

l108_toprealb
(TMXd2A7gHD18PEPMQ4jFD1gQgYQhadj3C2Y)

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Let $u1_struct_0 : \iota \Rightarrow \iota$ be given. Let $k1_pre_topc : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2_topalg_2 : \iota$ be given. Let $k5_toprealb : \iota \Rightarrow \iota$ be given. Let $k1_rcomp_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_real_1 : \iota \Rightarrow \iota$ be given. Let $np_1 : \iota$ be given. Let $l1_pre_topc : \iota \Rightarrow o$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $v2_xxreal_0 : \iota \Rightarrow o$ be given. Let $m2_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_numbers : \iota$ be given. Let $k5_numbers : \iota$ be given. Let $k3_topmetr : \iota$ be given. Let $k4_xcmplx_0 : \iota \Rightarrow \iota$ be given. Let $v1_xreal_0 : \iota \Rightarrow o$ be given. Let $v1_xcmplx_0 : \iota \Rightarrow o$ be given. Let $v2_pre_topc : \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0.(l1_pre_topc\ X0) \Rightarrow (\forall X1.(m1_subset_1\ X1\ (k1_zfmisc_1\ (u1_struct_0\ X0))) \Rightarrow (u1_struct_0\ (k1_pre_topc\ X0\ X1) = X1)) \quad (1)$$

Assume the following.

$$((v2_xxreal_0\ np_1) \wedge (m2_subset_1\ np_1\ k1_numbers\ k5_numbers)) \wedge ((m1_subset_1\ np_1\ k5_numbers) \wedge (m1_subset_1\ np_1\ k1_numbers)) \quad (2)$$

Assume the following.

$$k2_topalg_2 = k3_topmetr \quad (3)$$

Assume the following.

$$\forall X0.(m1_subset_1\ X0\ k1_numbers) \Rightarrow (k1_real_1\ X0 = k4_xcmplx_0\ X0) \quad (4)$$

Assume the following.

$$\forall X0.(v1_xreal_0\ X0) \Rightarrow ((v1_xcmplx_0\ (k4_xcmplx_0\ X0)) \wedge (v1_xreal_0\ (k4_xcmplx_0\ X0))) \quad (5)$$

Assume the following.

$$\forall X0.(m1_subset_1\ X0\ (k1_zfmisc_1\ k1_numbers)) \Rightarrow (m1_subset_1\ (k5_toprealb\ X0)\ (k1_zfmisc_1\ (u1_struct_0\ k2_topalg_2))) \quad (6)$$

Assume the following.

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

Assume the following.

$$\forall X0.\forall X1.((v1_xreal_0\ X0)\wedge(v1_xreal_0\ X1))\Rightarrow(m1_subset_1\ (k1_rcomp_1\ X0\ X1)\ (k1_zfmisc_1\ k1_numbers)) \quad (8)$$

Assume the following.

$$\forall X0.(m1_subset_1\ X0\ (k1_zfmisc_1\ k1_numbers))\Rightarrow(k5_toprealb\ X0 = X0) \quad (9)$$

Assume the following.

$$\forall X0.(m1_subset_1\ X0\ k1_numbers)\Rightarrow(v1_xreal_0\ X0) \quad (10)$$

Theorem 1

$$u1_struct_0\ (k1_pre_topc\ k2_topalg_2\ (k5_toprealb\ (k1_rcomp_1\ (k1_real_1\ np_1)\ np_1))) = k1_rcomp_1\ (k1_real_1\ np_1)\ np_1$$