

t124_zfmisc_1
 (TMKsKaJxeBya7uYxJCkgzuyRU5rCcgJ5YCE)

October 27, 2020

Let $r1_tarski : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k3_xboole_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_tarski : \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0. \forall X1. (X0 \in X1) \Rightarrow (k3_xboole_0 X1 (k1_tarski X0) = k1_tarski X0) \quad (1)$$

Assume the following.

$$\forall X0. \forall X1. (r1_tarski X0 X1) \Rightarrow (k3_xboole_0 X0 X1 = X0) \quad (2)$$

Assume the following.

$$\forall X0. \forall X1. \forall X2. k3_xboole_0 (k3_xboole_0 X0 X1) X2 = k3_xboole_0 X0 (k3_xboole_0 X1 X2) \quad (3)$$

Theorem 1

$$\forall X0. \forall X1. \forall X2. \forall X3. ((r1_tarski X0 X1) \wedge ((k3_xboole_0 X1 X2 = k1_tarski X3) \wedge (X3 \in X0))) \Rightarrow (k3_xboole_0 X0 X2 = k1_tarski X3)$$