

l56_card_1 (TMRSMfgTUun- WxM7GRj1YSnXCcd4ePGpkXyd)

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Let $v3_ordinal1 : \iota \Rightarrow o$ be given. Let $v7_ordinal1 : \iota \Rightarrow o$ be given. Let $r2_wellord2 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $r1_ordinal1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_card_1 : \iota \Rightarrow \iota$ be given. Let $r1_tarski : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_ordinal1 : \iota \Rightarrow \iota$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $v1_card_1 : \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0.(v3_ordinal1 X0) \Rightarrow (r1_ordinal1 (k1_card_1 X0) X0) \quad (1)$$

Assume the following.

$$\forall X0.\forall X1.\neg(X0 \in X1) \wedge (r1_tarski X1 X0) \quad (2)$$

Assume the following.

$$\forall X0.(v3_ordinal1 X0) \Rightarrow (\forall X1.(v3_ordinal1 X1) \Rightarrow ((X0 \in X1) \Leftrightarrow (r1_ordinal1 (k1_ordinal1 X0) X1))) \quad (3)$$

Assume the following.

$$\forall X0.(v3_ordinal1 X0) \Rightarrow (\forall X1.(v3_ordinal1 X1) \Rightarrow (\neg(\neg X0 \in X1) \wedge ((X0 \neq X1) \wedge (\neg X1 \in X0)))) \quad (4)$$

Assume the following.

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

Assume the following.

$$\forall X0.\forall X1.(r1_tarski X0 X1) \Rightarrow (r1_ordinal1 (k1_card_1 X0) (k1_card_1 X1)) \quad (6)$$

Assume the following.

$$\forall X0.\forall X1.r2_wellord2 X0 X0 \quad (7)$$

Assume the following.

$$\forall X0.\forall X1.r1_tarski X0 X0 \quad (8)$$

Assume the following.

$$\forall X0.\forall X1.((v3_ordinal1\ X0)\wedge(v3_ordinal1\ X1))\Rightarrow((r1_ordinal1\ X0\ X1)\Leftrightarrow(r1_tarSKI\ X0\ X1)) \quad (9)$$

Assume the following.

$$\forall X0.((v3_ordinal1\ X0)\wedge(v7_ordinal1\ X0))\Rightarrow(v7_ordinal1\ (k1_ordinal1\ X0)) \quad (10)$$

Assume the following.

$$\forall X0.(v3_ordinal1\ X0)\Rightarrow((\neg v1_xboole_0\ (k1_ordinal1\ X0))\wedge (v3_ordinal1\ (k1_ordinal1\ X0))) \quad (11)$$

Assume the following.

$$\forall X0.\forall X1.(v1_card_1\ X1)\Rightarrow((X1 = k1_card_1\ X0)\Leftrightarrow(r2_wellord2\ X0\ X1)) \quad (12)$$

Assume the following.

$$\forall X0.(v7_ordinal1\ X0)\Rightarrow(v3_ordinal1\ X0) \quad (13)$$

Assume the following.

$$\forall X0.(v7_ordinal1\ X0)\Rightarrow(v1_card_1\ X0) \quad (14)$$

Theorem 1

$$\forall X0.(v3_ordinal1\ X0)\Rightarrow(\forall X1.(v7_ordinal1\ X1)\Rightarrow((r2_wellord2\ X0\ X1)\Rightarrow(X0 = X1)))$$