

t41_ordinal2
(TMFCnysobZfja65cXavBwm5ycpgjRHPoh8V)

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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 $k1_ordinal1 : \iota \Rightarrow \iota$ be given. Let $k1_xboole_0 : \iota$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $k2_xboole_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_tarski : \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0. \forall X1. (X0 \in k1_ordinal1 X1) \Leftrightarrow ((X0 \in X1) \vee (X0 = X1)) \quad (1)$$

Assume the following.

$$\begin{aligned} \forall X0. (v3_ordinal1 X0) \Rightarrow (\forall X1. (v3_ordinal1 X1) \Rightarrow (\forall X2. \\ (v3_ordinal1 X2) \Rightarrow ((X1 \in X2) \Rightarrow ((X0 = k1_xboole_0) \vee (k11_ordinal2 \\ X1 X0 \in k11_ordinal2 X2 X0)))))) \end{aligned} \quad (2)$$

Assume the following.

$$\forall X0. (v3_ordinal1 X0) \Rightarrow (k11_ordinal2 X0 k1_xboole_0 = k1_xboole_0) \quad (3)$$

Assume the following.

$$\forall X0. (v3_ordinal1 X0) \Rightarrow (\forall X1. (v3_ordinal1 X1) \Rightarrow ((X0 \in k1_ordinal1 X1) \Leftrightarrow (r1_ordinal1 X0 X1))) \quad (4)$$

Assume the following.

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

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.

$$k1_xboole_0 = the (\lambda X0 : \iota. v1_xboole_0 X0) \quad (7)$$

Assume the following.

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

Theorem 1

$$\forall X0.(v3_ordinal1\ X0)\Rightarrow(\forall X1.(v3_ordinal1\ X1)\Rightarrow(\forall X2.(v3_ordinal1\ X2)\Rightarrow((r1_ordinal1\ X0\ X1)\Rightarrow(r1_ordinal1\ (k11_ordinal2\ X0\ X2)\ (k11_ordinal2\ X1\ X2))))))$$