

t10\_ordinal1  
(TMQvZH2hDgHrCTz4EdQpss2BonPW48o1Jr9)

October 27, 2020

Let  $v1\_ordinal1 : \iota \Rightarrow o$  be given. Let  $r1\_tarski : \iota \Rightarrow \iota \Rightarrow o$  be given. Assume the following.

$$\forall X0. \forall X1. (r1\_tarski X0 X1) \Leftrightarrow (\forall X2. (X2 \in X0) \Rightarrow (X2 \in X1)) \quad (1)$$

Assume the following.

$$\forall X0. (v1\_ordinal1 X0) \Leftrightarrow (\forall X1. (X1 \in X0) \Rightarrow (r1\_tarski X1 X0)) \quad (2)$$

**Theorem 1**

$$\forall X0. \forall X1. \forall X2. (v1\_ordinal1 X2) \Rightarrow (((X0 \in X1) \wedge (X1 \in X2)) \Rightarrow (X0 \in X2))$$