t13_abcmiz_1 (TM-RQjGU6bbouazMiqdPswH3qLaHYVw7qm5T)

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Let $k1\_abcmiz\_1 : \iota \Rightarrow \iota$ be given. Let $k3\_xboole\_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $r1\_tarski : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k4\_tarski : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0.\forall X1.(r1\_tarski\ X0\ X1) \Rightarrow (r1\_tarski\ (k1\_abcmiz\_1\ X0)\ (k1\_abcmiz\_1\ X1)) \tag{1}$$

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.

$$\forall X0.k1\_abcmiz\_1\ (k1\_abcmiz\_1\ X0) = k1\_abcmiz\_1\ X0 \tag{5}$$

Assume the following.

$$\forall X0.\forall X1.k3\_xboole\_0\ X0\ X0 = X0 \tag{6}$$

Assume the following.

$$\forall X0.\forall X1.(X1 = k1\_abcmiz\_1\ X0) \Leftrightarrow ((r1\_tarski\ X0\ X1) \wedge ((\forall X2.\forall X3.(k4\_tarski\ X2\ X3 \in X1) \Rightarrow (r1\_tarski\ X2\ X1)) \wedge (\forall X2.((r1\_tarski\ X0\ X2) \wedge (\forall X3.\forall X4.(k4\_tarski\ X3\ X4 \in X2) \Rightarrow (r1\_tarski\ X3\ X2))) \Rightarrow (r1\_tarski\ X1\ X2)))) \tag{7}$$

Assume the following.

$$\forall X0.\forall X1.k3\_xboole\_0\ X0\ X1 = k3\_xboole\_0\ X1\ X0 \tag{8}$$

Theorem 1

$$\forall X0.\forall X1.k1\_abcmiz\_1\ (k3\_xboole\_0\ (k1\_abcmiz\_1\ X0)\ (k1\_abcmiz\_1\ X1)) = k3\_xboole\_0\ (k1\_abcmiz\_1\ X0)\ (k1\_abcmiz\_1\ X1)$$