

t36_nat_1 (TM-
FyRKk5sFEXyDRvY5iTHUkAHdFiTYwgMEp)

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Let $v7_ordinal1 : \iota \Rightarrow o$ be given. Let $r1_xxreal_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $np_12 : \iota$ be given. Let $k6_numbers : \iota$ be given. Let $np_1 : \iota$ be given. Let $np_2 : \iota$ be given. Let $np_3 : \iota$ be given. Let $np_4 : \iota$ be given. Let $np_5 : \iota$ be given. Let $np_6 : \iota$ be given. Let $np_7 : \iota$ be given. Let $np_8 : \iota$ be given. Let $np_9 : \iota$ be given. Let $np_10 : \iota$ be given. Let $np_11 : \iota$ be given. Let $k1_nat_1 : \iota \Rightarrow \iota \Rightarrow \iota$ 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 $k2_xcmplx_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_xboole_0 : \iota$ be given. Let $k4_ordinal1 : \iota$ be given. Assume the following.

$$\forall X0.(v7_ordinal1 X0) \Rightarrow (\forall X1.(v7_ordinal1 X1) \Rightarrow (\neg (r1_xxreal_0 X0 (k1_nat_1 X1 np_1)) \wedge (\neg r1_xxreal_0 X0 X1) \wedge (X0 \neq k1_nat_1 X1 np_1)))) \quad (1)$$

Assume the following.

$$\forall X0.(v7_ordinal1 X0) \Rightarrow (\neg (r1_xxreal_0 X0 np_11) \wedge ((X0 \neq k6_numbers) \wedge ((X0 \neq np_1) \wedge ((X0 \neq np_2) \wedge ((X0 \neq np_3) \wedge ((X0 \neq np_4) \wedge ((X0 \neq np_5) \wedge ((X0 \neq np_6) \wedge ((X0 \neq np_7) \wedge ((X0 \neq np_8) \wedge ((X0 \neq np_9) \wedge ((X0 \neq np_10) \wedge (X0 \neq np_11)))))))))))))) \quad (2)$$

Assume the following.

$$((v2_xxreal_0 np_1) \wedge (m2_subset_1 np_1 k1_numbers k5_numbers)) \wedge ((m1_subset_1 np_1 k5_numbers) \wedge (m1_subset_1 np_1 k1_numbers)) \quad (3)$$

Assume the following.

$$((v2_xxreal_0 np_11) \wedge (m2_subset_1 np_11 k1_numbers k5_numbers)) \wedge ((m1_subset_1 np_11 k5_numbers) \wedge (m1_subset_1 np_11 k1_numbers)) \quad (4)$$

Assume the following.

$$k2_xcmplx_0 np_1 np_11 = np_12 \quad (5)$$

Assume the following.

$$k6_numbers = k1_xboole_0 \quad (6)$$

Assume the following.

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

Assume the following.

$$\forall X0.\forall X1.((v7_ordinal1 X0)\wedge(m1_subset_1 X1 k5_numbers))\Rightarrow (k1_nat_1 X0 X1 = k2_xcmplx_0 X0 X1) \quad (8)$$

Assume the following.

$$\forall X0.\forall X1.((v7_ordinal1 X0)\wedge(m1_subset_1 X1 k5_numbers))\Rightarrow (k1_nat_1 X0 X1 = k1_nat_1 X1 X0) \quad (9)$$

Assume the following.

$$\forall X0.(m1_subset_1 X0 k4_ordinal1)\Rightarrow(v7_ordinal1 X0) \quad (10)$$

Theorem 1

$$\forall X0.(v7_ordinal1 X0)\Rightarrow(\neg(r1_xxreal_0 X0 np_12)\wedge((X0\neq k6_numbers)\wedge((X0\neq np_1)\wedge((X0\neq np_2)\wedge((X0\neq np_3)\wedge((X0\neq np_4)\wedge((X0\neq np_5)\wedge((X0\neq np_6)\wedge((X0\neq np_7)\wedge((X0\neq np_8)\wedge((X0\neq np_9)\wedge((X0\neq np_10)\wedge((X0\neq np_11)\wedge(X0\neq np_12))))))))))))))$$