

l27_nat_4

(TMPJJWcymwdDiu3inMzrXrYFw1rceU6qLjY)

October 27, 2020

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 $r1_xreal_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $np_1 : \iota$ be given. Let $np_5 : \iota$ be given. Let $v1_int_2 : \iota \Rightarrow o$ be given. Let $np_2 : \iota$ be given. Let $np_3 : \iota$ be given. Let $np_4 : \iota$ be given. Let $v7_ordinal1 : \iota \Rightarrow o$ be given. Let $k6_numbers : \iota$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $k1_xboole_0 : \iota$ be given. Let $k4_ordinal1 : \iota$ be given. Let $v3_ordinal1 : \iota \Rightarrow o$ be given. Assume the following.

$$\neg v1_int_2\ np_4 \tag{1}$$

Assume the following.

$$\forall X0.(v7_ordinal1\ X0) \Rightarrow ((\neg r1_xreal_0\ np_1\ X0) \Rightarrow (X0 = k6_numbers)) \tag{2}$$

Assume the following.

$$r1_xreal_0\ np_1\ np_1 \tag{3}$$

Assume the following.

$$\forall X0.\forall X1.((\neg v1_xboole_0\ X0) \wedge ((\neg v1_xboole_0\ X1) \wedge (m1_subset_1\ X1\ (k1_zfmisc_1\ X0)))) \Rightarrow (\forall X2.(m2_subset_1\ X2\ X0\ X1) \Leftrightarrow (m1_subset_1\ X2\ X1)) \tag{4}$$

Assume the following.

$$k6_numbers = k1_xboole_0 \tag{5}$$

Assume the following.

$$k5_numbers = k4_ordinal1 \tag{6}$$

Assume the following.

$$\forall X0.(m1_subset_1\ X0\ k5_numbers) \Rightarrow (\neg(r1_xreal_0\ np_1\ X0) \wedge ((\neg r1_xreal_0\ np_5\ X0) \wedge ((X0 \neq np_1) \wedge ((X0 \neq np_2) \wedge ((X0 \neq np_3) \wedge (X0 \neq np_4)))))) \tag{7}$$

Assume the following.

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

Assume the following.

$$v1_xboole_0 \ k1_xboole_0 \quad (9)$$

Assume the following.

$$\neg v1_xboole_0 \ k1_numbers \quad (10)$$

Assume the following.

$$m1_subset_1 \ k5_numbers \ (k1_zfmisc_1 \ k1_numbers) \quad (11)$$

Assume the following.

$$k1_xboole_0 = the \ (\lambda X0 : \iota.v1_xboole_0 \ X0) \quad (12)$$

Assume the following.

$$\forall X0.(m1_subset_1 \ X0 \ k4_ordinal1) \Rightarrow (v7_ordinal1 \ X0) \quad (13)$$

Assume the following.

$$\forall X0.((v7_ordinal1 \ X0) \wedge (v1_int_2 \ X0)) \Rightarrow ((\neg v1_xboole_0 \ X0) \wedge ((v7_ordinal1 \ X0) \wedge (v1_int_2 \ X0))) \quad (14)$$

Theorem 1

$$\forall X0.(m2_subset_1 \ X0 \ k1_numbers \ k5_numbers) \Rightarrow (\neg(\neg r1_xxreal_0 \ X0 \ np_1) \wedge ((\neg r1_xxreal_0 \ np_5 \ X0) \wedge ((v1_int_2 \ X0) \wedge ((X0 \neq np_2) \wedge (X0 \neq np_3)))))$$