

t5_hahnban1 (TMTWs- gmSN2WDkufSzknQr8GcvXob4porqXk)

October 27, 2020

Let $k8_group_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_complfld : \iota$ be given. Let $k4_algstr_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_group_1 : \iota \Rightarrow \iota$ 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 $k6_complex1 : \iota$ 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 $k2_numbers : \iota$ be given. Let $v36_algstr_0 : \iota \Rightarrow o$ be given. Let $np_1 : \iota$ be given. Let $u1_algstr_0 : \iota \Rightarrow \iota$ be given. Let $k27_binop_2 : \iota$ be given. Let $u2_algstr_0 : \iota \Rightarrow \iota$ be given. Let $k29_binop_2 : \iota$ be given. Let $k5_struct_0 : \iota \Rightarrow \iota$ be given. Let $k4_struct_0 : \iota \Rightarrow \iota$ be given. Let $k5_complex1 : \iota$ be given. Assume the following.

$$\begin{aligned} & \forall X0.(m1_subset_1 X0 (u1_struct_0 k1_complfld)) \Rightarrow (\forall X1. \\ & (v1_xcmplx_0 X1) \Rightarrow ((X0 = X1) \Rightarrow (k4_algstr_0 k1_complfld X0 = k1_binop_2 \\ & X1))) \end{aligned} \tag{1}$$

Assume the following.

$$\begin{aligned} & \forall X0.(m1_subset_1 X0 (u1_struct_0 k1_complfld)) \Rightarrow (k4_algstr_0 \\ & k1_complfld X0 = k8_group_1 k1_complfld (k4_algstr_0 k1_complfld \\ & (k1_group_1 k1_complfld)) X0) \end{aligned} \tag{2}$$

Assume the following.

$$k1_group_1 k1_complfld = k6_complex1 \tag{3}$$

Assume the following.

$$\forall X0.(v1_xcmplx_0 X0) \Rightarrow (k1_binop_2 (k1_binop_2 X0) = X0) \tag{4}$$

Assume the following.

$$\forall X0.(l6_algstr_0 X0) \Rightarrow ((l2_algstr_0 X0) \wedge (l5_algstr_0 X0)) \tag{5}$$

Assume the following.

$$m1_subset_1 k6_complex1 k2_numbers \tag{6}$$

Assume the following.

$$\forall X0.\forall X1.((l2_algstr_0 X0)\wedge(m1_subset_1 X1 (u1_struct_0 X0)))\Rightarrow(m1_subset_1 (k4_algstr_0 X0 X1) (u1_struct_0 X0)) \quad (7)$$

Assume the following.

$$(v36_algstr_0 k1_complfld)\wedge(l6_algstr_0 k1_complfld) \quad (8)$$

Assume the following.

$$k6_complex1 = np_1 \quad (9)$$

Assume the following.

$$\begin{aligned} \forall X0.((v36_algstr_0 X0)\wedge(l6_algstr_0 X0))\Rightarrow((X0 = k1_complfld)\Leftrightarrow \\ ((u1_struct_0 X0 = k2_numbers)\wedge((u1_algstr_0 X0 = k27_binop_2)\wedge \\ ((u2_algstr_0 X0 = k29_binop_2)\wedge((k5_struct_0 X0 = k6_complex1)\wedge \\ (k4_struct_0 X0 = k5_complex1)))))) \quad (10) \end{aligned}$$

Assume the following.

$$\forall X0.(m1_subset_1 X0 (u1_struct_0 k1_complfld))\Rightarrow(v1_xcmplx_0 X0) \quad (11)$$

Theorem 1

$$\begin{aligned} k8_group_1 k1_complfld (k4_algstr_0 k1_complfld (k1_group_1 \\ k1_complfld)) (k4_algstr_0 k1_complfld (k1_group_1 k1_complfld)) = \\ k1_group_1 k1_complfld \end{aligned}$$