

t20_relat_1

(TMarLDBFmu6N85DERBfCiQRubGeX3vremVA)

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Let $v1_relat_1 : \iota \Rightarrow o$ be given. Let $k10_xtuple_0 : \iota \Rightarrow \iota$ be given. Let $k9_xtuple_0 : \iota \Rightarrow \iota$ be given. Let $k2_relat_1 : \iota \Rightarrow \iota$ be given. Let $k4_tarski : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0.(v1_relat_1 X0) \Rightarrow (v1_relat_1 (k2_relat_1 X0)) \quad (1)$$

Assume the following.

$$\begin{aligned} \forall X0.(v1_relat_1 X0) \Rightarrow (\forall X1.(v1_relat_1 X1) \Rightarrow ((X1 = \\ k2_relat_1 X0) \Leftrightarrow (\forall X2.\forall X3.(k4_tarski X2 X3 \in X1) \Leftrightarrow (\\ k4_tarski X3 X2 \in X0)))) \end{aligned} \quad (2)$$

Assume the following.

$$\forall X0.\forall X1.(X1 = k10_xtuple_0 X0) \Leftrightarrow (\forall X2.(X2 \in X1) \Leftrightarrow (\exists X3.k4_tarski X3 X2 \in X0)) \quad (3)$$

Assume the following.

$$\forall X0.\forall X1.(X1 = k9_xtuple_0 X0) \Leftrightarrow (\forall X2.(X2 \in X1) \Leftrightarrow (\exists X3.k4_tarski X2 X3 \in X0)) \quad (4)$$

Theorem 1

$$\forall X0.(v1_relat_1 X0) \Rightarrow ((k10_xtuple_0 X0 = k9_xtuple_0 (k2_relat_1 X0)) \wedge (k9_xtuple_0 X0 = k10_xtuple_0 (k2_relat_1 X0)))$$