

t25_e_siec
(TMb3k9cuoZ8z9kD9utcjx7fXQWpp7atKCbb)

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 $k2_relat_1 : \iota \Rightarrow \iota$ 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 $k1_xboole_0 : \iota$ be given. Let $u1_e_siec : \iota \Rightarrow \iota$ be given. Let $v1_relat_1 : \iota \Rightarrow o$ be given. Assume the following.

$$k2_relat_1 \ k1_xboole_0 = k1_xboole_0 \quad (1)$$

Assume the following.

$$\forall X0.(v1_relat_1 \ X0) \Rightarrow (\forall X1.(v1_relat_1 \ X1) \Rightarrow (k2_relat_1 \ (k3_relat_1 \ X0 \ X1) = k3_relat_1 \ (k2_relat_1 \ X1) \ (k2_relat_1 \ X0))) \quad (2)$$

Assume the following.

$$\begin{aligned} & \forall X0.((v2_e_siec \ X0) \wedge ((v3_e_siec \ X0) \wedge (l1_e_siec \ X0))) \Rightarrow \\ & ((k3_relat_1 \ (k4_xboole_0 \ (u1_e_siec \ X0) \ (k4_relat_1 \ (u1_struct_0 \ X0))) \ (k4_xboole_0 \ (u1_e_siec \ X0) \ (k4_relat_1 \ (u1_struct_0 \ X0))) = \\ & k1_xboole_0) \wedge ((k3_relat_1 \ (k4_xboole_0 \ (u2_e_siec \ X0) \ (k4_relat_1 \ (u1_struct_0 \ X0))) \ (k4_xboole_0 \ (u2_e_siec \ X0) \ (k4_relat_1 \ (u1_struct_0 \ X0))) = \\ & k1_xboole_0) \wedge ((k3_relat_1 \ (k4_xboole_0 \ (u1_e_siec \ X0) \ (k4_relat_1 \ (u1_struct_0 \ X0))) \ (k4_xboole_0 \ (u2_e_siec \ X0) \ (k4_relat_1 \ (u1_struct_0 \ X0))) = \\ & k1_xboole_0) \wedge (k3_relat_1 \ (k4_xboole_0 \ (u2_e_siec \ X0) \ (k4_relat_1 \ (u1_struct_0 \ X0))) \ (k4_xboole_0 \ (u1_e_siec \ X0) \ (k4_relat_1 \ (u1_struct_0 \ X0))) = k1_xboole_0)))) \quad (3) \end{aligned}$$

Assume the following.

$$\forall X0.\forall X1.(v1_relat_1 \ X0) \Rightarrow (v1_relat_1 \ (k4_xboole_0 \ X0 \ X1)) \quad (4)$$

Assume the following.

$$\forall X0.(l1_e_siec \ X0) \Rightarrow (v1_relat_1 \ (u2_e_siec \ X0)) \quad (5)$$

Assume the following.

$$\forall X0.(l1_e_siec \ X0) \Rightarrow (v1_relat_1 \ (u1_e_siec \ X0)) \quad (6)$$

Theorem 1

$$\begin{aligned} & \forall X0.((v2_e_siec X0)\wedge((v3_e_siec X0)\wedge(l1_e_siec X0)))\Rightarrow \\ & ((k3_relat_1 (k2_relat_1 (k4_xboole_0 (u2_e_siec X0) (k4_relat_1 \\ & (u1_struct_0 X0)))) (k2_relat_1 (k4_xboole_0 (u2_e_siec X0) (\\ & k4_relat_1 (u1_struct_0 X0)))) = k1_xboole_0)\wedge(k3_relat_1 (k2_relat_1 \\ & (k4_xboole_0 (u1_e_siec X0) (k4_relat_1 (u1_struct_0 X0)))) (\\ & k2_relat_1 (k4_xboole_0 (u1_e_siec X0) (k4_relat_1 (u1_struct_0 \\ & X0)))) = k1_xboole_0)) \end{aligned}$$