

t4\_scmyciel (TM-  
MvVUXda7R8xuN9VFrQHZgSvYKaeZnCZjw)

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Let  $k2\_tarski : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k4\_tarski : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k1\_tarski : \iota \Rightarrow \iota$  be given. Assume the following.

$$\forall X0. \forall X1. \forall X2. \forall X3. \neg (k2\_tarski X0 X1 = k2\_tarski X2 X3) \wedge ((X0 \neq X2) \wedge (X0 \neq X3)) \quad (1)$$

Assume the following.

$$\forall X0. \forall X1. \forall X2. \forall X3. (k4\_tarski X0 X1 = k4\_tarski X2 X3) \Rightarrow ((X0 = X2) \wedge (X1 = X3)) \quad (2)$$

Assume the following.

$$\forall X0. \forall X1. \neg k4\_tarski X0 X1 \in X1 \quad (3)$$

Assume the following.

$$\forall X0. \forall X1. k4\_tarski X0 X1 = k2\_tarski (k2\_tarski X0 X1) (k1\_tarski X0) \quad (4)$$

Assume the following.

$$\forall X0. \forall X1. k2\_tarski X0 X1 = k2\_tarski X1 X0 \quad (5)$$

**Theorem 1**

$$\forall X0. \forall X1. \forall X2. \forall X3. \forall X4. ((X0 \in X4) \wedge ((X2 \in X4) \wedge (k2\_tarski X0 (k4\_tarski X1 X4) = k2\_tarski X2 (k4\_tarski X3 X4)))) \Rightarrow ((X0 = X2) \wedge (X1 = X3))$$