

t45_ordinal3
(TMco88CjehLdByb7Tk14cTBqciSA21fKzan)

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Let $v3_ordinal1 : \iota \Rightarrow o$ be given. Let $k1_xboole_0 : \iota$ be given. Let $k3_tarski : \iota \Rightarrow \iota$ be given. Let $k10_ordinal2 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_ordinal1 : \iota \Rightarrow \iota$ be given. Let $v4_ordinal1 : \iota \Rightarrow o$ be given. Let $k2_xboole_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_tarski : \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0.(v3_ordinal1 X0) \Rightarrow (k3_tarski (k1_ordinal1 X0) = X0) \quad (1)$$

Assume the following.

$$\forall X0.(v3_ordinal1 X0) \Rightarrow (\forall X1.(v3_ordinal1 X1) \Rightarrow ((v4_ordinal1 X0) \Rightarrow ((X0 = k1_xboole_0) \vee (v4_ordinal1 (k10_ordinal2 X1 X0)))))) \quad (2)$$

Assume the following.

$$\forall X0.(v3_ordinal1 X0) \Rightarrow ((\neg(\neg v4_ordinal1 X0) \wedge (\forall X1.(v3_ordinal1 X1) \Rightarrow (X0 \neq k1_ordinal1 X1))) \wedge (\neg(\exists X1.(v3_ordinal1 X1) \wedge (X0 = k1_ordinal1 X1)) \wedge (v4_ordinal1 X0))) \quad (3)$$

Assume the following.

$$\forall X0.(v3_ordinal1 X0) \Rightarrow (\forall X1.(v3_ordinal1 X1) \Rightarrow (k10_ordinal2 X0 (k1_ordinal1 X1) = k1_ordinal1 (k10_ordinal2 X0 X1))) \quad (4)$$

Assume the following.

$$\forall X0.(v3_ordinal1 X0) \Rightarrow (v3_ordinal1 (k3_tarski X0)) \quad (5)$$

Assume the following.

$$\forall X0.\forall X1.((v3_ordinal1 X0) \wedge (v3_ordinal1 X1)) \Rightarrow (v3_ordinal1 (k10_ordinal2 X0 X1)) \quad (6)$$

Assume the following.

$$\forall X0.(v4_ordinal1 X0) \Leftrightarrow (X0 = k3_tarski X0) \quad (7)$$

Assume the following.

$$\forall X0.k1_ordinal1 X0 = k2_xboole_0 X0 (k1_tarski X0) \quad (8)$$

Theorem 1

$$\forall X0.(v3_ordinal1\ X0) \Rightarrow (\forall X1.(v3_ordinal1\ X1) \Rightarrow ((X0 \neq k1_xboole_0) \Rightarrow (k3_tarski\ (k10_ordinal2\ X1\ X0) = k10_ordinal2\ X1\ (k3_tarski\ X0))))$$