

t17_topmetr
(TMa79SD95amhQ5RUHPaoXkbgeX4YnqSxGxH)

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Let $u1_struct.0 : \iota \Rightarrow \iota$ be given. Let $k3_topmetr : \iota$ be given. Let $k1_numbers : \iota$ be given. Let $m1_subset.1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_zfmisc.1 : \iota \Rightarrow \iota$ be given. Let $g1_pre_topc : \iota \Rightarrow \iota \Rightarrow \iota$ 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 $k2_zfmisc.1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $g1_metric.1 : \iota \Rightarrow \iota \Rightarrow \iota$ 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. Let $l1_pre_topc : \iota \Rightarrow o$ be given. Let $u1_pre_topc : \iota \Rightarrow \iota$ be given. Let $v1_metric.1 : \iota \Rightarrow o$ be given. Let $k8_metric.1 : \iota$ be given. Let $l1_metric.1 : \iota \Rightarrow o$ be given. Let $k7_metric.1 : \iota$ be given. Let $k3_pcomps.1 : \iota \Rightarrow \iota$ be given. Let $k2_pcomps.1 : \iota \Rightarrow \iota$ be given. Let $u1_metric.1 : \iota \Rightarrow \iota$ be given. Assume the following.

$$\begin{aligned} \forall X0. \forall X1. (m1_subset.1 X1 (k1_zfmisc.1 (k1_zfmisc.1 \\ X0))) \Rightarrow (\forall X2. \forall X3. (g1_pre_topc X0 X1 = g1_pre_topc \\ X2 X3) \Rightarrow ((X0 = X2) \wedge (X1 = X3))) \end{aligned} \quad (1)$$

Assume the following.

$$\begin{aligned} \forall X0. \forall X1. ((v1_funct.1 X1) \wedge ((v1_funct.2 X1 (k2_zfmisc.1 \\ X0 X0) k1_numbers) \wedge (m1_subset.1 X1 (k1_zfmisc.1 (k2_zfmisc.1 \\ (k2_zfmisc.1 X0 X0) k1_numbers)))))) \Rightarrow (\forall X2. \forall X3. (\\ g1_metric.1 X0 X1 = g1_metric.1 X2 X3) \Rightarrow ((X0 = X2) \wedge (X1 = X3))) \end{aligned} \quad (2)$$

Assume the following.

$$(\neg v2_struct.0 k3_topmetr) \wedge ((v1_pre_topc k3_topmetr) \wedge (v2_pre_topc \\ k3_topmetr)) \quad (3)$$

Assume the following.

$$\forall X0. (l1_pre_topc X0) \Rightarrow (m1_subset.1 (u1_pre_topc X0) (k1_zfmisc.1 \\ (k1_zfmisc.1 (u1_struct.0 X0)))) \quad (4)$$

Assume the following.

$$(v1_metric.1 k8_metric.1) \wedge (l1_metric.1 k8_metric.1) \quad (5)$$

Assume the following.

$$(v1_funct_1\ k7_metric_1) \wedge ((v1_funct_2\ k7_metric_1\ (k2_zfmisc_1\ k1_numbers\ k1_numbers)\ k1_numbers) \wedge (m1_subset_1\ k7_metric_1\ (k1_zfmisc_1\ (k2_zfmisc_1\ (k2_zfmisc_1\ k1_numbers\ k1_numbers)\ k1_numbers)))) \quad (6)$$

Assume the following.

$$(v2_pre_topc\ k3_topmetr) \wedge (l1_pre_topc\ k3_topmetr) \quad (7)$$

Assume the following.

$$k3_topmetr = k3_pcomps_1\ k8_metric_1 \quad (8)$$

Assume the following.

$$\forall X0.(l1_metric_1\ X0) \Rightarrow (k3_pcomps_1\ X0 = g1_pre_topc\ (u1_struct_0\ X0)\ (k2_pcomps_1\ X0)) \quad (9)$$

Assume the following.

$$k8_metric_1 = g1_metric_1\ k1_numbers\ k7_metric_1 \quad (10)$$

Assume the following.

$$\forall X0.(l1_pre_topc\ X0) \Rightarrow ((v1_pre_topc\ X0) \Rightarrow (X0 = g1_pre_topc\ (u1_struct_0\ X0)\ (u1_pre_topc\ X0))) \quad (11)$$

Assume the following.

$$\forall X0.(l1_metric_1\ X0) \Rightarrow ((v1_metric_1\ X0) \Rightarrow (X0 = g1_metric_1\ (u1_struct_0\ X0)\ (u1_metric_1\ X0))) \quad (12)$$

Theorem 1 $u1_struct_0\ k3_topmetr = k1_numbers$.