

t34_sysrel (TMNpsLCKbQjdQm- RdB9wJuHk7VEQk8aCb1N5)

October 27, 2020

Let $v1_relat_1 : \iota \Rightarrow o$ be given. Let $r1_tarski : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k4_relat_1 : \iota \Rightarrow \iota$ be given. Let $k9_xtuple_0 : \iota \Rightarrow \iota$ be given. Let $k1_sysrel : \iota \Rightarrow \iota$ be given. Let $k10_xtuple_0 : \iota \Rightarrow \iota$ be given. Let $k3_xboole_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0.(v1_relat_1 X0) \Rightarrow (k1_sysrel X0 = k4_relat_1 (k9_xtuple_0 (k1_sysrel X0))) \quad (1)$$

Assume the following.

$$\forall X0.\forall X1.r1_tarski (k3_xboole_0 X0 X1) X0 \quad (2)$$

Assume the following.

$$\forall X0.k10_xtuple_0 (k4_relat_1 X0) = X0 \quad (3)$$

Assume the following.

$$\forall X0.(v1_relat_1 X0) \Rightarrow (k1_sysrel X0 = k3_xboole_0 X0 (k4_relat_1 (k9_xtuple_0 X0))) \quad (4)$$

Theorem 1

$$\forall X0.(v1_relat_1 X0) \Rightarrow ((r1_tarski (k4_relat_1 (k9_xtuple_0 (k1_sysrel X0))) X0) \wedge (r1_tarski (k4_relat_1 (k10_xtuple_0 (k1_sysrel X0))) X0))$$