

t19_ordinal2
(TMSs7PnR8a2igsfqSxypxnZimr4Mk67NaF8)

October 27, 2020

Let $v3_ordinal1 : \iota \Rightarrow o$ be given. Let $k3_ordinal2 : \iota \Rightarrow \iota$ be given. Let $k2_ordinal1 : \iota \Rightarrow \iota$ be given. Let $r1_tarski : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $r1_ordinal1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0.v3_ordinal1 (k3_ordinal2 X0) \tag{1}$$

Assume the following.

$$\forall X0.\forall X1.(X1 = k2_ordinal1 X0) \Leftrightarrow (\forall X2.(X2 \in X1) \Leftrightarrow ((X2 \in X0) \wedge (v3_ordinal1 X2))) \tag{2}$$

Assume the following.

$$\forall X0.\forall X1.(r1_tarski X0 X1) \Leftrightarrow (\forall X2.(X2 \in X0) \Rightarrow (X2 \in X1)) \tag{3}$$

Assume the following.

$$\forall X0.\forall X1.(v3_ordinal1 X1) \Rightarrow ((X1 = k3_ordinal2 X0) \Leftrightarrow ((r1_tarski (k2_ordinal1 X0) X1) \wedge (\forall X2.(v3_ordinal1 X2) \Rightarrow ((r1_tarski (k2_ordinal1 X0) X2) \Rightarrow (r1_ordinal1 X1 X2)))))) \tag{4}$$

Theorem 1

$$\forall X0.(v3_ordinal1 X0) \Rightarrow (\forall X1.(X0 \in X1) \Rightarrow (X0 \in k3_ordinal2 X1))$$