

t131_member_1
(TMVcGQ2xZd8vJWUMcdLD1Dqf5jLmgHZxU8c)

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Let $v1_xcmplx_0 : \iota \Rightarrow o$ be given. Let $k15_member_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2_tarski : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2_enumset1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k6_binop_2 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k7_member_1 : \iota \Rightarrow \iota$ be given. Let $k2_binop_2 : \iota \Rightarrow \iota$ be given. Let $k13_member_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k5_binop_2 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k7_xcmplx_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k3_xcmplx_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k5_xcmplx_0 : \iota \Rightarrow \iota$ be given. Let $v1_membered : \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0.(v1_xcmplx_0 X0) \Rightarrow (\forall X1.(v1_xcmplx_0 X1) \Rightarrow (k7_member_1 (k2_tarski X0 X1) = k2_tarski (k2_binop_2 X0) (k2_binop_2 X1))) \quad (1)$$

Assume the following.

$$\forall X0.(v1_xcmplx_0 X0) \Rightarrow (\forall X1.(v1_xcmplx_0 X1) \Rightarrow (\forall X2.(v1_xcmplx_0 X2) \Rightarrow (\forall X3.(v1_xcmplx_0 X3) \Rightarrow (k13_member_1 (k2_tarski X0 X1) (k2_tarski X2 X3) = k2_enumset1 (k5_binop_2 X0 X2) (k5_binop_2 X0 X3) (k5_binop_2 X1 X2) (k5_binop_2 X1 X3)))))) \quad (2)$$

Assume the following.

$$\forall X0.\forall X1.((v1_xcmplx_0 X0) \wedge (v1_xcmplx_0 X1)) \Rightarrow (k6_binop_2 X0 X1 = k7_xcmplx_0 X0 X1) \quad (3)$$

Assume the following.

$$\forall X0.\forall X1.((v1_xcmplx_0 X0) \wedge (v1_xcmplx_0 X1)) \Rightarrow (k5_binop_2 X0 X1 = k3_xcmplx_0 X0 X1) \quad (4)$$

Assume the following.

$$\forall X0.(v1_xcmplx_0 X0) \Rightarrow (k2_binop_2 X0 = k5_xcmplx_0 X0) \quad (5)$$

Assume the following.

$$\forall X0.\forall X1.((v1_xcmplx_0 X0) \wedge (v1_xcmplx_0 X1)) \Rightarrow (v1_membered (k2_tarski X0 X1)) \quad (6)$$

Assume the following.

$$\forall X0.(v1_xcmplx_0 X0) \Rightarrow (v1_xcmplx_0 (k5_xcmplx_0 X0)) \quad (7)$$

Assume the following.

$$\forall X0.(v1_xcmplx_0 X0) \Rightarrow (\forall X1.(v1_xcmplx_0 X1) \Rightarrow (k7_xcmplx_0 X0 X1 = k3_xcmplx_0 X0 (k5_xcmplx_0 X1))) \quad (8)$$

Assume the following.

$$\forall X0.(v1_membered X0) \Rightarrow (\forall X1.(v1_membered X1) \Rightarrow (k15_member_1 X0 X1 = k13_member_1 X0 (k7_member_1 X1))) \quad (9)$$

Theorem 1

$$\begin{aligned} & \forall X0.(v1_xcmplx_0 X0) \Rightarrow (\forall X1.(v1_xcmplx_0 X1) \Rightarrow (\forall X2. \\ & (v1_xcmplx_0 X2) \Rightarrow (\forall X3.(v1_xcmplx_0 X3) \Rightarrow (k15_member_1 \\ & (k2_tarski X0 X1) (k2_tarski X2 X3) = k2_enumset1 (k6_binop_2 X0 \\ & X2) (k6_binop_2 X0 X3) (k6_binop_2 X1 X2) (k6_binop_2 X1 X3)))))) \end{aligned}$$