

t99_scmyciel
(TMZX5mg61uH31XyzqFghxJc8ak5bqwrFjmM)

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Let $v4_scmyciel : \iota \Rightarrow o$ be given. Let $k2_tarski : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k4_tarski : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k3_tarski : \iota \Rightarrow \iota$ be given. Let $k1_scmyciel : \iota \Rightarrow \iota$ be given. Let $k12_scmyciel : \iota \Rightarrow \iota$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $k1_tarski : \iota \Rightarrow \iota$ be given. Assume the following.

$$\begin{aligned} & \forall X0.(v4_scmyciel X0) \Rightarrow (\forall X1.(X1 \in k1_scmyciel (k12_scmyciel \\ & X0)) \Leftrightarrow (\neg(\neg X1 \in k1_scmyciel X0) \wedge ((\forall X2.(m1_subset_1 X2 (k3_tarski \\ & X0)) \Rightarrow (\forall X3.(m1_subset_1 X3 (k3_tarski X0)) \Rightarrow (\neg(X1 = k2_tarski \\ & X2 (k4_tarski X3 (k3_tarski X0))) \wedge (k2_tarski X2 X3 \in k1_scmyciel \\ & X0)))) \wedge (\forall X2.(m1_subset_1 X2 (k3_tarski X0)) \Rightarrow (\neg(X1 = k2_tarski \\ & (k3_tarski X0) (k4_tarski X2 (k3_tarski X0)))) \wedge (X2 \in k3_tarski X0)))))) \end{aligned} \quad (1)$$

Assume the following.

$$\forall X0.\forall X1.\neg(X0 \in X1) \wedge (v1_xboole_0 X1) \quad (2)$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.\forall X3.\neg(k2_tarski X0 X1 = k2_tarski X2 X3) \wedge ((X0 \neq X2) \wedge (X0 \neq X3)) \quad (3)$$

Assume the following.

$$\forall X0.\forall X1.(m1_subset_1 X0 X1) \Rightarrow ((v1_xboole_0 X1) \vee (X0 \in X1)) \quad (4)$$

Assume the following.

$$\forall X0.\forall X1.k4_tarski X0 X1 \neq X1 \quad (5)$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.\forall X3.(k4_tarski X0 X1 = k4_tarski X2 X3) \Rightarrow ((X0 = X2) \wedge (X1 = X3)) \quad (6)$$

Assume the following.

$$\forall X0.\forall X1.\neg k4_tarSKI X0 X1 \in X1 \quad (7)$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.(k2_tarSKI X1 X2 \in k1_scmyciel X0) \Rightarrow ((X1 \neq X2) \wedge ((X1 \in k3_tarSKI X0) \wedge (X2 \in k3_tarSKI X0))) \quad (8)$$

Assume the following.

$$\forall X0.\forall X1.k4_tarSKI X0 X1 = k2_tarSKI (k2_tarSKI X0 X1) (k1_tarSKI X0) \quad (9)$$

Assume the following.

$$\forall X0.\forall X1.k2_tarSKI X0 X1 = k2_tarSKI X1 X0 \quad (10)$$

Assume the following.

$$\forall X0.\forall X1.(X0 \in X1) \Rightarrow (\neg X1 \in X0) \quad (11)$$

Theorem 1

$$\forall X0.(v4_scmyciel X0) \Rightarrow (\forall X1.\forall X2.(k2_tarSKI (k4_tarSKI X1 (k3_tarSKI X0)) X2 \in k1_scmyciel (k12_scmyciel X0)) \Rightarrow ((X1 \neq X2) \wedge ((X1 \in k3_tarSKI X0) \wedge ((X2 \in k3_tarSKI X0) \vee (X2 = k3_tarSKI X0)))))$$