

t37_member_1

(TMXM8zrmnkbagSxQMCKYjUX152tK5a2ahwU)

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Let $v1_xcmplx_0 : \iota \Rightarrow o$ be given. Let $k7_member_1 : \iota \Rightarrow \iota$ be given. Let $k1_tarski : \iota \Rightarrow \iota$ be given. Let $k2_binop_2 : \iota \Rightarrow \iota$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k5_xcmplx_0 : \iota \Rightarrow \iota$ be given. Let $v1_membered : \iota \Rightarrow o$ be given. Let $k2_numbers : \iota$ be given. Assume the following.

$$\forall X0. \forall X1. (X0 \in X1) \Rightarrow (m1_subset_1 X0 X1) \quad (1)$$

Assume the following.

$$\forall X0. (v1_xcmplx_0 X0) \Rightarrow (k2_binop_2 X0 = k5_xcmplx_0 X0) \quad (2)$$

Assume the following.

$$\forall X0. (v1_xcmplx_0 X0) \Rightarrow (v1_membered (k1_tarski X0)) \quad (3)$$

Assume the following.

$$\forall X0. (v1_membered X0) \Rightarrow (v1_membered (k7_member_1 X0)) \quad (4)$$

Assume the following.

$$\forall X0. (v1_xcmplx_0 X0) \Rightarrow (v1_xcmplx_0 (k5_xcmplx_0 X0)) \quad (5)$$

Assume the following.

$$\forall X0. (v1_membered X0) \Rightarrow (k7_member_1 X0 = ReplSep (toset (\lambda X1 : \iota. m1_subset_1 X1 k2_numbers)) (\lambda X1 : \iota. X1 \in X0) (\lambda X1 : \iota. k2_binop_2 X1))) \quad (6)$$

Assume the following.

$$\forall X0. (v1_xcmplx_0 X0) \Leftrightarrow (X0 \in k2_numbers) \quad (7)$$

Assume the following.

$$\forall X0. \forall X1. (X1 = k1_tarski X0) \Leftrightarrow (\forall X2. (X2 \in X1) \Leftrightarrow (X2 = X0)) \quad (8)$$

Assume the following.

$$\forall X0.(v1_membered\ X0) \Rightarrow (\forall X1.(v1_membered\ X1) \Rightarrow ((X0 = X1) \Leftrightarrow (\forall X2.(v1_xcmplx_0\ X2) \Rightarrow ((X2 \in X0) \Leftrightarrow (X2 \in X1)))))) \quad (9)$$

Theorem 1

$$\forall X0.(v1_xcmplx_0\ X0) \Rightarrow (k7_member_1\ (k1_tarski\ X0) = k1_tarski\ (k2_binop_2\ X0))$$