

t10\_taxonom2  
(TMJzKFqXVEfjcsUpCE7feZAcxdqk6QANgsH)

October 27, 2020

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

$$\forall X0.(v4\_taxonom2\ X0) \Leftrightarrow (\forall X1.\forall X2.((X1 \in X0) \wedge (X2 \in X0)) \Rightarrow ((X1 = X2) \vee (r1\_xboole\_0\ X1\ X2))) \quad (1)$$

Assume the following.

$$\forall X0.\forall X1.(X1 = k1\_tarski\ X0) \Leftrightarrow (\forall X2.(X2 \in X1) \Leftrightarrow (X2 = X0)) \quad (2)$$

**Theorem 1**  $\forall X0.v4\_taxonom2\ (k1\_tarski\ X0)$ .