

t9_toprealb (TMZzSkRxfDwBB- vuyD8avmYPnJLG3aAQ8Ekg)

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Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k5_numbers : \iota$ be given. Let $v1_xreal_0 : \iota \Rightarrow o$ be given. Let $u1_struct_0 : \iota \Rightarrow \iota$ be given. Let $k15_euclid : \iota \Rightarrow \iota$ be given. Let $k7_toprealb : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k3_topreal9 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k4_ordinal1 : \iota$ be given. Let $v6_membered : \iota \Rightarrow o$ be given. Let $l1_pre_topc : \iota \Rightarrow o$ be given. Let $m1_pre_topc : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $l1_rltopsp1 : \iota \Rightarrow o$ be given. Let $l1_rlvect_1 : \iota \Rightarrow o$ be given. Let $l1_struct_0 : \iota \Rightarrow o$ be given. Let $v7_ordinal1 : \iota \Rightarrow o$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $v1_pre_topc : \iota \Rightarrow o$ be given. Let $k1_pre_topc : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v5_rltopsp1 : \iota \Rightarrow o$ be given. Let $k2_struct_0 : \iota \Rightarrow \iota$ be given. Assume the following.

$$k5_numbers = k4_ordinal1 \tag{1}$$

Assume the following.

$$v6_membered\ k4_ordinal1 \tag{2}$$

Assume the following.

$$\forall X0.(l1_pre_topc\ X0) \Rightarrow (\forall X1.(m1_pre_topc\ X1\ X0) \Rightarrow (l1_pre_topc\ X1)) \tag{3}$$

Assume the following.

$$\forall X0.(l1_rltopsp1\ X0) \Rightarrow ((l1_rlvect_1\ X0) \wedge (l1_pre_topc\ X0)) \tag{4}$$

Assume the following.

$$\forall X0.(l1_pre_topc\ X0) \Rightarrow (l1_struct_0\ X0) \tag{5}$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.((v7_ordinal1\ X0) \wedge ((m1_subset_1\ X1\ (u1_struct_0\ (k15_euclid\ X0))) \wedge (v1_xreal_0\ X2))) \Rightarrow (m1_subset_1\ (k3_topreal9\ X0\ X1\ X2)\ (k1_zfmisc_1\ (u1_struct_0\ (k15_euclid\ X0)))) \tag{6}$$

Assume the following.

$$\forall X0.\forall X1.((l1_pre_topc\ X0)\wedge(m1_subset_1\ X1\ (k1_zfmisc.1\ (u1_struct_0\ X0))))\Rightarrow((v1_pre_topc\ (k1_pre_topc\ X0\ X1))\wedge(m1_pre_topc\ (k1_pre_topc\ X0\ X1)\ X0)) \quad (7)$$

Assume the following.

$$\forall X0.(v7_ordinal1\ X0)\Rightarrow((v5_rltopsp1\ (k15_euclid\ X0))\wedge(l1_rltopsp1\ (k15_euclid\ X0))) \quad (8)$$

Assume the following.

$$\forall X0.(v7_ordinal1\ X0)\Rightarrow(\forall X1.(m1_subset_1\ X1\ (u1_struct_0\ (k15_euclid\ X0))))\Rightarrow(\forall X2.(v1_xreal_0\ X2)\Rightarrow(k7_toprealb\ X0\ X1\ X2 = k1_pre_topc\ (k15_euclid\ X0)\ (k3_topreal9\ X0\ X1\ X2)))) \quad (9)$$

Assume the following.

$$\forall X0.(l1_pre_topc\ X0)\Rightarrow(\forall X1.(m1_subset_1\ X1\ (k1_zfmisc.1\ (u1_struct_0\ X0))))\Rightarrow(\forall X2.((v1_pre_topc\ X2)\wedge(m1_pre_topc\ X2\ X0))\Rightarrow((X2 = k1_pre_topc\ X0\ X1)\Leftrightarrow(k2_struct_0\ X2 = X1)))) \quad (10)$$

Assume the following.

$$\forall X0.(l1_struct_0\ X0)\Rightarrow(k2_struct_0\ X0 = u1_struct_0\ X0) \quad (11)$$

Assume the following.

$$\forall X0.(v6_membered\ X0)\Rightarrow(\forall X1.(m1_subset_1\ X1\ X0)\Rightarrow(v7_ordinal1\ X1)) \quad (12)$$

Theorem 1

$$\forall X0.(m1_subset_1\ X0\ k5_numbers)\Rightarrow(\forall X1.(v1_xreal_0\ X1)\Rightarrow(\forall X2.(m1_subset_1\ X2\ (u1_struct_0\ (k15_euclid\ X0))))\Rightarrow(u1_struct_0\ (k7_toprealb\ X0\ X2\ X1) = k3_topreal9\ X0\ X2\ X1)))$$