

t17\_mcart\_1  
(TMTA3f7S8wHa2iHhoiNYvkqgrmuU4rUicfX)

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Let  $k2\_zfmisc.1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k2\_tarski : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k1\_tarski : \iota \Rightarrow \iota$  be given. Let  $k1\_xtuple\_0 : \iota \Rightarrow \iota$  be given. Let  $k2\_xtuple\_0 : \iota \Rightarrow \iota$  be given. Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. \forall X2. \forall X3. (X0 \in k2\_zfmisc.1 \\ & (k2\_tarski X1 X2) X3) \Rightarrow (((k1\_xtuple\_0 X0 = X1) \vee (k1\_xtuple\_0 X0 = \\ & X2)) \wedge (k2\_xtuple\_0 X0 \in X3)) \end{aligned} \tag{1}$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. \forall X2. (X0 \in k2\_zfmisc.1 X1 (k1\_tarski \\ & X2)) \Rightarrow ((k1\_xtuple\_0 X0 \in X1) \wedge (k2\_xtuple\_0 X0 = X2)) \end{aligned} \tag{2}$$

**Theorem 1**

$$\begin{aligned} & \forall X0. \forall X1. \forall X2. \forall X3. (X0 \in k2\_zfmisc.1 \\ & (k2\_tarski X1 X2) (k1\_tarski X3)) \Rightarrow (((k1\_xtuple\_0 X0 = X1) \vee (k1\_xtuple\_0 \\ & X0 = X2)) \wedge (k2\_xtuple\_0 X0 = X3)) \end{aligned}$$