

t2_t_0topsp (TMQWd- eQt4NKiLzJQQZy73cUTshaNFEkdA1S)

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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 $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $u1_struct_0 : \iota \Rightarrow \iota$ be given. Let $k3_t_0topsp : \iota \Rightarrow \iota$ be given. Let $v3_pre_topc : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k3_tarski : \iota \Rightarrow \iota$ be given. Let $u1_pre_topc : \iota \Rightarrow \iota$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $m1_eqrel_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k11_borsuk_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2_t_0topsp : \iota \Rightarrow \iota$ be given. Let $v1_pre_topc : \iota \Rightarrow o$ be given. Assume the following.

$$\begin{aligned} & \forall X0.((\neg v2_struct_0 X0) \wedge ((v2_pre_topc X0) \wedge (l1_pre_topc \\ & X0))) \Rightarrow (\forall X1.((\neg v1_xboole_0 X1) \wedge (m1_eqrel_1 X1 (u1_struct_0 \\ & X0))) \Rightarrow (\forall X2.(m1_subset_1 X2 (k1_zfmisc_1 X1)) \Rightarrow ((k3_tarski \\ & X2 \in u1_pre_topc X0) \Leftrightarrow (X2 \in u1_pre_topc (k11_borsuk_1 X0 X1)))))) \end{aligned} \quad (1)$$

Assume the following.

$$\begin{aligned} & \forall X0.((\neg v2_struct_0 X0) \wedge ((v2_pre_topc X0) \wedge (l1_pre_topc \\ & X0))) \Rightarrow ((v2_pre_topc (k3_t_0topsp X0)) \wedge (l1_pre_topc (k3_t_0topsp \\ & X0))) \end{aligned} \quad (2)$$

Assume the following.

$$\begin{aligned} & \forall X0.((\neg v2_struct_0 X0) \wedge (l1_pre_topc X0)) \Rightarrow ((\neg v1_xboole_0 \\ & (k2_t_0topsp X0)) \wedge (m1_eqrel_1 (k2_t_0topsp X0) (u1_struct_0 \\ & X0))) \end{aligned} \quad (3)$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1.(((v2_pre_topc X0) \wedge (l1_pre_topc X0)) \wedge \\ & (m1_eqrel_1 X1 (u1_struct_0 X0))) \Rightarrow ((v1_pre_topc (k11_borsuk_1 \\ & X0 X1)) \wedge ((v2_pre_topc (k11_borsuk_1 X0 X1)) \wedge (l1_pre_topc (k11_borsuk_1 \\ & X0 X1)))) \end{aligned} \quad (4)$$

Assume the following.

$$\begin{aligned}
& \forall X0.((v2_pre_topc\ X0) \wedge (l1_pre_topc\ X0)) \Rightarrow (\forall X1. \\
& (m1_eqrel_1\ X1\ (u1_struct_0\ X0)) \Rightarrow (\forall X2.((v1_pre_topc\ X2) \wedge \\
& ((v2_pre_topc\ X2) \wedge (l1_pre_topc\ X2))) \Rightarrow ((X2 = k11_borsuk_1\ X0\ X1) \Leftrightarrow \\
& ((u1_struct_0\ X2 = X1) \wedge (u1_pre_topc\ X2 = ReplSep\ (toset\ (\lambda X3 : \\
& \iota.m1_subset_1\ X3\ (k1_zfmisc_1\ X1)))\ (\lambda X3 : \iota.k3_tarski \\
& X3 \in u1_pre_topc\ X0)\ (\lambda X3 : \iota.X3))))))
\end{aligned} \tag{5}$$

Assume the following.

$$\forall X0.((\neg v2_struct_0\ X0) \wedge ((v2_pre_topc\ X0) \wedge (l1_pre_topc\ X0))) \Rightarrow (k3_t_0topsp\ X0 = k11_borsuk_1\ X0\ (k2_t_0topsp\ X0)) \tag{6}$$

Assume the following.

$$\forall X0.(l1_pre_topc\ X0) \Rightarrow (\forall X1.(m1_subset_1\ X1\ (k1_zfmisc_1\ (u1_struct_0\ X0))) \Rightarrow ((v3_pre_topc\ X1\ X0) \Leftrightarrow (X1 \in u1_pre_topc\ X0))) \tag{7}$$

Theorem 1

$$\begin{aligned}
& \forall X0.((\neg v2_struct_0\ X0) \wedge ((v2_pre_topc\ X0) \wedge (l1_pre_topc\ X0))) \Rightarrow (\forall X1.(m1_subset_1\ X1\ (k1_zfmisc_1\ (u1_struct_0 \\
& (k3_t_0topsp\ X0)))) \Rightarrow ((v3_pre_topc\ X1\ (k3_t_0topsp\ X0)) \Leftrightarrow (k3_tarski \\
& X1 \in u1_pre_topc\ X0)))
\end{aligned}$$