

t51_zfmisc_1 (TMHMdF-
SmS5NHWkLduTJwmtSiuJzMGCUbRHq)

October 27, 2020

Let $r1_xboole_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k2_tarski : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k3_xboole_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0. \forall X1. (\neg(\neg r1_xboole_0 X0 X1) \wedge (\forall X2. \neg X2 \in k3_xboole_0 X0 X1)) \wedge (\neg(\exists X2. X2 \in k3_xboole_0 X0 X1) \wedge (r1_xboole_0 X0 X1)) \quad (1)$$

Assume the following.

$$\forall X0. \forall X1. \forall X2. (X2 = k3_xboole_0 X0 X1) \Leftrightarrow (\forall X3. (X3 \in X2) \Leftrightarrow ((X3 \in X0) \wedge (X3 \in X1))) \quad (2)$$

Assume the following.

$$\forall X0. \forall X1. \forall X2. (X2 = k2_tarski X0 X1) \Leftrightarrow (\forall X3. (X3 \in X2) \Leftrightarrow ((X3 = X0) \vee (X3 = X1))) \quad (3)$$

Theorem 1

$$\forall X0. \forall X1. \forall X2. \neg(\neg X0 \in X1) \wedge ((\neg X2 \in X1) \wedge (\neg r1_xboole_0 (k2_tarski X0 X2) X1))$$