# t21_ordinal2 (TMVKPz1yMEheqrpkAF7CY888H4m1cnEineL)

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Let $v3\_ordinal1 : \iota \Rightarrow o$ be given. Let $k3\_ordinal2 : \iota \Rightarrow \iota$ be given. Let $r1\_ordinal1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $r1\_tarski : \iota \Rightarrow \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0.\forall X1.\neg(X0 \in X1) \wedge (r1\_tarski\ X1\ X0) \tag{1}$$

Assume the following.

$$\forall X0.(v3\_ordinal1\ X0) \Rightarrow (\forall X1.(\forall X2.(v3\_ordinal1\ X2) \Rightarrow ((X2 \in X1) \Rightarrow (X2 \in X0))) \Rightarrow (r1\_ordinal1\ (k3\_ordinal2\ X1)\ X0)) \tag{2}$$

Assume the following.

$$\forall X0.(v3\_ordinal1\ X0) \Rightarrow (\forall X1.(v3\_ordinal1\ X1) \Rightarrow ((r1\_ordinal1\ X0\ X1) \vee (X1 \in X0))) \tag{3}$$

Assume the following.

$$\forall X0.\forall X1.((v3\_ordinal1\ X0) \wedge (v3\_ordinal1\ X1)) \Rightarrow ((r1\_ordinal1\ X0\ X1) \Leftrightarrow (r1\_tarski\ X0\ X1)) \tag{4}$$

Assume the following.

$$\forall X0.v3\_ordinal1\ (k3\_ordinal2\ X0) \tag{5}$$

**Theorem 1**

$$\forall X0.(v3\_ordinal1\ X0) \Rightarrow (\forall X1.\neg(X0 \in k3\_ordinal2\ X1) \wedge (\forall X2.(v3\_ordinal1\ X2) \Rightarrow (\neg(X2 \in X1) \wedge (r1\_ordinal1\ X0\ X2))))$$