

t3_binari_4 (TMNjPdi- CYaDF3WcGyTNmjPR7zo52HX5VzqL)

October 27, 2020

Let $v7_ordinal1 : \iota \Rightarrow o$ be given. Let $k7_euclid : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k5_euclid : \iota \Rightarrow \iota$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $k1_xboole_0 : \iota$ be given. Let $v1_xcmplx_0 : \iota \Rightarrow o$ be given. Let $k2_xcmplx_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k6_numbers : \iota$ be given. Let $m1_finseq_2 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $m2_finseq_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_euclid : \iota \Rightarrow \iota$ be given. Let $k1_valued_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k5_numbers : \iota$ be given. Let $k4_ordinal1 : \iota$ be given. Let $k5_finseq_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2_finseq_2 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k4_euclid : \iota \Rightarrow \iota$ be given. Let $k3_xboole_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1_relat_1 : \iota \Rightarrow o$ be given. Let $v3_relat_1 : \iota \Rightarrow o$ be given. Let $v1_funct_1 : \iota \Rightarrow o$ be given. Let $v1_finseq_1 : \iota \Rightarrow o$ be given. Let $v1_finset_1 : \iota \Rightarrow o$ be given. Let $v1_valued_0 : \iota \Rightarrow o$ be given. Let $k1_funct_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_numbers : \iota$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $m2_subset_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v3_valued_0 : \iota \Rightarrow o$ be given. Let $k9_xtuple_0 : \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0.(v1_xboole_0 X0) \Rightarrow (X0 = k1_xboole_0) \quad (1)$$

Assume the following.

$$\forall X0.(v1_xcmplx_0 X0) \Rightarrow (k2_xcmplx_0 X0 k6_numbers = X0) \quad (2)$$

Assume the following.

$$\forall X0.\forall X1.(m1_finseq_2 X1 X0) \Rightarrow (\forall X2.(m2_finseq_2 X2 X0 X1) \Leftrightarrow (m1_subset_1 X2 X1)) \quad (3)$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.((v7_ordinal1 X0) \wedge ((m1_subset_1 X1 (k1_euclid X0)) \wedge (m1_subset_1 X2 (k1_euclid X0)))) \Rightarrow (k7_euclid X0 X1 X2 = k1_valued_1 X1 X2) \quad (4)$$

Assume the following.

$$k6_numbers = k1_xboole_0 \quad (5)$$

Assume the following.

$$k5_numbers = k4_ordinal1 \quad (6)$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.((\neg v1_xboole_0 X0)\wedge((v7_ordinal1 X1)\wedge(m1_subset_1 X2 X0)))\Rightarrow(k5_finseq_2 X0 X1 X2 = k2_finseq_2 X1 X2) \quad (7)$$

Assume the following.

$$\forall X0.(v7_ordinal1 X0)\Rightarrow(k5_euclid X0 = k4_euclid X0) \quad (8)$$

Assume the following.

$$\forall X0.\forall X1.k3_xboole_0 X0 X0 = X0 \quad (9)$$

Assume the following.

$$\forall X0.(v7_ordinal1 X0)\Rightarrow((v1_relat_1 (k2_finseq_2 X0 k6_numbers))\wedge((v3_relat_1 (k2_finseq_2 X0 k6_numbers))\wedge((v1_funct_1 (k2_finseq_2 X0 k6_numbers))\wedge(v1_finseq_1 (k2_finseq_2 X0 k6_numbers)))))) \quad (10)$$

Assume the following.

$$\neg v1_finset_1 k4_ordinal1 \quad (11)$$

Assume the following.

$$\forall X0.\forall X1.((v1_relat_1 X0)\wedge((v1_funct_1 X0)\wedge(v1_valued_0 X0)))\Rightarrow(v1_xcmplx_0 (k1_funct_1 X0 X1)) \quad (12)$$

Assume the following.

$$\neg v1_xboole_0 k1_numbers \quad (13)$$

Assume the following.

$$\forall X0.\forall X1.((v1_relat_1 X0)\wedge((v3_relat_1 X0)\wedge(v1_funct_1 X0)))\Rightarrow(v1_xboole_0 (k1_funct_1 X0 X1)) \quad (14)$$

