t45_member_1 (TMVPRAVNHcrUqykwBB-grFa8aJByUkmRozEx)

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Let $v1\_xxreal\_0 : \iota \Rightarrow o$ be given. Let $k8\_member\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2\_tarski : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2\_enumset1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1\_xxreal\_3 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2\_xboole\_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1\_tarski : \iota \Rightarrow \iota$ be given. Let $v2\_membered : \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0.\forall X1.\forall X2.\forall X3.k2\_enumset1\ X0\ X1\ X2\ X3 = k2\_xboole\_0\ (k2\_tarski\ X0\ X1)\ (k2\_tarski\ X2\ X3) \tag{1}$$

Assume the following.

$$\forall X0.(v1\_xxreal\_0\ X0) \Rightarrow (\forall X1.(v1\_xxreal\_0\ X1) \Rightarrow (\forall X2.(v1\_xxreal\_0\ X2) \Rightarrow (k8\_member\_1\ (k1\_tarski\ X0)\ (k2\_tarski\ X1\ X2) = k2\_tarski\ (k1\_xxreal\_3\ X0\ X1)\ (k1\_xxreal\_3\ X0\ X2)))) \tag{2}$$

Assume the following.

$$\forall X0.(v2\_membered\ X0) \Rightarrow (\forall X1.(v2\_membered\ X1) \Rightarrow (\forall X2.(v2\_membered\ X2) \Rightarrow (k8\_member\_1\ X0\ (k2\_xboole\_0\ X1\ X2) = k2\_xboole\_0\ (k8\_member\_1\ X0\ X1)\ (k8\_member\_1\ X0\ X2)))) \tag{3}$$

Assume the following.

$$\forall X0.\forall X1.k2\_tarski\ X0\ X1 = k2\_xboole\_0\ (k1\_tarski\ X0)\ (k1\_tarski\ X1) \tag{4}$$

Assume the following.

$$\forall X0.(v1\_xxreal\_0\ X0) \Rightarrow (v2\_membered\ (k1\_tarski\ X0)) \tag{5}$$

Assume the following.

$$\forall X0.\forall X1.((v2\_membered\ X0) \wedge (v2\_membered\ X1)) \Rightarrow (v2\_membered\ (k2\_xboole\_0\ X0\ X1)) \tag{6}$$

Assume the following.

$$\forall X0.\forall X1.((v1\_xxreal\_0\ X0)\wedge(v1\_xxreal\_0\ X1))\Rightarrow(\\ v2\_membered\ (k2\_tarski\ X0\ X1)) \tag{7}$$

Assume the following.

$$\forall X0.\forall X1.((v2\_membered\ X0)\wedge(v2\_membered\ X1))\Rightarrow(\\ k8\_member\_1\ X0\ X1 = k8\_member\_1\ X1\ X0) \tag{8}$$

Theorem 1

$$\forall X0.(v1\_xxreal\_0\ X0)\Rightarrow(\forall X1.(v1\_xxreal\_0\ X1)\Rightarrow(\forall X2.\\ (v1\_xxreal\_0\ X2)\Rightarrow(\forall X3.(v1\_xxreal\_0\ X3)\Rightarrow(k8\_member\_1\\ (k2\_tarski\ X0\ X1)\ (k2\_tarski\ X2\ X3) = k2\_enumset1\ (k1\_xxreal\_3\ X0\\ X2)\ (k1\_xxreal\_3\ X0\ X3)\ (k1\_xxreal\_3\ X1\ X2)\ (k1\_xxreal\_3\ X1\ X3)))))$$