

t119_relat_1
(TMJWUrQU85BcJe5hFtxyofcGR6SiFQbikbU)

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Let $v1_relat_1 : \iota \Rightarrow o$ be given. Let $k1_xboole_0 : \iota$ be given. Let $r1_tarski : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k9_xtuple_0 : \iota \Rightarrow \iota$ be given. Let $k7_relat_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k3_xboole_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $r1_xboole_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0. \forall X1. (r1_tarski X0 X1) \Rightarrow (k3_xboole_0 X0 X1 = X0) \quad (1)$$

Assume the following.

$$\forall X0. \forall X1. (v1_relat_1 X1) \Rightarrow ((k7_relat_1 X1 X0 = k1_xboole_0) \Leftrightarrow (r1_xboole_0 (k9_xtuple_0 X1) X0)) \quad (2)$$

Assume the following.

$$\forall X0. \forall X1. (r1_xboole_0 X0 X1) \Leftrightarrow (k3_xboole_0 X0 X1 = k1_xboole_0) \quad (3)$$

Assume the following.

$$\forall X0. \forall X1. k3_xboole_0 X0 X1 = k3_xboole_0 X1 X0 \quad (4)$$

Theorem 1

$$\forall X0. \forall X1. (v1_relat_1 X1) \Rightarrow (\neg(X0 \neq k1_xboole_0) \wedge (r1_tarski X0 (k9_xtuple_0 X1)) \wedge (k7_relat_1 X1 X0 = k1_xboole_0))$$