

t129_member_1 (TMZyJWzbowJjAQaNaSFS- mepxKj8GhFBwMh36)

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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 $k1_tarski : \iota \Rightarrow \iota$ be given. Let $k2_tarski : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k6_binop_2 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2_xboole_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1_membered : \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0. \forall X1. k2_tarski X0 X1 = k2_xboole_0 (k1_tarski X0) (k1_tarski X1) \quad (1)$$

Assume the following.

$$\forall X0. (v1_xcmplx_0 X0) \Rightarrow (\forall X1. (v1_xcmplx_0 X1) \Rightarrow (k15_member_1 (k1_tarski X0) (k1_tarski X1) = k1_tarski (k6_binop_2 X0 X1))) \quad (2)$$

Assume the following.

$$\forall X0. (v1_membered X0) \Rightarrow (\forall X1. (v1_membered X1) \Rightarrow (\forall X2. (v1_membered X2) \Rightarrow (k15_member_1 X0 (k2_xboole_0 X1 X2) = k2_xboole_0 (k15_member_1 X0 X1) (k15_member_1 X0 X2)))) \quad (3)$$

Assume the following.

$$\forall X0. (v1_xcmplx_0 X0) \Rightarrow (v1_membered (k1_tarski X0)) \quad (4)$$

Theorem 1

$$\forall X0. (v1_xcmplx_0 X0) \Rightarrow (\forall X1. (v1_xcmplx_0 X1) \Rightarrow (\forall X2. (v1_xcmplx_0 X2) \Rightarrow (k15_member_1 (k1_tarski X0) (k2_tarski X1 X2) = k2_tarski (k6_binop_2 X0 X1) (k6_binop_2 X0 X2))))$$