

t14_nat_1

(TMPGeqJR5iaisbehJgQf4MARon6qYdTm1dX)

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Let $v7_ordinal1 : \iota \Rightarrow o$ be given. Let $r1_xreal_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $np_1 : \iota$ be given. Let $k6_numbers : \iota$ be given. Let $k1_nat_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v2_xreal_0 : \iota \Rightarrow o$ 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 $k4_xcmplx_0 : \iota \Rightarrow \iota$ be given. Let $np_0 : \iota$ be given. Let $k1_xboole_0 : \iota$ be given. Let $c5_xreal_0 : \iota$ be given. Let $k1_arytm_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $c3_xreal_0 : \iota$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0.(v7_ordinal1 X0) \Rightarrow (\neg(k6_numbers \neq X0) \wedge (r1_xreal_0 X0 k6_numbers)) \quad (1)$$

Assume the following.

$$\forall X0.(v7_ordinal1 X0) \Rightarrow (\forall X1.(v7_ordinal1 X1) \Rightarrow ((\neg r1_xreal_0 (k1_nat_1 X1 np_1) X0) \Leftrightarrow (r1_xreal_0 X0 X1))) \quad (2)$$

Assume the following.

$$((v2_xreal_0 np_1) \wedge (m2_subset_1 np_1 k1_numbers k5_numbers)) \wedge ((m1_subset_1 np_1 k5_numbers) \wedge (m1_subset_1 np_1 k1_numbers)) \quad (3)$$

Assume the following.

$$k2_xcmplx_0 np_1 (k4_xcmplx_0 np_1) = np_0 \quad (4)$$

Assume the following.

$$k2_xcmplx_0 np_0 np_1 = np_1 \quad (5)$$

Assume the following.

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

Assume the following.

$$\forall X0.\forall X1.((v7_ordinal1 X0) \wedge (m1_subset_1 X1 k5_numbers)) \Rightarrow (k1_nat_1 X0 X1 = k2_xcmplx_0 X0 X1) \quad (7)$$

Assume the following.

$$(c5_xreal_0 = k4_xcmplx_0 \ np_1) \wedge (k1_arytm_0 \ c3_xreal_0 \ c5_xreal_0 = k6_numbers) \tag{8}$$

Assume the following.

$$k2_xcmplx_0 \ np_1 \ (k4_xcmplx_0 \ np_1) = k6_numbers \tag{9}$$

Assume the following.

$$v1_xboole_0 \ k1_xboole_0 \tag{10}$$

Assume the following.

$$\forall X0. (v1_xboole_0 \ X0) \Rightarrow (v7_ordinal1 \ X0) \tag{11}$$

Theorem 1

$$\forall X0. (v7_ordinal1 \ X0) \Rightarrow ((\neg r1_xreal_0 \ np_1 \ X0) \Rightarrow (X0 = k6_numbers))$$