

t26_topgen_5

(TMJ75xC9ddWnGY5RHeRw4UnMLM5YqBBVvba)

October 27, 2020

Let $v4_pre_topc : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_topgen_5 : \iota$ be given. Let $k3_topgen_5 : \iota$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $u1_struct_0 : \iota \Rightarrow \iota$ be given. Let $l1_pre_topc : \iota \Rightarrow o$ be given. Let $v3_pre_topc : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k3_subset_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $r1_tarski : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k7_subset_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k15_euclid : \iota \Rightarrow \iota$ be given. Let $np_2 : \iota$ be given. Let $k2_topgen_5 : \iota$ be given. Let $k4_xboole_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v2_struct_0 : \iota \Rightarrow o$ be given. Let $v1_pre_topc : \iota \Rightarrow o$ be given. Let $v2_pre_topc : \iota \Rightarrow o$ be given. Assume the following.

$$\begin{aligned} \forall X0.(l1_pre_topc X0) \Rightarrow (\forall X1.(m1_subset_1 X1 (k1_zfmisc_1 \\ (u1_struct_0 X0))) \Rightarrow ((v3_pre_topc X1 X0) \Leftrightarrow (v4_pre_topc (k3_subset_1 \\ (u1_struct_0 X0) X1) X0))) \end{aligned} \tag{1}$$

Assume the following.

$$\forall X0.\forall X1.(m1_subset_1 X0 (k1_zfmisc_1 X1)) \Leftrightarrow (r1_tarski X0 X1) \tag{2}$$

Assume the following.

$$\begin{aligned} (v3_pre_topc (k7_subset_1 (u1_struct_0 (k15_euclid np_2)) k2_topgen_5 \\ k1_topgen_5) k3_topgen_5) \wedge (m1_subset_1 (k7_subset_1 (u1_struct_0 \\ (k15_euclid np_2)) k2_topgen_5 k1_topgen_5) (k1_zfmisc_1 (u1_struct_0 \\ k3_topgen_5))) \end{aligned} \tag{3}$$

Assume the following.

$$r1_tarski k1_topgen_5 k2_topgen_5 \tag{4}$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.(m1_subset_1 X1 (k1_zfmisc_1 X0)) \Rightarrow (k7_subset_1 X0 X1 X2 = k4_xboole_0 X1 X2) \tag{5}$$

Assume the following.

$$u1_struct_0 \ k3_topgen_5 = k2_topgen_5 \quad (6)$$

Assume the following.

$$\forall X0.\forall X1.(m1_subset_1 \ X1 \ (k1_zfmisc_1 \ X0)) \Rightarrow (k3_subset_1 \ X0 \ (k3_subset_1 \ X0 \ X1) = X1) \quad (7)$$

Assume the following.

$$(\neg v2_struct_0 \ k3_topgen_5) \wedge ((v1_pre_topc \ k3_topgen_5) \wedge ((v2_pre_topc \ k3_topgen_5) \wedge (l1_pre_topc \ k3_topgen_5))) \quad (8)$$

Assume the following.

$$m1_subset_1 \ k2_topgen_5 \ (k1_zfmisc_1 \ (u1_struct_0 \ (k15_euclid \ np_2))) \quad (9)$$

Assume the following.

$$\forall X0.\forall X1.(m1_subset_1 \ X1 \ (k1_zfmisc_1 \ X0)) \Rightarrow (k3_subset_1 \ X0 \ X1 = k4_xboole_0 \ X0 \ X1) \quad (10)$$

Theorem 1

$$(v4_pre_topc \ k1_topgen_5 \ k3_topgen_5) \wedge (m1_subset_1 \ k1_topgen_5 \ (k1_zfmisc_1 \ (u1_struct_0 \ k3_topgen_5)))$$