

t26\_mcart\_1 (TMYfZRwk-  
iqQnYwb2452KMUIe8SgdqPWAY8U)

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Let  $k1\_xboole\_0 : \iota$  be given. Let  $k3\_xtuple\_0 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $v1\_xboole\_0 : \iota \Rightarrow o$  be given. Let  $r1\_xboole\_0 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k4\_tarski : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k2\_tarski : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k1\_tarski : \iota \Rightarrow \iota$  be given. Assume the following.

$$\forall X0. \forall X1. \neg(v1\_xboole\_0 X0) \wedge ((X0 \neq X1) \wedge (v1\_xboole\_0 X1)) \quad (1)$$

Assume the following.

$$\forall X0. (\neg v1\_xboole\_0 X0) \Rightarrow (\exists X1. (X1 \in X0) \wedge (\forall X2. \forall X3. \forall X4. ((X2 \in X3) \wedge ((X3 \in X4) \wedge (X4 \in X1))) \Rightarrow (r1\_xboole\_0 X2 X0))) \quad (2)$$

Assume the following.

$$\forall X0. \forall X1. (\neg(\neg r1\_xboole\_0 X0 X1) \wedge (\forall X2. \neg(X2 \in X0) \wedge (X2 \in X1))) \wedge (\neg(\exists X2. (X2 \in X0) \wedge (X2 \in X1)) \wedge (r1\_xboole\_0 X0 X1)) \quad (3)$$

Assume the following.

$$v1\_xboole\_0 k1\_xboole\_0 \quad (4)$$

Assume the following.

$$\forall X0. \forall X1. k4\_tarski X0 X1 = k2\_tarski (k2\_tarski X0 X1) (k1\_tarski X0) \quad (5)$$

Assume the following.

$$\forall X0. \forall X1. \forall X2. k3\_xtuple\_0 X0 X1 X2 = k4\_tarski (k4\_tarski X0 X1) X2 \quad (6)$$

Assume the following.

$$\forall X0. \forall X1. \forall X2. (X2 = k2\_tarski X0 X1) \Leftrightarrow (\forall X3. (X3 \in X2) \Leftrightarrow ((X3 = X0) \vee (X3 = X1))) \quad (7)$$

Assume the following.

$$\forall X0.\forall X1.k2\_tarSKI X0 X1 = k2\_tarSKI X1 X0 \quad (8)$$

**Theorem 1**

$$\forall X0.\neg(X0 \neq k1\_xboole\_0) \wedge (\forall X1.\neg(X1 \in X0) \wedge (\forall X2.\forall X3.\forall X4.\neg((X2 \in X0) \vee (X3 \in X0)) \wedge (X1 = k3\_xtuple\_0 X2 X3 X4)))$$