

t27_e_siec (TMKHHmVQiER- VAD6VguErSG4rS5yNNmCHxqa)

October 27, 2020

Let $v2_e_siec : \iota \Rightarrow o$ be given. Let $v3_e_siec : \iota \Rightarrow o$ be given. Let $l1_e_siec : \iota \Rightarrow o$ be given. Let $k3_relat_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k4_xboole_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $u2_e_siec : \iota \Rightarrow \iota$ be given. Let $k4_relat_1 : \iota \Rightarrow \iota$ be given. Let $u1_struct_0 : \iota \Rightarrow \iota$ be given. Let $k10_xtuple_0 : \iota \Rightarrow \iota$ be given. Let $k1_xboole_0 : \iota$ be given. Let $u1_e_siec : \iota \Rightarrow \iota$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $v1_relat_1 : \iota \Rightarrow o$ be given. Let $k4_tarski : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0. \forall X1. \neg (X0 \in X1) \wedge (v1_xboole_0 X1) \quad (1)$$

Assume the following.

$$\forall X0. k4_xboole_0 X0 k1_xboole_0 = X0 \quad (2)$$

Assume the following.

$$v1_xboole_0 k1_xboole_0 \quad (3)$$

Assume the following.

$$\forall X0. v1_relat_1 (k4_relat_1 X0) \quad (4)$$

Assume the following.

$$\begin{aligned} \forall X0. \forall X1. \forall X2. (v1_relat_1 X2) \Rightarrow ((X2 = k3_relat_1 \\ X0 X1) \Leftrightarrow (\forall X3. \forall X4. (k4_tarski X3 X4 \in X2) \Leftrightarrow (\exists X5. \\ (k4_tarski X3 X5 \in X0) \wedge (k4_tarski X5 X4 \in X1)))) \end{aligned} \quad (5)$$

Assume the following.

$$\begin{aligned} \forall X0. \forall X1. \forall X2. (X2 = k4_xboole_0 X0 X1) \Leftrightarrow (\forall X3. \\ (X3 \in X2) \Leftrightarrow ((X3 \in X0) \wedge (\neg X3 \in X1))) \end{aligned} \quad (6)$$

Assume the following.

$$\begin{aligned} \forall X0. \forall X1. (X1 = k10_xtuple_0 X0) \Leftrightarrow (\forall X2. (X2 \in \\ X1) \Leftrightarrow (\exists X3. k4_tarski X3 X2 \in X0)) \end{aligned} \quad (7)$$

Assume the following.

$$\forall X0.\forall X1.(v1_relat_1 X1)\Rightarrow((X1 = k4_relat_1 X0)\Leftrightarrow(\forall X2.\forall X3.(k4_tarski X2 X3 \in X1)\Leftrightarrow((X2 \in X0)\wedge(X2 = X3)))) \quad (8)$$

Assume the following.

$$\forall X0.(v1_xboole_0 X0)\Rightarrow(v1_relat_1 X0) \quad (9)$$

Theorem 1

$$\begin{aligned} &\forall X0.((v2_e_siec X0)\wedge((v3_e_siec X0)\wedge(l1_e_siec X0)))\Rightarrow \\ &(((k3_relat_1 (k4_xboole_0 (u2_e_siec X0) (k4_relat_1 (u1_struct_0 \\ &X0))) (k4_relat_1 (k4_xboole_0 (u1_struct_0 X0) (k10_xtuple_0 \\ &(u2_e_siec X0)))) = k1_xboole_0)\wedge(k3_relat_1 (k4_xboole_0 (u1_e_siec \\ &X0) (k4_relat_1 (u1_struct_0 X0))) (k4_relat_1 (k4_xboole_0 (\\ &u1_struct_0 X0) (k10_xtuple_0 (u1_e_siec X0)))) = k1_xboole_0)) \end{aligned}$$