

t9\_taxonom2  
(TMUbuB9VV7pRp9ucycDYncsMWfPu1AMPXQU)

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Let  $v4\_taxonom2 : \iota \Rightarrow o$  be given. Let  $k1\_tarski : \iota \Rightarrow \iota$  be given. Let  $k1\_xboole\_0 : \iota$  be given. Let  $r1\_xboole\_0 : \iota \Rightarrow \iota \Rightarrow o$  be given. Assume the following.

$$\forall X0. \forall X1. ((X0 \in k1\_tarski\ k1\_xboole\_0) \wedge (X1 \in k1\_tarski\ k1\_xboole\_0)) \Rightarrow ((X0 = X1) \vee (r1\_xboole\_0\ X0\ X1)) \quad (1)$$

Assume the following.

$$\forall X0. (v4\_taxonom2\ X0) \Leftrightarrow (\forall X1. \forall X2. ((X1 \in X0) \wedge (X2 \in X0)) \Rightarrow ((X1 = X2) \vee (r1\_xboole\_0\ X1\ X2))) \quad (2)$$

**Theorem 1**  $v4\_taxonom2\ (k1\_tarski\ k1\_xboole\_0)$ .