

t10_jgraph_2

(TMKzvUSACzvCBCQb69mEbToixAtQGxRwjsr)

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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 $v1_funct.1 : \iota \Rightarrow o$ be given. Let $v1_funct.2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $u1_struct.0 : \iota \Rightarrow \iota$ be given. Let $m1_subset.1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_zfmisc.1 : \iota \Rightarrow \iota$ be given. Let $k2_zfmisc.1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v5_pre_topc : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k3_funct.2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v3_pre_topc : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $r1_tarski : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k7_relset.1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $r1_tmap.1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0. \forall X1. \forall X2. ((X0 \in X1) \wedge (m1_subset.1 X1 (k1_zfmisc.1 X2))) \Rightarrow (m1_subset.1 X0 X2) \quad (1)$$

Assume the following.

$$\begin{aligned} & \forall X0. ((\neg v2_struct.0 X0) \wedge ((v2_pre_topc X0) \wedge (l1_pre_topc X0))) \Rightarrow (\forall X1. ((\neg v2_struct.0 X1) \wedge ((v2_pre_topc X1) \wedge (l1_pre_topc X1)))) \Rightarrow (\forall X2. ((v1_funct.1 X2) \wedge ((v1_funct.2 X2 (u1_struct.0 X1) (u1_struct.0 X0)) \wedge (m1_subset.1 X2 (k1_zfmisc.1 (k2_zfmisc.1 (u1_struct.0 X1) (u1_struct.0 X0))))))) \Rightarrow ((v5_pre_topc X2 X1 X0) \Leftrightarrow (\forall X3. (m1_subset.1 X3 (u1_struct.0 X1)) \Rightarrow (r1_tmap.1 X1 X0 X2 X3)))) \quad (2) \end{aligned}$$

Assume the following.

$$\begin{aligned} & \forall X0. ((\neg v2_struct.0 X0) \wedge ((v2_pre_topc X0) \wedge (l1_pre_topc X0))) \Rightarrow (\forall X1. ((\neg v2_struct.0 X1) \wedge ((v2_pre_topc X1) \wedge (l1_pre_topc X1)))) \Rightarrow (\forall X2. ((v1_funct.1 X2) \wedge ((v1_funct.2 X2 (u1_struct.0 X0) (u1_struct.0 X1)) \wedge (m1_subset.1 X2 (k1_zfmisc.1 (k2_zfmisc.1 (u1_struct.0 X0) (u1_struct.0 X1))))))) \Rightarrow (\forall X3. (m1_subset.1 X3 (u1_struct.0 X0)) \Rightarrow ((r1_tmap.1 X0 X1 X2 X3) \Leftrightarrow (\forall X4. (m1_subset.1 X4 (k1_zfmisc.1 (u1_struct.0 X1)) \Rightarrow (\neg (v3_pre_topc X4 X1) \wedge ((k3_funct.2 (u1_struct.0 X0) (u1_struct.0 X1) X2 X3 \in X4) \wedge (\forall X5. (m1_subset.1 X5 (k1_zfmisc.1 (u1_struct.0 X0)) \Rightarrow (\neg (v3_pre_topc X5 X0) \wedge ((X3 \in X5) \wedge (r1_tarski (k7_relset.1 (u1_struct.0 X0) (u1_struct.0 X1) X2 X5) X4)))))))))) \quad (3) \end{aligned}$$

Theorem 1

$$\begin{aligned} & \forall X0.((\neg v2_struct_0 X0) \wedge ((v2_pre_topc X0) \wedge (l1_pre_topc \\ & X0))) \Rightarrow (\forall X1.((\neg v2_struct_0 X1) \wedge ((v2_pre_topc X1) \wedge (l1_pre_topc \\ & X1)))) \Rightarrow (\forall X2.((v1_funct_1 X2) \wedge ((v1_funct_2 X2 (u1_struct_0 \\ & X0) (u1_struct_0 X1)) \wedge (m1_subset_1 X2 (k1_zfmisc_1 (k2_zfmisc_1 \\ & (u1_struct_0 X0) (u1_struct_0 X1)))))) \Rightarrow ((v5_pre_topc X2 X0 X1) \Leftrightarrow \\ & (\forall X3.(m1_subset_1 X3 (u1_struct_0 X0)) \Rightarrow (\forall X4.(m1_subset_1 \\ & X4 (k1_zfmisc_1 (u1_struct_0 X1)) \Rightarrow (\neg(k3_funct_2 (u1_struct_0 \\ & X0) (u1_struct_0 X1) X2 X3 \in X4) \wedge ((v3_pre_topc X4 X1) \wedge (\forall X5. \\ & (m1_subset_1 X5 (k1_zfmisc_1 (u1_struct_0 X0)) \Rightarrow (\neg(X3 \in X5) \wedge \\ & (v3_pre_topc X5 X0) \wedge (r1_tarski (k7_relset_1 (u1_struct_0 X0) \\ & (u1_struct_0 X1) X2 X5) X4)))))))))) \end{aligned}$$