

t6_euclid_9 (TMWaoGxvZiTWn- sAVh75Z6buGFZU5ontQh6x)

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Let $k2_pcomps_1 : \iota \Rightarrow \iota$ be given. Let $k14_euclid : \iota \Rightarrow \iota$ be given. Let $k6_numbers : \iota$ be given. Let $k2_tarski : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_xboole_0 : \iota$ be given. Let $k1_tarski : \iota \Rightarrow \iota$ be given. Let $v13_struct_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $np_1 : \iota$ 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 $k9_setfam_1 : \iota \Rightarrow \iota$ be given. Let $u1_struct_0 : \iota \Rightarrow \iota$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k6_domain_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $k4_ordinal1 : \iota$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $g1_pre_topc : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v6_membered : \iota \Rightarrow o$ be given. Let $v7_ordinal1 : \iota \Rightarrow o$ be given. Let $v2_struct_0 : \iota \Rightarrow o$ be given. Let $v1_metric_1 : \iota \Rightarrow o$ 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 $l1_struct_0 : \iota \Rightarrow o$ be given. Let $l1_metric_1 : \iota \Rightarrow o$ be given. Let $k3_pcomps_1 : \iota \Rightarrow \iota$ be given. Let $v1_pre_topc : \iota \Rightarrow o$ be given. Let $v7_struct_0 : \iota \Rightarrow o$ be given. Let $v3_card_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Assume the following.

$$\begin{aligned} & \forall X0. ((v13_struct_0 X0 np_1) \wedge ((v2_pre_topc X0) \wedge (l1_pre_topc \\ & X0))) \Rightarrow ((u1_pre_topc X0 = k9_setfam_1 (u1_struct_0 X0)) \wedge (\forall X1. \\ & (m1_subset_1 X1 (u1_struct_0 X0)) \Rightarrow ((u1_struct_0 X0 = k6_domain_1 \\ & (u1_struct_0 X0) X1) \wedge (u1_pre_topc X0 = k2_tarski k1_xboole_0 (\\ & k6_domain_1 (u1_struct_0 X0) X1)))))) \end{aligned} \tag{1}$$

Assume the following.

$$\forall X0. (v1_xboole_0 X0) \Rightarrow (X0 = k1_xboole_0) \tag{2}$$

Assume the following.

$$m1_subset_1 k1_xboole_0 k4_ordinal1 \tag{3}$$

Assume the following.

$$k6_numbers = k1_xboole_0 \tag{4}$$

Assume the following.

$$\forall X0.\forall X1.((\neg v1_xboole_0 X0)\wedge(m1_subset_1 X1 X0))\Rightarrow (k6_domain_1 X0 X1 = k1_tarski X1) \quad (5)$$

Assume the following.

$$\forall X0.\forall X1.(m1_subset_1 X1 (k1_zfmisc_1 (k1_zfmisc_1 X0)))\Rightarrow(\forall X2.\forall X3.(g1_pre_topc X0 X1 = g1_pre_topc X2 X3)\Rightarrow((X0 = X2)\wedge(X1 = X3))) \quad (6)$$

Assume the following.

$$v6_membered k4_ordinal1 \quad (7)$$

Assume the following.

$$\forall X0.(v7_ordinal1 X0)\Rightarrow((\neg v2_struct_0 (k14_euclid X0))\wedge((v1_metric_1 (k14_euclid X0))\wedge((v6_metric_1 (k14_euclid X0))\wedge((v7_metric_1 (k14_euclid X0))\wedge((v8_metric_1 (k14_euclid X0))\wedge(v9_metric_1 (k14_euclid X0)))))))) \quad (8)$$

Assume the following.

$$\forall X0.((\neg v2_struct_0 X0)\wedge(l1_struct_0 X0))\Rightarrow(\neg v1_xboole_0 (u1_struct_0 X0)) \quad (9)$$

Assume the following.

$$\forall X0.((\neg v2_struct_0 X0)\wedge(l1_metric_1 X0))\Rightarrow(\neg v2_struct_0 (k3_pcomps_1 X0)) \quad (10)$$

Assume the following.

$$\forall X0.(l1_metric_1 X0)\Rightarrow((v1_pre_topc (k3_pcomps_1 X0))\wedge(v2_pre_topc (k3_pcomps_1 X0))) \quad (11)$$

Assume the following.

$$v7_struct_0 (k3_pcomps_1 (k14_euclid k6_numbers)) \quad (12)$$

Assume the following.

$$\forall X0.\exists X1.m1_subset_1 X1 X0 \quad (13)$$

Assume the following.

$$\forall X0.(l1_pre_topc X0)\Rightarrow(l1_struct_0 X0) \quad (14)$$

Assume the following.

$$\forall X0.(l1_metric_1 X0)\Rightarrow(l1_struct_0 X0) \quad (15)$$

Assume the following.

$$\forall X0.(l1_metric_1 X0) \Rightarrow (l1_pre_topc (k3_pcomps_1 X0)) \quad (16)$$

Assume the following.

$$\forall X0.(l1_metric_1 X0) \Rightarrow (m1_subset_1 (k2_pcomps_1 X0) (k1_zfmisc_1 (k1_zfmisc_1 (u1_struct_0 X0)))) \quad (17)$$

Assume the following.

$$\forall X0.(v7_ordinal1 X0) \Rightarrow ((v1_metric_1 (k14_euclid X0)) \wedge ((v6_metric_1 (k14_euclid X0)) \wedge ((v7_metric_1 (k14_euclid X0)) \wedge ((v8_metric_1 (k14_euclid X0)) \wedge ((v9_metric_1 (k14_euclid X0)) \wedge (l1_metric_1 (k14_euclid X0))))))) \quad (18)$$

Assume the following.

$$\forall X0.(l1_metric_1 X0) \Rightarrow (k3_pcomps_1 X0 = g1_pre_topc (u1_struct_0 X0) (k2_pcomps_1 X0)) \quad (19)$$

Assume the following.

$$\forall X0.(v3_card_1 X0 k1_xboole_0) \Rightarrow (v1_xboole_0 X0) \quad (20)$$

Assume the following.

$$\forall X0.(v7_ordinal1 X0) \Rightarrow (\forall X1.(m1_subset_1 X1 (u1_struct_0 (k14_euclid X0))) \Rightarrow (v3_card_1 X1 X0)) \quad (21)$$

Assume the following.

$$\forall X0.(v6_membered X0) \Rightarrow (\forall X1.(m1_subset_1 X1 X0) \Rightarrow (v7_ordinal1 X1)) \quad (22)$$

Assume the following.

$$\forall X0.(l1_struct_0 X0) \Rightarrow (((\neg v2_struct_0 X0) \wedge (v7_struct_0 X0)) \Rightarrow (v13_struct_0 X0 np_1)) \quad (23)$$

Assume the following.

$$\forall X0.(l1_pre_topc X0) \Rightarrow ((v1_pre_topc X0) \Rightarrow (X0 = g1_pre_topc (u1_struct_0 X0) (u1_pre_topc X0))) \quad (24)$$

Theorem 1

$$k2_pcomps_1 (k14_euclid k6_numbers) = k2_tarSKI k1_xboole_0 (k1_tarSKI k1_xboole_0)$$