

t47_complfld (TMFzpRQvCNAjZAdYEN-
ZAJX83KxQ8QSapTCw)

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Let $k2_complfld : \iota \Rightarrow \iota$ be given. Let $k4_struct_0 : \iota \Rightarrow \iota$ be given. Let $k1_complfld : \iota$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $k15_complex1 : \iota \Rightarrow \iota$ be given. Let $k6_numbers : \iota$ be given. Let $k1_xboole_0 : \iota$ be given. Let $k5_complex1 : \iota$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $u1_struct_0 : \iota \Rightarrow \iota$ be given. Let $k14_complex1 : \iota \Rightarrow \iota$ be given. Let $v1_xcmplx_0 : \iota \Rightarrow o$ be given. Let $v1_xxreal_0 : \iota \Rightarrow o$ be given. Let $v1_xreal_0 : \iota \Rightarrow o$ be given. Let $k2_numbers : \iota$ be given. Let $v36_algstr_0 : \iota \Rightarrow o$ be given. Let $l6_algstr_0 : \iota \Rightarrow o$ 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 $k6_complex1 : \iota$ be given. Assume the following.

$$\forall X0. \forall X1. \neg(v1_xboole_0 X0) \wedge ((X0 \neq X1) \wedge (v1_xboole_0 X1)) \quad (1)$$

Assume the following.

$$k15_complex1 k6_numbers = k6_numbers \quad (2)$$

Assume the following.

$$k6_numbers = k1_xboole_0 \quad (3)$$

Assume the following.

$$k5_complex1 = k1_xboole_0 \quad (4)$$

Assume the following.

$$\forall X0. (m1_subset_1 X0 (u1_struct_0 k1_complfld)) \Rightarrow (k2_complfld X0 = k14_complex1 X0) \quad (5)$$

Assume the following.

$$\forall X0. (v1_xcmplx_0 X0) \Rightarrow (k15_complex1 X0 = k14_complex1 X0) \quad (6)$$

Assume the following.

$$\exists X0.(v1_xboole_0 X0) \wedge ((v1_xcmplx_0 X0) \wedge ((v1_xxreal_0 X0) \wedge (v1_xreal_0 X0))) \quad (7)$$

Assume the following.

$$v1_xboole_0 \ k1_xboole_0 \quad (8)$$

Assume the following.

$$m1_subset_1 \ k5_complex1 \ k2_numbers \quad (9)$$

Assume the following.

$$(v36_algstr_0 \ k1_complfld) \wedge (l6_algstr_0 \ k1_complfld) \quad (10)$$

Assume the following.

$$\begin{aligned} \forall X0. & ((v36_algstr_0 X0) \wedge (l6_algstr_0 X0)) \Rightarrow ((X0 = k1_complfld) \Leftrightarrow \\ & ((u1_struct_0 X0 = k2_numbers) \wedge ((u1_algstr_0 X0 = k27_binop_2) \wedge \\ & ((u2_algstr_0 X0 = k29_binop_2) \wedge ((k5_struct_0 X0 = k6_complex1) \wedge \\ & (k4_struct_0 X0 = k5_complex1)))))) \end{aligned} \quad (11)$$

Theorem 1 $k2_complfld \ (k4_struct_0 \ k1_complfld) = k4_struct_0 \ k1_complfld.$