t23_ordinal2 (TMXhYiadyiU4roCu1VwNwHqeC4Cp68jN7Zq)

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Let $v3\_ordinal1 : \iota \Rightarrow o$ be given. Let $k3\_ordinal2 : \iota \Rightarrow \iota$ be given. Let $k1\_tarski : \iota \Rightarrow \iota$ be given. Let $k1\_ordinal1 : \iota \Rightarrow \iota$ be given. Let $r1\_tarski : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k2\_xboole\_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $r1\_ordinal1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k4\_xboole\_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k6\_subset\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1\_xboole\_0 : \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0.X0 \neq k1\_ordinal1\ X0 \tag{1}$$

Assume the following.

$$\forall X0.\forall X1.(X0 \in k1\_ordinal1\ X1) \Leftrightarrow ((X0 \in X1) \vee (X0 = X1)) \tag{2}$$

Assume the following.

$$\forall X0.\forall X1.r1\_tarski\ X0\ (k2\_xboole\_0\ X0\ X1) \tag{3}$$

Assume the following.

$$\forall X0.\forall X1.(r1\_tarski\ X0\ X1) \Rightarrow (r1\_ordinal1\ (k3\_ordinal2\ X0)\ (k3\_ordinal2\ X1)) \tag{4}$$

Assume the following.

$$\forall X0.(v3\_ordinal1\ X0) \Rightarrow (\forall X1.(v3\_ordinal1\ X1) \Rightarrow ((X0 \in k1\_ordinal1\ X1) \Leftrightarrow (r1\_ordinal1\ X0\ X1))) \tag{5}$$

Assume the following.

$$\forall X0.(v3\_ordinal1\ X0) \Rightarrow (\forall X1.\neg(X0 \in k3\_ordinal2\ X1) \wedge (\forall X2.(v3\_ordinal1\ X2) \Rightarrow (\neg(X2 \in X1) \wedge (r1\_ordinal1\ X0\ X2)))) \tag{6}$$

Assume the following.

$$\forall X0.(v3\_ordinal1\ X0) \Rightarrow (\forall X1.(v3\_ordinal1\ X1) \Rightarrow ((X0 \in X1) \Leftrightarrow (r1\_ordinal1\ (k1\_ordinal1\ X0)\ X1))) \tag{7}$$

Assume the following.

$$\forall X0.(v3\_ordinal1\ X0)\Rightarrow(\forall X1.(X0 \in X1)\Rightarrow(X0 \in k3\_ordinal2\ X1)) \tag{8}$$

Assume the following.

$$\forall X0.(v3\_ordinal1\ X0)\Rightarrow(k3\_ordinal2\ X0 = X0) \tag{9}$$

Assume the following.

$$\forall X0.\forall X1.(k4\_xboole\_0\ (k1\_tarski\ X0)\ (k1\_tarski\ X1) = k1\_tarski\ X0)\Leftrightarrow(X0 \neq X1) \tag{10}$$

Assume the following.

$$\forall X0.\forall X1.((v3\_ordinal1\ X0)\wedge(v3\_ordinal1\ X1))\Rightarrow((r1\_ordinal1\ X0\ X1)\Leftrightarrow(r1\_tarski\ X0\ X1)) \tag{11}$$

Assume the following.

$$\forall X0.\forall X1.k6\_subset\_1\ X0\ X1 = k4\_xboole\_0\ X0\ X1 \tag{12}$$

Assume the following.

$$\forall X0.(v3\_ordinal1\ X0)\Rightarrow((\neg v1\_xboole\_0\ (k1\_ordinal1\ X0))\wedge(v3\_ordinal1\ (k1\_ordinal1\ X0))) \tag{13}$$

Assume the following.

$$\forall X0.v3\_ordinal1\ (k3\_ordinal2\ X0) \tag{14}$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.(X2 = k4\_xboole\_0\ X0\ X1)\Leftrightarrow(\forall X3.(X3 \in X2)\Leftrightarrow((X3 \in X0)\wedge(\neg X3 \in X1))) \tag{15}$$

Assume the following.

$$\forall X0.\forall X1.(X1 = k1\_tarski\ X0)\Leftrightarrow(\forall X2.(X2 \in X1)\Leftrightarrow(X2 = X0)) \tag{16}$$

Assume the following.

$$\forall X0.k1\_ordinal1\ X0 = k2\_xboole\_0\ X0\ (k1\_tarski\ X0) \tag{17}$$

Assume the following.

$$\forall X0.\forall X1.(X0 = X1)\Leftrightarrow((r1\_tarski\ X0\ X1)\wedge(r1\_tarski\ X1\ X0)) \tag{18}$$

Theorem 1

$$\forall X0.(v3\_ordinal1\ X0)\Rightarrow(k3\_ordinal2\ (k1\_tarski\ X0) = k1\_ordinal1\ X0)$$