 X1 (k1_zfmisc_1 X2)) \wedge (v1_xboole_0 X2)) \quad (4)$$

Assume the following.

$$\forall X0. (r1_tarski X0 k1_xboole_0) \Rightarrow (X0 = k1_xboole_0) \quad (5)$$

Assume the following.

$$\forall X0. \forall X1. (l1_orders_2 X1) \Rightarrow (k1_funct_2 X0 (u1_struct_0 X1) = u1_struct_0 (k6_yellow_1 X0 X1)) \quad (6)$$

Assume the following.

$$\forall X0.\forall X1.(X0 \in X1) \Rightarrow (m1_subset_1 X0 X1) \quad (7)$$

Assume the following.

$$\forall X0.\forall X1.((r1_tarski X0 (k2_zfmisc_1 X0 X1)) \vee (r1_tarski X0 (k2_zfmisc_1 X1 X0))) \Rightarrow (X0 = k1_xboole_0) \quad (8)$$

Assume the following.

$$\exists X0.v1_xboole_0 X0 \quad (9)$$

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.((\neg v2_struct_0 X1) \wedge (l1_orders_2 X1)) \Rightarrow \\ & (\forall X2.(m1_subset_1 X2 (u1_struct_0 (k6_yellow_1 X0 X1))) \Rightarrow \\ & ((X2 \in u1_struct_0 (k5_yellow_1 X0 (k7_funcop_1 X0 X1))) \wedge ((v1_funct_1 \\ & X2) \wedge ((v1_funct_2 X2 X0 (u1_struct_0 X1)) \wedge (m1_subset_1 X2 (k1_zfmisc_1 \\ & (k2_zfmisc_1 X0 (u1_struct_0 X1)))))))))) \end{aligned} \quad (10)$$

Assume the following.

$$\forall X0.\exists X1.m1_subset_1 X1 X0 \quad (11)$$

Assume the following.

$$\forall X0.\forall X1.(r1_tarski X0 X1) \Leftrightarrow (\forall X2.(X2 \in X0) \Rightarrow (X2 \in X1)) \quad (12)$$

Assume the following.

$$\forall X0.(v1_xboole_0 X0) \Leftrightarrow (\forall X1.\neg X1 \in X0) \quad (13)$$

Assume the following.

$$\forall X0.(v1_xboole_0 X0) \Rightarrow (\forall X1.(m1_subset_1 X1 (k1_zfmisc_1 X0)) \Rightarrow (v1_xboole_0 X1)) \quad (14)$$

Theorem 1

$$\begin{aligned} & \forall X0.\forall X1.((\neg v2_struct_0 X1) \wedge (l1_orders_2 X1)) \Rightarrow \\ & (\forall X2.(m1_subset_1 X2 (u1_struct_0 (k6_yellow_1 X0 X1))) \Leftrightarrow \\ & ((v1_funct_1 X2) \wedge ((v1_funct_2 X2 X0 (u1_struct_0 X1)) \wedge (m1_subset_1 \\ & X2 (k1_zfmisc_1 (k2_zfmisc_1 X0 (u1_struct_0 X1))))))) \end{aligned}$$