

t36_member_1

(TMauLBL21RBQyhsst9zmjG3x5DuxH4EhgNL)

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Let $v1_membered : \iota \Rightarrow o$ be given. Let $k5_member_1 : \iota \Rightarrow \iota$ be given. Let $k7_member_1 : \iota \Rightarrow \iota$ be given. Let $v1_xcmplx_0 : \iota \Rightarrow o$ be given. Let $k2_binop_2 : \iota \Rightarrow \iota$ be given. Let $k5_xcmplx_0 : \iota \Rightarrow \iota$ be given. Let $k4_xcmplx_0 : \iota \Rightarrow \iota$ be given. Let $k1_binop_2 : \iota \Rightarrow \iota$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k2_numbers : \iota$ be given. Assume the following.

$$\forall X0.(v1_membered X0) \Rightarrow (\forall X1.(v1_xcmplx_0 X1) \Rightarrow ((k2_binop_2 X1 \in X0) \Leftrightarrow (X1 \in k7_member_1 X0))) \quad (1)$$

Assume the following.

$$\forall X0.(v1_xcmplx_0 X0) \Rightarrow (k5_xcmplx_0 (k4_xcmplx_0 X0) = k4_xcmplx_0 (k5_xcmplx_0 X0)) \quad (2)$$

Assume the following.

$$\forall X0.(v1_membered X0) \Rightarrow (\forall X1.(v1_xcmplx_0 X1) \Rightarrow ((k1_binop_2 X1 \in X0) \Leftrightarrow (X1 \in k5_member_1 X0))) \quad (3)$$

Assume the following.

$$\forall X0.(v1_xcmplx_0 X0) \Rightarrow (k2_binop_2 X0 = k5_xcmplx_0 X0) \quad (4)$$

Assume the following.

$$\forall X0.(v1_xcmplx_0 X0) \Rightarrow (k1_binop_2 X0 = k4_xcmplx_0 X0) \quad (5)$$

Assume the following.

$$\forall X0.(v1_membered X0) \Rightarrow (k7_member_1 (k7_member_1 X0) = X0) \quad (6)$$

Assume the following.

$$\forall X0.(v1_membered X0) \Rightarrow (k5_member_1 (k5_member_1 X0) = X0) \quad (7)$$

Assume the following.

$$\forall X0.(v1_xcmplx_0 X0) \Rightarrow (k2_binop_2 (k2_binop_2 X0) = X0) \quad (8)$$

Assume the following.

$$\forall X0.(v1_xcmplx_0 X0) \Rightarrow (k1_binop_2 (k1_binop_2 X0) = X0) \quad (9)$$

Assume the following.

$$\forall X0.(v1_membered X0) \Rightarrow (v1_membered (k7_member_1 X0)) \quad (10)$$

Assume the following.

$$\forall X0.(v1_xcmplx_0 X0) \Rightarrow (v1_xcmplx_0 (k5_xcmplx_0 X0)) \quad (11)$$

Assume the following.

$$\forall X0.(v1_membered X0) \Rightarrow (v1_membered (k5_member_1 X0)) \quad (12)$$

Assume the following.

$$\forall X0.(v1_xcmplx_0 X0) \Rightarrow (m1_subset_1 (k2_binop_2 X0) k2_numbers) \quad (13)$$

Assume the following.

$$\forall X0.(v1_xcmplx_0 X0) \Rightarrow (m1_subset_1 (k1_binop_2 X0) k2_numbers) \quad (14)$$

Assume the following.

$$\forall X0.(v1_membered X0) \Rightarrow (\forall X1.(v1_membered X1) \Rightarrow ((X0 = X1) \Leftrightarrow (\forall X2.(v1_xcmplx_0 X2) \Rightarrow ((X2 \in X0) \Leftrightarrow (X2 \in X1))))) \quad (15)$$

Assume the following.

$$\forall X0.(m1_subset_1 X0 k2_numbers) \Rightarrow (v1_xcmplx_0 X0) \quad (16)$$

Theorem 1

$$\forall X0.(v1_membered X0) \Rightarrow (k5_member_1 (k7_member_1 X0) = k7_member_1 (k5_member_1 X0))$$