

t36_binari_3

(TMYNaeWLycUFaiHcUzeqjKgfhhhC5YCFH63)

October 27, 2020

Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $v7_ordinal1 : \iota \Rightarrow o$ 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 $k6_margrel1 : \iota$ be given. Let $k1_binari_3 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k6_binarith : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $r1_xxreal_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k5_series_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $np_2 : \iota$ be given. Let $k1_xboole_0 : \iota$ be given. Let $k4_ordinal1 : \iota$ be given. Let $m2_subset_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $m1_finseq_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k5_numbers : \iota$ be given. Let $v3_ordinal1 : \iota \Rightarrow o$ be given. Let $k1_numbers : \iota$ be given. Assume the following.

$$\forall X0. \forall X1. \neg(v1_xboole_0 X0) \wedge ((X0 \neq X1) \wedge (v1_xboole_0 X1)) \quad (1)$$

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.

$$\forall X0. ((\neg v1_xboole_0 X0) \wedge (v7_ordinal1 X0)) \Rightarrow (\forall X1. (v7_ordinal1 X1) \Rightarrow ((\neg r1_xxreal_0 (k5_series_1 np_2 X0) X1) \Rightarrow (k6_binarith X0 (k1_binari_3 X0 X1) = X1))) \quad (3)$$

Assume the following.

$$\forall X0. \forall X1. (m1_subset_1 X0 X1) \Rightarrow ((v1_xboole_0 X1) \vee (X0 \in X1)) \quad (4)$$

Assume the following.

$$\forall X0. ((\neg v1_xboole_0 X0) \wedge (v7_ordinal1 X0)) \Rightarrow (\forall X1. ((v3_card_1 X1 X0) \wedge (m2_finseq_1 X1 k6_margrel1)) \Rightarrow (\forall X2. ((v3_card_1 X2 X0) \wedge (m2_finseq_1 X2 k6_margrel1)) \Rightarrow ((k6_binarith X0 X1 = k6_binarith X0 X2) \Rightarrow (X1 = X2)))) \quad (5)$$

Assume the following.

$$m1_subset_1 \ k1_xboole_0 \ k4_ordinal1 \quad (6)$$

Assume the following.

$$\begin{aligned} \forall X0.((\neg v1_xboole_0 \ X0) \wedge (v7_ordinal1 \ X0)) \Rightarrow (\forall X1. \\ ((v3_card_1 \ X1 \ X0) \wedge (m2_finseq_1 \ X1 \ k6_margrel1)) \Rightarrow (\neg r1_xreal_0 \\ (k5_series_1 \ np_2 \ X0) \ (k6_binarith \ X0 \ X1))) \end{aligned} \quad (7)$$

Assume the following.

$$\begin{aligned} \forall X0.\forall X1.((\neg v1_xboole_0 \ X0) \wedge ((\neg v1_xboole_0 \ X1) \wedge \\ (m1_subset_1 \ X1 \ (k1_zfmisc_1 \ X0)))) \Rightarrow (\forall X2.(m2_subset_1 \\ X2 \ X0 \ X1) \Leftrightarrow (m1_subset_1 \ X2 \ X1)) \end{aligned} \quad (8)$$

Assume the following.

$$\forall X0.\forall X1.(m2_finseq_1 \ X1 \ X0) \Leftrightarrow (m1_finseq_1 \ X1 \ X0) \quad (9)$$

Assume the following.

$$k5_numbers = k4_ordinal1 \quad (10)$$

Assume the following.

$$\exists X0.v1_xboole_0 \ X0 \quad (11)$$

Assume the following.

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

Assume the following.

$$v1_xboole_0 \ k1_xboole_0 \quad (13)$$

Assume the following.

$$\begin{aligned} \forall X0.\forall X1.((v7_ordinal1 \ X0) \wedge ((v3_card_1 \ X1 \ X0) \wedge \\ (m1_finseq_1 \ X1 \ k6_margrel1))) \Rightarrow (m2_subset_1 \ (k6_binarith \ X0 \ X1) \\ k1_numbers \ k5_numbers) \end{aligned} \quad (14)$$

Assume the following.

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

Assume the following.

$$\begin{aligned} \forall X0.\forall X1.((v7_ordinal1 \ X0) \wedge (v7_ordinal1 \ X1)) \Rightarrow (\\ (v3_card_1 \ (k1_binari_3 \ X0 \ X1) \ X0) \wedge (m2_finseq_1 \ (k1_binari_3 \\ X0 \ X1) \ k6_margrel1)) \end{aligned} \quad (16)$$

Assume the following.

$$\forall X0.(m1_subset_1 \ X0 \ k4_ordinal1) \Rightarrow (v7_ordinal1 \ X0) \quad (17)$$

Theorem 1

$$\begin{aligned} & \forall X0.((\neg v1_xboole_0 X0) \wedge (v7_ordinal1 X0)) \Rightarrow (\forall X1. \\ & ((v3_card_1 X1 X0) \wedge (m2_finseq_1 X1 k6_margrel1)) \Rightarrow (k1_binari_3 \\ & X0 (k6_binarith X0 X1) = X1)) \end{aligned}$$