

t38_ordinal5

(TMYHY9tANxbCNN5LmReVky7n4sMYS9cE1bL)

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Let $v3_ordinal1 : \iota \Rightarrow o$ be given. Let $v4_ordinal5 : \iota \Rightarrow o$ be given. Let $k12_ordinal2 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k4_ordinal1 : \iota$ be given. Let $r1_ordinal1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k10_ordinal2 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $np_1 : \iota$ be given. Let $k11_ordinal2 : \iota \Rightarrow \iota \Rightarrow \iota$ 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 $v1_xboole_0 : \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0.(v3_ordinal1 X0) \Rightarrow ((r1_ordinal1 k4_ordinal1 X0) \Rightarrow (k10_ordinal2 np_1 X0 = X0)) \quad (1)$$

Assume the following.

$$\forall X0.(v3_ordinal1 X0) \Rightarrow ((k12_ordinal2 X0 np_1 = X0) \wedge (k12_ordinal2 np_1 X0 = np_1)) \quad (2)$$

Assume the following.

$$\forall X0.(v3_ordinal1 X0) \Rightarrow (\forall X1.(v3_ordinal1 X1) \Rightarrow (\forall X2.(v3_ordinal1 X2) \Rightarrow (k12_ordinal2 (k12_ordinal2 X0 X1) X2 = k12_ordinal2 X0 (k11_ordinal2 X2 X1)))) \quad (3)$$

Assume the following.

$$\forall X0.(v3_ordinal1 X0) \Rightarrow (\forall X1.(v3_ordinal1 X1) \Rightarrow (\forall X2.(v3_ordinal1 X2) \Rightarrow (k12_ordinal2 X0 (k10_ordinal2 X1 X2) = k11_ordinal2 (k12_ordinal2 X0 X2) (k12_ordinal2 X0 X1)))) \quad (4)$$

Assume the following.

$$((v2_xxreal_0 np_1) \wedge (m2_subset_1 np_1 k1_numbers k5_numbers)) \wedge ((m1_subset_1 np_1 k5_numbers) \wedge (m1_subset_1 np_1 k1_numbers)) \quad (5)$$

Assume the following.

$$\forall X0.\forall X1.((v3_ordinal1 X0) \wedge (v3_ordinal1 X1)) \Rightarrow (r1_ordinal1 X0 X0) \quad (6)$$

Assume the following.

$$k5_numbers = k4_ordinal1 \quad (7)$$

Assume the following.

$$(\neg v1_xboole_0 \ k4_ordinal1) \wedge (v3_ordinal1 \ k4_ordinal1) \quad (8)$$

Assume the following.

$$\forall X0. \forall X1. ((v3_ordinal1 \ X0) \wedge (v3_ordinal1 \ X1)) \Rightarrow (v3_ordinal1 \ (k12_ordinal2 \ X0 \ X1)) \quad (9)$$

Assume the following.

$$\forall X0. (v3_ordinal1 \ X0) \Rightarrow ((v4_ordinal5 \ X0) \Leftrightarrow (k12_ordinal2 \ k4_ordinal1 \ X0 = X0)) \quad (10)$$

Assume the following.

$$\forall X0. (v3_ordinal1 \ X0) \Rightarrow (\forall X1. (m1_subset_1 \ X1 \ X0) \Rightarrow (v3_ordinal1 \ X1)) \quad (11)$$

Theorem 1

$$\forall X0. ((v3_ordinal1 \ X0) \wedge (v4_ordinal5 \ X0)) \Rightarrow (k12_ordinal2 \ k4_ordinal1 \ (k12_ordinal2 \ X0 \ k4_ordinal1) = k12_ordinal2 \ X0 \ (k12_ordinal2 \ X0 \ k4_ordinal1))$$