

t32_ordinal3 (TMNptpvfaBQH- wNQa7aduPGLtc7WobmbS1da)

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Let $v3_ordinal1 : \iota \Rightarrow o$ be given. Let $k1_xboole_0 : \iota$ be given. Let $k11_ordinal2 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $r1_ordinal1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $r1_tarSKI : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $np_1 : \iota$ be given. Let $k1_ordinal1 : \iota \Rightarrow \iota$ be given. Let $v1_ordinal1 : \iota \Rightarrow o$ be given. Let $r2_xboole_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $np_0 : \iota$ be given. Let $v7_ordinal1 : \iota \Rightarrow o$ be given. Let $k2_xboole_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_tarSKI : \iota \Rightarrow \iota$ be given. Let $v2_ordinal1 : \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0.(v1_xboole_0 X0) \Rightarrow (X0 = k1_xboole_0) \quad (1)$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.\neg(X0 \in X1) \wedge ((m1_subset_1 X1 (k1_zfmisc_1 X2)) \wedge (v1_xboole_0 X2)) \quad (2)$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.((X0 \in X1) \wedge (m1_subset_1 X1 (k1_zfmisc_1 X2))) \Rightarrow (m1_subset_1 X0 X2) \quad (3)$$

Assume the following.

$$\forall X0.(v3_ordinal1 X0) \Rightarrow (\forall X1.(v3_ordinal1 X1) \Rightarrow (\forall X2.(v3_ordinal1 X2) \Rightarrow ((r1_ordinal1 X0 X1) \Rightarrow (r1_ordinal1 (k11_ordinal2 X2 X0) (k11_ordinal2 X2 X1)))))) \quad (4)$$

Assume the following.

$$\forall X0.(v3_ordinal1 X0) \Rightarrow (\forall X1.(v3_ordinal1 X1) \Rightarrow (\forall X2.(v3_ordinal1 X2) \Rightarrow ((r1_ordinal1 X0 X1) \Rightarrow (r1_ordinal1 (k11_ordinal2 X0 X2) (k11_ordinal2 X1 X2)))))) \quad (5)$$

Assume the following.

$$\forall X0.\forall X1.(m1_subset_1 X0 (k1_zfmisc_1 X1)) \Leftrightarrow (r1_tarSKI X0 X1) \quad (6)$$

Assume the following.

$$\forall X0.(v3_ordinal1\ X0)\Rightarrow((k11_ordinal2\ np_1\ X0 = X0)\wedge(k11_ordinal2\ X0\ np_1 = X0)) \quad (7)$$

Assume the following.

$$\forall X0.r1_tarski\ k1_xboole_0\ X0 \quad (8)$$

Assume the following.

$$\forall X0.\forall X1.(m1_subset_1\ X0\ X1)\Rightarrow((v1_xboole_0\ X1)\vee (X0 \in X1)) \quad (9)$$

Assume the following.

$$\forall X0.(v3_ordinal1\ X0)\Rightarrow(\forall X1.(v3_ordinal1\ X1)\Rightarrow((X0 \in X1)\Leftrightarrow(r1_ordinal1\ (k1_ordinal1\ X0)\ X1))) \quad (10)$$

Assume the following.

$$\forall X0.(v1_ordinal1\ X0)\Rightarrow(\forall X1.(v3_ordinal1\ X1)\Rightarrow((r2_xboole_0\ X0\ X1)\Rightarrow(X0 \in X1))) \quad (11)$$

Assume the following.

$$v1_xboole_0\ np_0 \quad (12)$$

Assume the following.

$$k1_ordinal1\ np_0 = np_1 \quad (13)$$

Assume the following.

$$\forall X0.\forall X1.r1_tarski\ X0\ X0 \quad (14)$$

Assume the following.

$$\forall X0.\forall X1.((v3_ordinal1\ X0)\wedge(v3_ordinal1\ X1))\Rightarrow((r1_ordinal1\ X0\ X1)\Leftrightarrow(r1_tarski\ X0\ X1)) \quad (15)$$

Assume the following.

$$\forall X0.((v3_ordinal1\ X0)\wedge(v7_ordinal1\ X0))\Rightarrow(v7_ordinal1\ (k1_ordinal1\ X0)) \quad (16)$$

Assume the following.

$$\forall X0.\forall X1.((v3_ordinal1\ X0)\wedge(v3_ordinal1\ X1))\Rightarrow(v3_ordinal1\ (k11_ordinal2\ X0\ X1)) \quad (17)$$

Assume the following.

$$\forall X0.\forall X1.(r2_xboole_0 X0 X1)\Leftrightarrow((r1_tarski X0 X1)\wedge (X0\neq X1)) \quad (18)$$

Assume the following.

$$\forall X0.k1_ordinal1 X0 = k2_xboole_0 X0 (k1_tarski X0) \quad (19)$$

Assume the following.

$$\forall X0.(v1_xboole_0 X0)\Rightarrow(v7_ordinal1 X0) \quad (20)$$

Assume the following.

$$\forall X0.(v7_ordinal1 X0)\Rightarrow(v3_ordinal1 X0) \quad (21)$$

Assume the following.

$$\forall X0.(v1_xboole_0 X0)\Rightarrow(v3_ordinal1 X0) \quad (22)$$

Assume the following.

$$\forall X0.(v3_ordinal1 X0)\Rightarrow((v1_ordinal1 X0)\wedge(v2_ordinal1 X0)) \quad (23)$$

Theorem 1

$$\forall X0.(v3_ordinal1 X0)\Rightarrow(\forall X1.(v3_ordinal1 X1)\Rightarrow(\forall X2.(v3_ordinal1 X2)\Rightarrow((X0 \in X1)\Rightarrow((X2 = k1_xboole_0)\vee((X0 \in k11_ordinal2 X1 X2)\wedge(X0 \in k11_ordinal2 X2 X1))))))$$