Assume the following.

$$\forall X0.\forall X1.((\neg v1_xboole_0 X0)\wedge((\neg v1_xboole_0 X1)\wedge(m1_subset_1 X1 (k1_zfmisc_1 X0))))\Rightarrow(\forall X2.(m2_subset_1 X2 X0 X1)\Rightarrow(m1_subset_1 X2 X0)) \quad (15)$$

Assume the following.

$$m2_subset_1 k6_numbers k1_numbers k5_numbers \quad (16)$$

Assume the following.

$$m1_subset_1 \ k5_numbers \ (k1_zfmisc_1 \ k1_numbers) \quad (17)$$

Assume the following.

$$\forall X0.(v7_ordinal1 \ X0) \Rightarrow (m2_finseq_2 \ (k5_euclid \ X0) \ k1_numbers \ (k1_euclid \ X0)) \quad (18)$$

Assume the following.

$$\forall X0.(v7_ordinal1 \ X0) \Rightarrow ((v1_relat_1 \ (k4_euclid \ X0)) \wedge ((v1_funct_1 \ (k4_euclid \ X0)) \wedge ((v1_finseq_1 \ (k4_euclid \ X0)) \wedge (v3_valued_0 \ (k4_euclid \ X0)))))) \quad (19)$$

Assume the following.

$$\forall X0.(v7_ordinal1 \ X0) \Rightarrow (m1_finseq_2 \ (k1_euclid \ X0) \ k1_numbers) \quad (20)$$

Assume the following.

$$\forall X0.(v7_ordinal1 \ X0) \Rightarrow (k4_euclid \ X0 = k5_finseq_2 \ k1_numbers \ X0 \ k6_numbers) \quad (21)$$

Assume the following.

$$\begin{aligned} \forall X0.((v1_relat_1 \ X0) \wedge ((v1_funct_1 \ X0) \wedge (v1_valued_0 \ X0))) \Rightarrow \\ (\forall X1.((v1_relat_1 \ X1) \wedge ((v1_funct_1 \ X1) \wedge (v1_valued_0 \ X1))) \Rightarrow (\forall X2.((v1_relat_1 \ X2) \wedge (v1_funct_1 \ X2)) \Rightarrow ((X2 = k1_valued_1 \ X0 \ X1) \Leftrightarrow ((k9_xtuple_0 \ X2 = k3_xboole_0 \ (k9_xtuple_0 \ X0) \ (k9_xtuple_0 \ X1)) \wedge (\forall X3.(X3 \in k9_xtuple_0 \ X2) \Rightarrow (k1_funct_1 \ X2 \ X3 = k2_xcmplx_0 \ (k1_funct_1 \ X0 \ X3) \ (k1_funct_1 \ X1 \ X3))))))) \end{aligned} \quad (22)$$

Assume the following.

$$\forall X0.((v1_relat_1 \ X0) \wedge (v3_valued_0 \ X0)) \Rightarrow ((v1_relat_1 \ X0) \wedge (v1_valued_0 \ X0)) \quad (23)$$

Assume the following.

$$\forall X0.((v1_relat_1 \ X0) \wedge ((v1_funct_1 \ X0) \wedge (v1_finseq_1 \ X0))) \Rightarrow ((v1_relat_1 \ X0) \wedge ((v1_funct_1 \ X0) \wedge (v1_finset_1 \ X0))) \quad (24)$$

Assume the following.

$$\forall X0.(v1_xboole_0 \ X0) \Rightarrow (v1_relat_1 \ X0) \quad (25)$$

Assume the following.

$$\forall X0.(v1_xboole_0 \ X0) \Rightarrow (v1_funct_1 \ X0) \quad (26)$$

Assume the following.

$$\forall X0.((v1_relat_1 \ X0) \wedge (v1_xboole_0 \ X0)) \Rightarrow ((v1_relat_1 \ X0) \wedge (v1_finseq_1 \ X0)) \quad (27)$$

Theorem 1

$$\forall X0.(v7_ordinal1\ X0) \Rightarrow (k7_euclid\ X0 \wedge (k5_euclid\ X0) \wedge (k5_euclid\ X0) = k5_euclid\ X0)$$