

t2_uniform1 (TMZx- agCm2VHtvBuKXi6vkP4vtV8mXfY3dkq)

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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 $v6_metric_1 : \iota \Rightarrow o$ be given. Let $v7_metric_1 : \iota \Rightarrow o$ be given. Let $v8_metric_1 : \iota \Rightarrow o$ be given. Let $v9_metric_1 : \iota \Rightarrow o$ be given. Let $l1_metric_1 : \iota \Rightarrow o$ be given. Let $v1_funct_1 : \iota \Rightarrow o$ be given. Let $v1_funct_2 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $u1_struct_0 : \iota \Rightarrow \iota$ be given. Let $k3_pcomps_1 : \iota \Rightarrow \iota$ 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 $v5_pre_topc : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_numbers : \iota$ be given. Let $k9_metric_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v3_pre_topc : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k8_relset_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2_struct_0 : \iota \Rightarrow \iota$ be given. Let $k1_xboole_0 : \iota$ be given. Let $v1_xreal_0 : \iota \Rightarrow o$ be given. Let $l1_struct_0 : \iota \Rightarrow o$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Assume the following.

$$\begin{aligned} & \forall X0.(l1_pre_topc\ X0) \Rightarrow (\forall X1.(l1_pre_topc\ X1) \Rightarrow (\forall X2. \\ & ((v1_funct_1\ X2) \wedge ((v1_funct_2\ X2\ (u1_struct_0\ X0)\ (u1_struct_0 \\ & X1)) \wedge (m1_subset_1\ X2\ (k1_zfmisc_1\ (k2_zfmisc_1\ (u1_struct_0 \\ & X0)\ (u1_struct_0\ X1)))))) \Rightarrow (((k2_struct_0\ X1 = k1_xboole_0) \Rightarrow (\\ & k2_struct_0\ X0 = k1_xboole_0)) \Rightarrow ((v5_pre_topc\ X2\ X0\ X1) \Leftrightarrow (\forall X3. \\ & (m1_subset_1\ X3\ (k1_zfmisc_1\ (u1_struct_0\ X1))) \Rightarrow ((v3_pre_topc \\ & X3\ X1) \Rightarrow (v3_pre_topc\ (k8_relset_1\ (u1_struct_0\ X0)\ (u1_struct_0 \\ & X1)\ X2\ X3)\ X0)))))) \end{aligned} \quad (1)$$

Assume the following.

$$\begin{aligned} & \forall X0.(v1_xreal_0\ X0) \Rightarrow (\forall X1.((v9_metric_1\ X1) \wedge (l1_metric_1 \\ & X1)) \Rightarrow (\forall X2.(m1_subset_1\ X2\ (u1_struct_0\ X1)) \Rightarrow (\forall X3. \\ & (m1_subset_1\ X3\ (k1_zfmisc_1\ (u1_struct_0\ (k3_pcomps_1\ X1)))) \Rightarrow \\ & ((X3 = k9_metric_1\ X1\ X2\ X0) \Rightarrow (v3_pre_topc\ X3\ (k3_pcomps_1\ X1)))))) \end{aligned} \quad (2)$$

Assume the following.

$$\forall X0.((\neg v2_struct_0\ X0) \wedge (l1_struct_0\ X0)) \Rightarrow (\neg v1_xboole_0\ (k2_struct_0\ X0)) \quad (3)$$

Assume the following.

$$\forall X0.((\neg v2_struct_0 X0) \wedge (l1_metric_1 X0)) \Rightarrow (\neg v2_struct_0 (k3_pcomps_1 X0)) \quad (4)$$

Assume the following.

$$v1_xboole_0 k1_xboole_0 \quad (5)$$

Assume the following.

$$\forall X0.(l1_pre_topc X0) \Rightarrow (l1_struct_0 X0) \quad (6)$$

Assume the following.

$$\forall X0.(l1_metric_1 X0) \Rightarrow (l1_pre_topc (k3_pcomps_1 X0)) \quad (7)$$

Assume the following.

$$\forall X0.(m1_subset_1 X0 k1_numbers) \Rightarrow (v1_xreal_0 X0) \quad (8)$$

Theorem 1

$$\begin{aligned} & \forall X0.((\neg v2_struct_0 X0) \wedge ((v2_pre_topc X0) \wedge (l1_pre_topc X0))) \Rightarrow (\forall X1.((\neg v2_struct_0 X1) \wedge ((v6_metric_1 X1) \wedge ((v7_metric_1 X1) \wedge ((v8_metric_1 X1) \wedge ((v9_metric_1 X1) \wedge (l1_metric_1 X1))))))) \Rightarrow \\ & (\forall X2.((v1_funct_1 X2) \wedge ((v1_funct_2 X2 (u1_struct_0 X0) (u1_struct_0 (k3_pcomps_1 X1))) \wedge (m1_subset_1 X2 (k1_zfmisc_1 (k2_zfmisc_1 (u1_struct_0 X0) (u1_struct_0 (k3_pcomps_1 X1))))))) \Rightarrow \\ & ((v5_pre_topc X2 X0 (k3_pcomps_1 X1)) \Rightarrow (\forall X3.(m1_subset_1 X3 k1_numbers) \Rightarrow (\forall X4.(m1_subset_1 X4 (u1_struct_0 X1)) \Rightarrow \\ & (\forall X5.(m1_subset_1 X5 (k1_zfmisc_1 (u1_struct_0 (k3_pcomps_1 X1)))) \Rightarrow ((X5 = k9_metric_1 X1 X4 X3) \Rightarrow (v3_pre_topc (k8_relset_1 (u1_struct_0 X0) (u1_struct_0 (k3_pcomps_1 X1)) X2 X5) X0))))))) \end{aligned}$$