

t75_ordinal6

(TMWZPyzX6kXG3swyfdbbcQGzNUZfKek9zEUC)

October 27, 2020

Let $v3_ordinal1 : \iota \Rightarrow o$ be given. Let $v4_ordinal5 : \iota \Rightarrow o$ be given. Let $k13_ordinal6 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $np_1 : \iota$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $k1_xboole_0 : \iota$ be given. Let $k12_ordinal6 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_ordinal1 : \iota \Rightarrow \iota$ be given. Let $k6_numbers : \iota$ be given. Let $k12_ordinal2 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k4_ordinal1 : \iota$ be given. Let $v2_xxreal_0 : \iota \Rightarrow o$ be given. Let $m2_subset_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_numbers : \iota$ be given. Let $k5_numbers : \iota$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $np_0 : \iota$ be given. Let $v7_ordinal1 : \iota \Rightarrow o$ be given. Let $v1_finset_1 : \iota \Rightarrow o$ be given. Assume the following.

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

Assume the following.

$$\forall X0.(v3_ordinal1 X0) \Rightarrow (\forall X1.(v3_ordinal1 X1) \Rightarrow (k12_ordinal6 X0 (k12_ordinal6 (k1_ordinal1 X0) X1) = k12_ordinal6 (k1_ordinal1 X0) X1)) \quad (2)$$

Assume the following.

$$\forall X0.(v3_ordinal1 X0) \Rightarrow (k13_ordinal6 k6_numbers X0 = k12_ordinal2 k4_ordinal1 X0) \quad (3)$$

Assume the following.

$$((v2_xxreal_0 np_1) \wedge (m2_subset_1 np_1 k1_numbers k5_numbers)) \wedge ((m1_subset_1 np_1 k5_numbers) \wedge (m1_subset_1 np_1 k1_numbers)) \quad (4)$$

Assume the following.

$$v1_xboole_0 np_0 \quad (5)$$

Assume the following.

$$k1_ordinal1 np_0 = np_1 \quad (6)$$

Assume the following.

$$k6_numbers = k1_xboole_0 \quad (7)$$

Assume the following.

$$k5_numbers = k4_ordinal1 \quad (8)$$

Assume the following.

$$\forall X0.\forall X1.((v7_ordinal1 X0)\wedge(v3_ordinal1 X1))\Rightarrow(\quad (9) \\ k13_ordinal6 X0 X1 = k12_ordinal6 X0 X1)$$

Assume the following.

$$\forall X0.\forall X1.((v7_ordinal1 X0)\wedge(v3_ordinal1 X1))\Rightarrow(\quad (10) \\ v3_ordinal1 (k13_ordinal6 X0 X1))$$

Assume the following.

$$\forall X0.(v3_ordinal1 X0)\Rightarrow((v4_ordinal5 X0)\Leftrightarrow(k12_ordinal2 \quad (11) \\ k4_ordinal1 X0 = X0))$$

Assume the following.

$$\forall X0.(m1_subset_1 X0 k4_ordinal1)\Rightarrow(v7_ordinal1 X0) \quad (12)$$

Assume the following.

$$\forall X0.((v3_ordinal1 X0)\wedge(v1_finset_1 X0))\Rightarrow(v7_ordinal1 X0) \quad (13)$$

Assume the following.

$$\forall X0.(v1_xboole_0 X0)\Rightarrow(v3_ordinal1 X0) \quad (14)$$

Assume the following.

$$\forall X0.(v1_xboole_0 X0)\Rightarrow(v1_finset_1 X0) \quad (15)$$

Theorem 1 $\forall X0.(v3_ordinal1 X0)\Rightarrow(v4_ordinal5 (k13_ordinal6 np_1 X0)).$