

t4_hahnban1
(TMSxfSmjdwqmqeStjcqdetuX1fFm86VhGwP)

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Let $k8_group_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_complfld : \iota$ be given. Let $k2_hahnban1 : \iota$ be given. Let $k4_algstr_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_group_1 : \iota \Rightarrow \iota$ be given. Let $k6_complex1 : \iota$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $u1_struct_0 : \iota \Rightarrow \iota$ be given. Let $v1_xcmplx_0 : \iota \Rightarrow o$ be given. Let $k1_binop_2 : \iota \Rightarrow \iota$ be given. Let $k3_xcmplx_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_xcmplx_0 : \iota$ be given. Let $k4_xcmplx_0 : \iota \Rightarrow \iota$ be given. Let $np_1 : \iota$ be given. Let $v2_struct_0 : \iota \Rightarrow o$ be given. Let $v5_group_1 : \iota \Rightarrow o$ be given. Let $l3_algstr_0 : \iota \Rightarrow o$ be given. Let $k6_algstr_0 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k7_complex1 : \iota$ be given. Let $k5_binop_2 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v6_struct_0 : \iota \Rightarrow o$ be given. Let $v13_algstr_0 : \iota \Rightarrow o$ be given. Let $v33_algstr_0 : \iota \Rightarrow o$ be given. Let $v36_algstr_0 : \iota \Rightarrow o$ be given. Let $v3_group_1 : \iota \Rightarrow o$ be given. Let $v3_vectsp_1 : \iota \Rightarrow o$ be given. Let $v5_vectsp_1 : \iota \Rightarrow o$ be given. Let $v6_vectsp_1 : \iota \Rightarrow o$ be given. Let $v2_rlvect_1 : \iota \Rightarrow o$ be given. Let $v3_rlvect_1 : \iota \Rightarrow o$ be given. Let $v4_rlvect_1 : \iota \Rightarrow o$ be given. Let $l6_algstr_0 : \iota \Rightarrow o$ be given. Let $l2_algstr_0 : \iota \Rightarrow o$ be given. Let $l5_algstr_0 : \iota \Rightarrow o$ be given. Let $l4_algstr_0 : \iota \Rightarrow o$ be given. Let $l4_struct_0 : \iota \Rightarrow o$ be given. Let $l3_struct_0 : \iota \Rightarrow o$ be given. Let $k2_numbers : \iota$ be given. Assume the following.

$$k1_group_1 \ k1_complfld = k6_complex1 \tag{1}$$

Assume the following.

$$\begin{aligned} & \forall X0.(m1_subset_1 \ X0 \ (u1_struct_0 \ k1_complfld)) \Rightarrow (\forall X1. \\ & (v1_xcmplx_0 \ X1) \Rightarrow ((X0 = X1) \Rightarrow (k4_algstr_0 \ k1_complfld \ X0 = k1_binop_2 \\ & \quad X1))) \end{aligned} \tag{2}$$

Assume the following.

$$k3_xcmplx_0 \ k1_xcmplx_0 \ k1_xcmplx_0 = k4_xcmplx_0 \ np_1 \tag{3}$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.(((\neg v2_struct_0 X0)\wedge((v5_group_1 X0)\wedge(l3_algstr_0 X0)))\wedge((m1_subset_1 X1 (u1_struct_0 X0))\wedge(m1_subset_1 X2 (u1_struct_0 X0))))\Rightarrow(k8_group_1 X0 X1 X2 = k6_algstr_0 X0 X1 X2) \quad (4)$$

Assume the following.

$$k7_complex1 = k1_xcmplx_0 \quad (5)$$

Assume the following.

$$\forall X0.\forall X1.((v1_xcmplx_0 X0)\wedge(v1_xcmplx_0 X1))\Rightarrow(k5_binop_2 X0 X1 = k3_xcmplx_0 X0 X1) \quad (6)$$

Assume the following.

$$\forall X0.(v1_xcmplx_0 X0)\Rightarrow(k1_binop_2 X0 = k4_xcmplx_0 X0) \quad (7)$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.\forall X3.((v1_xcmplx_0 X0)\wedge((v1_xcmplx_0 X1)\wedge((m1_subset_1 X2 (u1_struct_0 k1_complfld))\wedge(m1_subset_1 X3 (u1_struct_0 k1_complfld))))))\Rightarrow(((X2 = X0)\wedge(X3 = X1))\Rightarrow(k6_algstr_0 k1_complfld X2 X3 = k5_binop_2 X0 X1)) \quad (8)$$

Assume the following.

$$\begin{aligned} & (\neg v6_struct_0 k1_complfld)\wedge((v13_algstr_0 k1_complfld)\wedge((\\ & v33_algstr_0 k1_complfld)\wedge((v36_algstr_0 k1_complfld)\wedge((v3_group_1 \\ & k1_complfld)\wedge((v5_group_1 k1_complfld)\wedge((v3_vectsp_1 k1_complfld)\wedge \\ & ((v5_vectsp_1 k1_complfld)\wedge((v6_vectsp_1 k1_complfld)\wedge((v2_rlvect_1 \\ & k1_complfld)\wedge((v3_rlvect_1 k1_complfld)\wedge(v4_rlvect_1 k1_complfld)))))))))) \quad (9) \end{aligned}$$

Assume the following.

$$v1_xcmplx_0 k1_xcmplx_0 \quad (10)$$

Assume the following.

$$(\neg v2_struct_0 k1_complfld)\wedge(v36_algstr_0 k1_complfld) \quad (11)$$

Assume the following.

$$\forall X0.(l6_algstr_0 X0)\Rightarrow((l2_algstr_0 X0)\wedge(l5_algstr_0 X0)) \quad (12)$$

Assume the following.

$$\forall X0.(l5_algstr_0 X0)\Rightarrow((l4_algstr_0 X0)\wedge(l4_struct_0 X0)) \quad (13)$$

Assume the following.

$$\forall X0.(l4_algstr_0 X0) \Rightarrow ((l3_struct_0 X0) \wedge (l3_algstr_0 X0)) \quad (14)$$

Assume the following.

$$m1_subset_1 \ k6_complex1 \ k2_numbers \quad (15)$$

Assume the following.

$$m1_subset_1 \ k2_hahnban1 \ (u1_struct_0 \ k1_complfld) \quad (16)$$

Assume the following.

$$\forall X0.(l3_algstr_0 X0) \Rightarrow (m1_subset_1 \ (k1_group_1 \ X0) \ (u1_struct_0 \ X0)) \quad (17)$$

Assume the following.

$$(v36_algstr_0 \ k1_complfld) \wedge (l6_algstr_0 \ k1_complfld) \quad (18)$$

Assume the following.

$$k6_complex1 = np_1 \quad (19)$$

Assume the following.

$$k2_hahnban1 = k7_complex1 \quad (20)$$

Assume the following.

$$\forall X0.(m1_subset_1 \ X0 \ k2_numbers) \Rightarrow (v1_xcmplx_0 \ X0) \quad (21)$$

Theorem 1

$$k8_group_1 \ k1_complfld \ k2_hahnban1 \ k2_hahnban1 = k4_algstr_0 \ k1_complfld \ (k1_group_1 \ k1_complfld)$$