

t10_member_1
(TMXtdDact5XUif26g7TVwosSXtade3YFZPg)

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Let $v1_xreal_0 : \iota \Rightarrow o$ be given. Let $k4_member_1 : \iota \Rightarrow \iota$ be given. Let $k2_tarski : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2_xreal_3 : \iota \Rightarrow \iota$ be given. Let $k1_tarski : \iota \Rightarrow \iota$ be given. Let $v2_membered : \iota \Rightarrow o$ be given. Let $k2_xboole_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0.(v1_xreal_0 X0) \Rightarrow (k4_member_1 (k1_tarski X0) = k1_tarski (k2_xreal_3 X0)) \quad (1)$$

Assume the following.

$$\forall X0.(v2_membered X0) \Rightarrow (\forall X1.(v2_membered X1) \Rightarrow (k4_member_1 (k2_xboole_0 X0 X1) = k2_xboole_0 (k4_member_1 X0) (k4_member_1 X1))) \quad (2)$$

Assume the following.

$$\forall X0.\forall X1.k2_tarski X0 X1 = k2_xboole_0 (k1_tarski X0) (k1_tarski X1) \quad (3)$$

Assume the following.

$$\forall X0.(v1_xreal_0 X0) \Rightarrow (v2_membered (k1_tarski X0)) \quad (4)$$

Theorem 1

$$\forall X0.(v1_xreal_0 X0) \Rightarrow (\forall X1.(v1_xreal_0 X1) \Rightarrow (k4_member_1 (k2_tarski X0 X1) = k2_tarski (k2_xreal_3 X0) (k2_xreal_3 X1)))$$