t33_member_1
(TMb1EqXfvs5ooVMj6AJdS4dcYEdf68aenLw)

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Let $v1\_membered : \iota{\Rightarrow}o$ be given. Let $k7\_member\_1 : \iota{\Rightarrow}\iota$ be given. Let $k3\_xboole\_0 : \iota{\Rightarrow}\iota{\Rightarrow}\iota$ be given. Let $r1\_tarski : \iota{\Rightarrow}\iota{\Rightarrow}o$ be given. Assume the following.

$$\forall X0.(v1\_membered\ X0){\Rightarrow}(\forall X1.(v1\_membered\ X1){\Rightarrow}((r1\_tarski\ X0\ X1){\Leftrightarrow}(r1\_tarski\ (k7\_member\_1\ X0)\ (k7\_member\_1\ X1)))) \tag{1}$$

Assume the following.

$$\forall X0.\forall X1.(r1\_tarski\ X0\ X1){\Rightarrow}(k3\_xboole\_0\ X0\ X1 = X0) \tag{2}$$

Assume the following.

$$\forall X0.\forall X1.r1\_tarski\ (k3\_xboole\_0\ X0\ X1)\ X0 \tag{3}$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.k3\_xboole\_0\ (k3\_xboole\_0\ X0\ X1)\ X2 = k3\_xboole\_0\ X0\ (k3\_xboole\_0\ X1\ X2) \tag{4}$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.(r1\_tarski\ X0\ X1){\Rightarrow}(r1\_tarski\ (k3\_xboole\_0\ X0\ X2)\ X1) \tag{5}$$

Assume the following.

$$\forall X0.(v1\_membered\ X0){\Rightarrow}(\forall X1.(v1\_membered\ X1){\Rightarrow}((r1\_tarski\ X0\ X1){\Rightarrow}(r1\_tarski\ (k7\_member\_1\ X0)\ (k7\_member\_1\ X1)))) \tag{6}$$

Assume the following.

$$\forall X0.(v1\_membered\ X0){\Rightarrow}(k7\_member\_1\ (k7\_member\_1\ X0) = X0) \tag{7}$$

Assume the following.

$$\forall X0.\forall X1.(v1\_membered\ X0){\Rightarrow}(v1\_membered\ (k3\_xboole\_0\ X1\ X0)) \tag{8}$$

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Assume the following.

$$\forall X0.\forall X1.(v1\_membered\ X0)\Rightarrow(v1\_membered\ (k3\_xboole\_0 \\ X0\ X1)) \tag{9}$$

Assume the following.

$$\forall X0.(v1\_membered\ X0)\Rightarrow(v1\_membered\ (k7\_member\_1\ X0)) \tag{10}$$

Assume the following.

$$\forall X0.\forall X1.k3\_xboole\_0\ X0\ X1 = k3\_xboole\_0\ X1\ X0 \tag{11}$$

Theorem 1

$$\forall X0.(v1\_membered\ X0)\Rightarrow(\forall X1.(v1\_membered\ X1)\Rightarrow(k7\_member\_1 \\ (k3\_xboole\_0\ X0\ X1) = k3\_xboole\_0\ (k7\_member\_1\ X0)\ (k7\_member\_1 \\ X1)))$$