

t18_topgen_2 (TMNBXWibByee- QvCeC21waPtNzqrmzhYzeNC)

October 27, 2020

Let $v2_struct_0 : \iota \Rightarrow o$ be given. Let $v2_pre_topc : \iota \Rightarrow o$ be given. Let $l1_pre_topc : \iota \Rightarrow o$ be given. Let $v1_tops_2 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v1_cantor_1 : \iota \Rightarrow \iota \Rightarrow o$ 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 $r1_tarski : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_card_1 : \iota \Rightarrow \iota$ be given. Let $k2_waybel23 : \iota \Rightarrow \iota$ be given. Let $v1_topgen_2 : \iota \Rightarrow o$ be given. Assume the following.

$$\begin{aligned} & \forall X0.((\neg v2_struct_0 X0) \wedge ((v2_pre_topc X0) \wedge ((v1_topgen_2 \\ & X0) \wedge (l1_pre_topc X0)))) \Rightarrow (\forall X1.((v1_tops_2 X1 X0) \wedge ((v1_cantor_1 \\ & X1 X0) \wedge (m1_subset_1 X1 (k1_zfmisc_1 (k1_zfmisc_1 (u1_struct_0 \\ & X0)))))) \Rightarrow (\exists X2.((v1_tops_2 X2 X0) \wedge ((v1_cantor_1 X2 X0) \wedge \\ & (m1_subset_1 X2 (k1_zfmisc_1 (k1_zfmisc_1 (u1_struct_0 X0)))))) \wedge \\ & ((r1_tarski X2 X1) \wedge (k1_card_1 X2 = k2_waybel23 X0)))) \end{aligned} \quad (1)$$

Assume the following.

$$\begin{aligned} & \forall X0.((v2_pre_topc X0) \wedge ((\neg v1_topgen_2 X0) \wedge (l1_pre_topc \\ & X0))) \Rightarrow (\forall X1.((v1_tops_2 X1 X0) \wedge ((v1_cantor_1 X1 X0) \wedge (m1_subset_1 \\ & X1 (k1_zfmisc_1 (k1_zfmisc_1 (u1_struct_0 X0)))))) \Rightarrow (\exists X2. \\ & ((v1_tops_2 X2 X0) \wedge ((v1_cantor_1 X2 X0) \wedge (m1_subset_1 X2 (k1_zfmisc_1 \\ & (k1_zfmisc_1 (u1_struct_0 X0)))))) \wedge ((r1_tarski X2 X1) \wedge (k1_card_1 \\ & X2 = k2_waybel23 X0)))) \end{aligned} \quad (2)$$

Theorem 1

$$\begin{aligned} & \forall X0.((\neg v2_struct_0 X0) \wedge ((v2_pre_topc X0) \wedge (l1_pre_topc \\ & X0))) \Rightarrow (\forall X1.((v1_tops_2 X1 X0) \wedge ((v1_cantor_1 X1 X0) \wedge (m1_subset_1 \\ & X1 (k1_zfmisc_1 (k1_zfmisc_1 (u1_struct_0 X0)))))) \Rightarrow (\exists X2. \\ & ((v1_tops_2 X2 X0) \wedge ((v1_cantor_1 X2 X0) \wedge (m1_subset_1 X2 (k1_zfmisc_1 \\ & (k1_zfmisc_1 (u1_struct_0 X0)))))) \wedge ((r1_tarski X2 X1) \wedge (k1_card_1 \\ & X2 = k2_waybel23 X0)))) \end{aligned}$$