l3_zfmisc_1 (TMaDfs1y7HzfdhNaWt74PC2jcWJUsAeHGZc)

October 27, 2020

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

$$\forall X0.\forall X1.(k4\_xboole\_0\ X0\ X1 = k1\_xboole\_0) \Leftrightarrow (r1\_tarski\ X0\ X1) \tag{1}$$

Assume the following.

$$\forall X0.r1\_tarski\ k1\_xboole\_0\ X0 \tag{2}$$

Assume the following.

$$\forall X0.\forall X1.r1\_tarski\ X0\ X0 \tag{3}$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.(r1\_tarski\ X0\ X1) \Rightarrow ((X2 \in X0) \vee (r1\_tarski\ X0\ (k4\_xboole\_0\ X1\ (k1\_tarski\ X2)))) \tag{4}$$

Assume the following.

$$\forall X0.\forall X1.(r1\_tarski\ (k1\_tarski\ X0)\ X1) \Leftrightarrow (X0 \in X1) \tag{5}$$

Assume the following.

$$\forall X0.\forall X1.(X0 = X1) \Leftrightarrow ((r1\_tarski\ X0\ X1) \wedge (r1\_tarski\ X1\ X0)) \tag{6}$$

Theorem 1

$$\forall X0.\forall X1.(r1\_tarski\ X0\ (k1\_tarski\ X1)) \Leftrightarrow ((X0 = k1\_xboole\_0) \vee (X0 = k1\_tarski\ X1))$$