

t86\_mcart\_1 (TMW-  
bVW56P3X3YMBbcM3fB7b8fMj2xLQWhFh)

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Let  $v1\_relat\_1 : \iota \Rightarrow o$  be given. Let  $k1\_xtuple\_0 : \iota \Rightarrow \iota$  be given. Let  $k9\_xtuple\_0 : \iota \Rightarrow \iota$  be given. Let  $k2\_xtuple\_0 : \iota \Rightarrow \iota$  be given. Let  $k10\_xtuple\_0 : \iota \Rightarrow \iota$  be given. Let  $k4\_tarski : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Assume the following.

$$\forall X0. \forall X1. (v1\_relat\_1 X1) \Rightarrow ((X0 \in X1) \Rightarrow (X0 = k4\_tarski (k1\_xtuple\_0 X0) (k2\_xtuple\_0 X0))) \quad (1)$$

Assume the following.

$$\forall X0. \forall X1. (X1 = k10\_xtuple\_0 X0) \Leftrightarrow (\forall X2. (X2 \in X1) \Leftrightarrow (\exists X3. k4\_tarski X3 X2 \in X0)) \quad (2)$$

Assume the following.

$$\forall X0. \forall X1. (X1 = k9\_xtuple\_0 X0) \Leftrightarrow (\forall X2. (X2 \in X1) \Leftrightarrow (\exists X3. k4\_tarski X2 X3 \in X0)) \quad (3)$$

**Theorem 1**

$$\forall X0. (v1\_relat\_1 X0) \Rightarrow (\forall X1. (X1 \in X0) \Rightarrow ((k1\_xtuple\_0 X1 \in k9\_xtuple\_0 X0) \wedge (k2\_xtuple\_0 X1 \in k10\_xtuple\_0 X0)))$$