

t5_radix_5

(TMV3YxX9g8gqgA9opN5Uyeerzfh5qB2yFJq)

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Let $v7_ordinal1 : \iota \Rightarrow o$ be given. Let $k2_finseq_1 : \iota \Rightarrow \iota$ be given. Let $k4_radix_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k10_radix_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k6_numbers : \iota$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $k1_xboole_0 : \iota$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $k3_nat_d : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k4_nat_d : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v2_xxreal_0 : \iota \Rightarrow o$ be given. Let $np_1 : \iota$ 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 $np_0 : \iota$ be given. Let $k4_ordinal1 : \iota$ be given. Let $v3_ordinal1 : \iota \Rightarrow o$ be given. Let $k1_newton : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k7_nat_d : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_radix_1 : \iota \Rightarrow \iota$ be given. Let $k13_newton : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v3_card_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $m2_finseq_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k3_radix_1 : \iota \Rightarrow \iota$ be given. Let $k9_radix_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ 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.

$$\forall X0.\forall X1.(m1_subset_1 X0 X1) \Rightarrow ((v1_xboole_0 X1) \vee (X0 \in X1)) \quad (3)$$

Assume the following.

$$\forall X0.(v7_ordinal1 X0) \Rightarrow (k3_nat_d k6_numbers X0 = k6_numbers) \quad (4)$$

Assume the following.

$$\forall X0.(v7_ordinal1 X0) \Rightarrow (k6_numbers = k4_nat_d k6_numbers X0) \quad (5)$$

Assume the following.

$$((v2_xxreal_0 np_1) \wedge (m2_subset_1 np_1 k1_numbers k5_numbers)) \wedge ((m1_subset_1 np_1 k5_numbers) \wedge (m1_subset_1 np_1 k1_numbers)) \quad (6)$$

Assume the following.

$$(m2_subset_1\ np_0\ k1_numbers\ k5_numbers) \wedge ((m1_subset_1\ np_0\ k5_numbers) \wedge (m1_subset_1\ np_0\ k1_numbers)) \quad (7)$$

Assume the following.

$$v1_xboole_0\ np_0 \quad (8)$$

Assume the following.

$$\forall X0.\forall X1.((\neg v1_xboole_0\ X0) \wedge ((\neg v1_xboole_0\ X1) \wedge (m1_subset_1\ X1\ (k1_zfmisc_1\ X0)))) \Rightarrow (\forall X2.(m2_subset_1\ X2\ X0\ X1) \Leftrightarrow (m1_subset_1\ X2\ X1)) \quad (9)$$

Assume the following.

$$k6_numbers = k1_xboole_0 \quad (10)$$

Assume the following.

$$k5_numbers = k4_ordinal1 \quad (11)$$

Assume the following.

$$(\neg v1_xboole_0\ k4_ordinal1) \wedge (v3_ordinal1\ k4_ordinal1) \quad (12)$$

Assume the following.

$$\forall X0.\forall X1.((v7_ordinal1\ X0) \wedge (v7_ordinal1\ X1)) \Rightarrow (v7_ordinal1\ (k1_newton\ X0\ X1)) \quad (13)$$

Assume the following.

$$\forall X0.\forall X1.((v7_ordinal1\ X0) \wedge (v7_ordinal1\ X1)) \Rightarrow (m1_subset_1\ (k7_nat_d\ X0\ X1)\ k5_numbers) \quad (14)$$

Assume the following.

$$m1_subset_1\ k5_numbers\ (k1_zfmisc_1\ k1_numbers) \quad (15)$$

Assume the following.

$$\forall X0.(v7_ordinal1\ X0) \Rightarrow (m1_subset_1\ (k1_radix_1\ X0)\ k5_numbers) \quad (16)$$

Assume the following.

$$\forall X0.\forall X1.((m1_subset_1\ X0\ k5_numbers) \wedge (m1_subset_1\ X1\ k5_numbers)) \Rightarrow (m2_subset_1\ (k13_newton\ X0\ X1)\ k1_numbers\ k5_numbers) \quad (17)$$

Assume the following.

$$\begin{aligned} \forall X0. \forall X1. \forall X2. ((v7_ordinal1\ X0) \wedge ((v7_ordinal1 \\ X1) \wedge (v7_ordinal1\ X2))) \Rightarrow ((v3_card_1\ (k10_radix_1\ X0\ X1\ X2)\ X1) \wedge \\ (m2_finseq_1\ (k10_radix_1\ X0\ X1\ X2)\ (k3_radix_1\ X0))) \end{aligned} \quad (18)$$

Assume the following.

$$\begin{aligned} \forall X0. (v7_ordinal1\ X0) \Rightarrow (\forall X1. (v7_ordinal1\ X1) \Rightarrow (\forall X2. \\ (v7_ordinal1\ X2) \Rightarrow (\forall X3. ((v3_card_1\ X3\ X1) \wedge (m2_finseq_1 \\ X3\ (k3_radix_1\ X0)))) \Rightarrow ((X3 = k10_radix_1\ X0\ X1\ X2) \Leftrightarrow (\forall X4. (\\ v7_ordinal1\ X4) \Rightarrow ((X4 \in k2_finseq_1\ X1) \Rightarrow (k4_radix_1\ X4\ X0\ X1\ X3 = \\ k9_radix_1\ X4\ X0\ X2))))))) \end{aligned} \quad (19)$$

Assume the following.

$$\begin{aligned} \forall X0. (v7_ordinal1\ X0) \Rightarrow (\forall X1. (v7_ordinal1\ X1) \Rightarrow (\forall X2. \\ (v7_ordinal1\ X2) \Rightarrow (k9_radix_1\ X0\ X1\ X2 = k3_nat_d\ (k4_nat_d\ X2\ (k1_newton \\ (k1_radix_1\ X1)\ X0))\ (k13_newton\ (k1_radix_1\ X1)\ (k7_nat_d\ X0\ np_1)))))) \end{aligned} \quad (20)$$

Assume the following.

$$\forall X0. (m1_subset_1\ X0\ k4_ordinal1) \Rightarrow (v7_ordinal1\ X0) \quad (21)$$

Theorem 1

$$\begin{aligned} \forall X0. (v7_ordinal1\ X0) \Rightarrow (\forall X1. (v7_ordinal1\ X1) \Rightarrow (\forall X2. \\ (v7_ordinal1\ X2) \Rightarrow ((X0 \in k2_finseq_1\ X2) \Rightarrow (k4_radix_1\ X0\ X1\ X2\ (k10_radix_1 \\ X1\ X2\ k6_numbers) = k6_numbers)))))) \end{aligned}$$