

t17_relat_1
(TMXgYbBpttqgSuhiH19tip4qWfQSbQ2gQ2b)

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Let $k1_relat_1 : \iota \Rightarrow \iota$ be given. Let $k1_tarski : \iota \Rightarrow \iota$ be given. Let $k4_tarski : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2_tarski : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1_relat_1 : \iota \Rightarrow o$ be given. Let $k9_xtuple_0 : \iota \Rightarrow \iota$ be given. Let $k10_xtuple_0 : \iota \Rightarrow \iota$ be given. Let $k2_xboole_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\begin{aligned} \forall X0.\forall X1.\forall X2.(v1_relat_1 X2) \Rightarrow ((X2 = k1_tarski \\ (k4_tarski X0 X1)) \Rightarrow ((k9_xtuple_0 X2 = k1_tarski X0) \wedge (k10_xtuple_0 \\ X2 = k1_tarski X1))) \end{aligned} \tag{1}$$

Assume the following.

$$\forall X0.\forall X1.k2_tarski X0 X1 = k2_xboole_0 (k1_tarski X0) (k1_tarski X1) \tag{2}$$

Assume the following.

$$\forall X0.\forall X1.v1_relat_1 (k1_tarski (k4_tarski X0 X1)) \tag{3}$$

Assume the following.

$$\forall X0.(v1_relat_1 X0) \Rightarrow (k1_relat_1 X0 = k2_xboole_0 (k9_xtuple_0 X0) (k10_xtuple_0 X0)) \tag{4}$$

Theorem 1

$$\forall X0.\forall X1.k1_relat_1 (k1_tarski (k4_tarski X0 X1)) = k2_tarski X0 X1$$