

t56_ordinal3 (TMU-
VMED45NHJ6d11TuniKjGyY2PcJCXKzGD)

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Let $v3_ordinal1 : \iota \Rightarrow o$ be given. Let $k5_ordinal3 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_xboole_0 : \iota$ be given. Let $k10_ordinal2 : \iota \Rightarrow \iota \Rightarrow \iota$ 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.

$$\forall X0.(v3_ordinal1 X0) \Rightarrow (k5_ordinal3 X0 X0 = k1_xboole_0) \quad (1)$$

Assume the following.

$$\forall X0.(v3_ordinal1 X0) \Rightarrow (\forall X1.(v3_ordinal1 X1) \Rightarrow (k5_ordinal3 (k10_ordinal2 X0 X1) X0 = X1)) \quad (2)$$

Assume the following.

$$\forall X0.(r1_tarski X0 k1_xboole_0) \Rightarrow (X0 = k1_xboole_0) \quad (3)$$

Assume the following.

$$\forall X0.(v3_ordinal1 X0) \Rightarrow (k10_ordinal2 k1_xboole_0 X0 = X0) \quad (4)$$

Assume the following.

$$\forall X0.\forall X1.((v3_ordinal1 X0) \wedge (v3_ordinal1 X1)) \Rightarrow (r1_ordinal1 X0 X1) \Leftrightarrow (r1_tarski X0 X1) \quad (5)$$

Assume the following.

$$\forall X0.\forall X1.((v3_ordinal1 X0) \wedge (v3_ordinal1 X1)) \Rightarrow (v3_ordinal1 (k5_ordinal3 X0 X1)) \quad (6)$$

Assume the following.

$$\begin{aligned} \forall X0.(v3_ordinal1 X0) \Rightarrow (\forall X1.(v3_ordinal1 X1) \Rightarrow (\forall X2. \\ (v3_ordinal1 X2) \Rightarrow (((r1_ordinal1 X1 X0) \Rightarrow ((X2 = k5_ordinal3 X0 X1) \Leftrightarrow \\ (X0 = k10_ordinal2 X1 X2))) \wedge ((\neg r1_ordinal1 X1 X0) \Rightarrow ((X2 = k5_ordinal3 \\ X0 X1) \Leftrightarrow (X2 = k1_xboole_0)))))) \end{aligned} \quad (7)$$

Assume the following.

$$\forall X0.\forall X1.(X0 = X1) \Leftrightarrow ((r1_tarski X0 X1) \wedge (r1_tarski X1 X0)) \quad (8)$$

Theorem 1

$$\forall X0.(v3_ordinal1\ X0)\Rightarrow((k5_ordinal3\ X0\ k1_xboole_0 = X0)\wedge(k5_ordinal3\ k1_xboole_0\ X0 = k1_xboole_0))$$