

t20\_mcart\_1  
(TMFwffuaHnjBJjbskC9t3ddxh6N9jisEscW)

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Let  $k4\_tarski : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k1\_xtuple\_0 : \iota \Rightarrow \iota$  be given. Let  $k2\_xtuple\_0 : \iota \Rightarrow \iota$  be given. Let  $k2\_tarski : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k1\_tarski : \iota \Rightarrow \iota$  be given. Assume the following.

$$\forall X0. \forall X1. k2\_xtuple\_0 (k4\_tarski X0 X1) = X1 \quad (1)$$

Assume the following.

$$\forall X0. \forall X1. k1\_xtuple\_0 (k4\_tarski X0 X1) = X0 \quad (2)$$

Assume the following.

$$\forall X0. \forall X1. k4\_tarski X0 X1 = k2\_tarski (k2\_tarski X0 X1) (k1\_tarski X0) \quad (3)$$

Assume the following.

$$\forall X0. \forall X1. \forall X2. (X2 = k2\_tarski X0 X1) \Leftrightarrow (\forall X3. (X3 \in X2) \Leftrightarrow ((X3 = X0) \vee (X3 = X1))) \quad (4)$$

Assume the following.

$$\forall X0. \forall X1. (X1 = k1\_tarski X0) \Leftrightarrow (\forall X2. (X2 \in X1) \Leftrightarrow (X2 = X0)) \quad (5)$$

Assume the following.

$$\forall X0. \forall X1. k2\_tarski X0 X1 = k2\_tarski X1 X0 \quad (6)$$

Assume the following.

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

**Theorem 1**

$$\forall X0. (\exists X1. \exists X2. X0 = k4\_tarski X1 X2) \Rightarrow ((X0 \neq k1\_xtuple\_0 X0) \wedge (X0 \neq k2\_xtuple\_0 X0))$$