

t123_zfmisc_1

(TMJRhyMpN1gbarkkWYZTh3vN3xd9mzP4u8B)

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Let $k4_xboole_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2_xboole_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_tarski : \iota \Rightarrow \iota$ be given. Let $r1_xboole_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. \forall X2. (r1_xboole_0 X0 X1) \Rightarrow (k2_xboole_0 \\ & (k4_xboole_0 X2 X0) X1 = k4_xboole_0 (k2_xboole_0 X2 X1) X0) \end{aligned} \quad (1)$$

Assume the following.

$$\forall X0. \forall X1. (X0 \neq X1) \Rightarrow (r1_xboole_0 (k1_tarski X0) (k1_tarski X1)) \quad (2)$$

Assume the following.

$$\forall X0. \forall X1. k2_xboole_0 X0 X1 = k2_xboole_0 X1 X0 \quad (3)$$

Theorem 1

$$\begin{aligned} & \forall X0. \forall X1. \forall X2. (X0 \neq X1) \Rightarrow (k4_xboole_0 (k2_xboole_0 \\ & X2 (k1_tarski X0)) (k1_tarski X1) = k2_xboole_0 (k4_xboole_0 X2 \\ & (k1_tarski X1)) (k1_tarski X0)) \end{aligned}$$