

t42_setfam_1 (TMN-
thMpC8Tj98bS6VBTPJ5kTRS8zHw3vcVB)

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Let $r1_tarski : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k3_tarski : \iota \Rightarrow \iota$ be given. Let $k2_xboole_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $r1_xboole_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0. \forall X1. (\forall X2. (X2 \in X0) \Rightarrow (r1_xboole_0 X2 X1)) \Rightarrow (r1_xboole_0 (k3_tarski X0) X1) \quad (1)$$

Assume the following.

$$\forall X0. \forall X1. k3_tarski (k2_xboole_0 X0 X1) = k2_xboole_0 (k3_tarski X0) (k3_tarski X1) \quad (2)$$

Assume the following.

$$\forall X0. \forall X1. \forall X2. ((r1_tarski X0 (k2_xboole_0 X1 X2)) \wedge (r1_xboole_0 X0 X2)) \Rightarrow (r1_tarski X0 X1) \quad (3)$$

Assume the following.

$$\forall X0. \forall X1. (r1_xboole_0 X0 X1) \Rightarrow (r1_xboole_0 X1 X0) \quad (4)$$

Theorem 1

$$\forall X0. \forall X1. \forall X2. ((r1_tarski X2 (k3_tarski (k2_xboole_0 X0 X1))) \wedge (\forall X3. (X3 \in X1) \Rightarrow (r1_xboole_0 X3 X2))) \Rightarrow (r1_tarski X2 (k3_tarski X0)))$$