

t8\_simplex0  
(TMYBxRouitV8w1FawUTcUnKv1jJrUga3EZx)

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Let  $r1\_tarski : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k1\_simplex0 : \iota \Rightarrow \iota$  be given. Let  $v1\_classes1 : \iota \Rightarrow o$  be given. Assume the following.

$$\forall X0.v1\_classes1 (k1\_simplex0 X0) \tag{1}$$

Assume the following.

$$\begin{aligned} \forall X0.\forall X1.(v1\_classes1 X1) \Rightarrow ((X1 = k1\_simplex0 X0) \Leftrightarrow \\ ((r1\_tarski X0 X1) \wedge (\forall X2.((r1\_tarski X0 X2) \wedge (v1\_classes1 X2)) \Rightarrow (r1\_tarski X1 X2)))) \end{aligned} \tag{2}$$

Assume the following.

$$\forall X0.\forall X1.(X0 = X1) \Leftrightarrow ((r1\_tarski X0 X1) \wedge (r1\_tarski X1 X0)) \tag{3}$$

**Theorem 1**  $\forall X0.(r1\_tarski (k1\_simplex0 X0) X0) \Rightarrow (v1\_classes1 X0).$