

t64_ordinal3

(TMUJG9nAdnQceJUpVwVXgScUbxC5vWkK78g)

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Let $v3_ordinal1 : \iota \Rightarrow o$ be given. Let $r1_ordinal1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k11_ordinal2 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k6_ordinal3 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_xboole_0 : \iota$ be given. Let $r1_tarski : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k10_ordinal2 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0.(v3_ordinal1 X0) \Rightarrow (k11_ordinal2 k1_xboole_0 X0 = k1_xboole_0) \quad (1)$$

Assume the following.

$$\forall X0.r1_tarski k1_xboole_0 X0 \quad (2)$$

Assume the following.

$$\forall X0.(v3_ordinal1 X0) \Rightarrow (\forall X1.(v3_ordinal1 X1) \Rightarrow ((r1_ordinal1 X0 (k10_ordinal2 X0 X1)) \wedge (r1_ordinal1 X1 (k10_ordinal2 X0 X1)))) \quad (3)$$

Assume the following.

$$\forall X0.\forall X1.((v3_ordinal1 X0) \wedge (v3_ordinal1 X1)) \Rightarrow ((r1_ordinal1 X0 X1) \Leftrightarrow (r1_tarski X0 X1)) \quad (4)$$

Assume the following.

$$\forall X0.\forall X1.((v3_ordinal1 X0) \wedge (v3_ordinal1 X1)) \Rightarrow (v3_ordinal1 (k6_ordinal3 X0 X1)) \quad (5)$$

Assume the following.

$$\forall X0.\forall X1.((v3_ordinal1 X0) \wedge (v3_ordinal1 X1)) \Rightarrow (v3_ordinal1 (k11_ordinal2 X0 X1)) \quad (6)$$

Assume the following.

$$\begin{aligned} & \forall X0.(v3_ordinal1 X0) \Rightarrow (\forall X1.(v3_ordinal1 X1) \Rightarrow (\forall X2. \\ & (v3_ordinal1 X2) \Rightarrow (((X1 \neq k1_xboole_0) \Rightarrow ((X2 = k6_ordinal3 X0 X1) \Leftrightarrow \\ & (\exists X3.(v3_ordinal1 X3) \wedge ((X0 = k10_ordinal2 (k11_ordinal2 \\ & X2 X1) X3) \wedge (X3 \in X1)))))) \wedge ((X1 = k1_xboole_0) \Rightarrow ((X2 = k6_ordinal3 \\ & X0 X1) \Leftrightarrow (X2 = k1_xboole_0)))))) \end{aligned} \quad (7)$$

Theorem 1

$$\forall X0.(v3_ordinal1\ X0) \Rightarrow (\forall X1.(v3_ordinal1\ X1) \Rightarrow (r1_ordinal1\ (k11_ordinal2\ (k6_ordinal3\ X0\ X1)\ X1)\ X0))$$