

l21_waybel18
(TMS95JpygxjFdCAL9aoBJXjBxP7AFhj3RZD)

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Let $v6_pre_topc : \iota \Rightarrow o$ be given. Let $k9_waybel18 : \iota$ be given. Let $r1_tarski : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_tarski : \iota \Rightarrow \iota$ be given. Let $k2_tarski : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $k6_numbers : \iota$ be given. Let $k1_xboole_0 : \iota$ be given. Let $v1_pre_topc : \iota \Rightarrow o$ be given. Let $l1_pre_topc : \iota \Rightarrow o$ be given. Let $u1_struct_0 : \iota \Rightarrow \iota$ be given. Let $np_1 : \iota$ be given. Let $u1_pre_topc : \iota \Rightarrow \iota$ be given. Let $k1_enumset1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v2_struct_0 : \iota \Rightarrow o$ be given. Let $v3_pre_topc : \iota \Rightarrow \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0. \forall X1. r1_tarski (k1_tarski X0) (k2_tarski X0 X1) \quad (1)$$

Assume the following.

$$\forall X0. \forall X1. (m1_subset_1 X0 (k1_zfmisc_1 X1)) \Leftrightarrow (r1_tarski X0 X1) \quad (2)$$

Assume the following.

$$\forall X0. \forall X1. (m1_subset_1 X0 X1) \Rightarrow ((v1_xboole_0 X1) \vee (X0 \in X1)) \quad (3)$$

Assume the following.

$$k6_numbers = k1_xboole_0 \quad (4)$$

Assume the following.

$$\forall X0. \forall X1. \neg v1_xboole_0 (k2_tarski X0 X1) \quad (5)$$

Assume the following.

$$(v1_pre_topc k9_waybel18) \wedge (l1_pre_topc k9_waybel18) \quad (6)$$

Assume the following.

$$\begin{aligned} \forall X0. ((v1_pre_topc X0) \wedge (l1_pre_topc X0)) \Rightarrow ((X0 = k9_waybel18) \Leftrightarrow \\ ((u1_struct_0 X0 = k2_tarski k6_numbers np_1) \wedge (u1_pre_topc X0 = \\ k1_enumset1 k1_xboole_0 (k1_tarski np_1) (k2_tarski k6_numbers \\ np_1)))) \quad (7) \end{aligned}$$

Assume the following.

$$\begin{aligned} \forall X0.(l1_pre_topc\ X0) \Rightarrow ((v6_pre_topc\ X0) \Leftrightarrow ((v2_struct_0 \\ X0) \vee (\forall X1.(m1_subset_1\ X1\ (u1_struct_0\ X0)) \Rightarrow (\forall X2. \\ (m1_subset_1\ X2\ (u1_struct_0\ X0)) \Rightarrow (\neg(X1 \neq X2) \wedge (\forall X3.(m1_subset_1 \\ X3\ (k1_zfmisc_1\ (u1_struct_0\ X0)) \Rightarrow (\neg(v3_pre_topc\ X3\ X0) \wedge (((\\ X1 \in X3) \wedge (\neg X2 \in X3)) \vee ((X2 \in X3) \wedge (\neg X1 \in X3)))))))))) \end{aligned} \quad (8)$$

Assume the following.

$$\begin{aligned} \forall X0.\forall X1.\forall X2.(X2 = k2_tarski\ X0\ X1) \Leftrightarrow (\forall X3. \\ (X3 \in X2) \Leftrightarrow ((X3 = X0) \vee (X3 = X1))) \end{aligned} \quad (9)$$

Assume the following.

$$\begin{aligned} \forall X0.(l1_pre_topc\ X0) \Rightarrow (\forall X1.(m1_subset_1\ X1\ (k1_zfmisc_1 \\ (u1_struct_0\ X0))) \Rightarrow ((v3_pre_topc\ X1\ X0) \Leftrightarrow (X1 \in u1_pre_topc\ X0))) \end{aligned} \quad (10)$$

Assume the following.

$$\begin{aligned} \forall X0.\forall X1.(X1 = k1_tarski\ X0) \Leftrightarrow (\forall X2.(X2 \in X1) \Leftrightarrow \\ (X2 = X0)) \end{aligned} \quad (11)$$

Assume the following.

$$\begin{aligned} \forall X0.\forall X1.\forall X2.\forall X3.(X3 = k1_enumset1 \\ X0\ X1\ X2) \Leftrightarrow (\forall X4.(X4 \in X3) \Leftrightarrow (\neg(X4 \neq X0) \wedge ((X4 \neq X1) \wedge (X4 \neq X2)))) \end{aligned} \quad (12)$$

Assume the following.

$$\forall X0.\forall X1.k2_tarski\ X0\ X1 = k2_tarski\ X1\ X0 \quad (13)$$

Theorem 1 *v6_pre_topc k9_waybel18.*