

t50_int_4 (TMWJsRLATqGStgRtyyREZYd- PLW4zk7hXFBR)

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 $r1_int_4 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_xboole_0 : \iota$ be given. Let $k6_numbers : \iota$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $v1_finset_1 : \iota \Rightarrow o$ be given. Let $k5_card_1 : \iota \Rightarrow \iota$ be given. Let $v1_int_1 : \iota \Rightarrow o$ be given. Let $k4_tarski : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_int_4 : \iota \Rightarrow \iota$ be given. Let $k1_card_1 : \iota \Rightarrow \iota$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k4_ordinal1 : \iota$ be given. Let $v1_relat_1 : \iota \Rightarrow o$ be given. Let $v1_funct_1 : \iota \Rightarrow o$ be given. Let $v1_finseq_1 : \iota \Rightarrow o$ be given. Let $k3_finseq_1 : \iota \Rightarrow \iota$ be given. Let $v3_valued_0 : \iota \Rightarrow o$ be given. Let $k1_rvsum_1 : \iota \Rightarrow \iota$ be given. Let $k10_xtuple_0 : \iota \Rightarrow \iota$ be given. Let $v4_relat_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_relset_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k9_xtuple_0 : \iota \Rightarrow \iota$ be given. Let $v1_partfun1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v4_valued_0 : \iota \Rightarrow o$ be given. Let $m1_finseq_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v5_relat_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $k2_zfmisc_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v7_ordinal1 : \iota \Rightarrow o$ be given. Let $k1_funct_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k6_finseq_1 : \iota \Rightarrow \iota$ be given. Let $v3_relat_1 : \iota \Rightarrow o$ be given. Let $m2_finseq_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k4_numbers : \iota$ be given. Let $k6_eqrel_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k7_nat_d : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $np_1 : \iota$ be given. Assume the following.

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

Assume the following.

$$\forall X0. (v1_xboole_0 X0) \Rightarrow (X0 = k1_xboole_0) \quad (2)$$

Assume the following.

$$\begin{aligned} & \forall X0. (m2_subset_1 X0 k1_numbers k5_numbers) \Rightarrow (\forall X1. \\ & (v1_finset_1 X1) \Rightarrow ((r1_int_4 X0 X1) \Rightarrow ((k5_card_1 X1 = X0) \wedge (\forall X2. \\ & (v1_int_1 X2) \Rightarrow (\forall X3. (v1_int_1 X3) \Rightarrow (\neg (X2 \in X1) \wedge ((X3 \in X1) \wedge \\ & ((X2 \neq X3) \wedge (k4_tarski X2 X3 \in k1_int_4 X0)))))))))) \quad (3) \end{aligned}$$

Assume the following.

$$k1_card_1 k1_xboole_0 = k1_xboole_0 \quad (4)$$

Assume the following.

$$m1_subset_1 \ k1_xboole_0 \ k4_ordinal1 \quad (5)$$

Assume the following.

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

Assume the following.

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

Assume the following.

$$\forall X0.(v1_finset_1 \ X0) \Rightarrow (k5_card_1 \ X0 = k1_card_1 \ X0) \quad (8)$$

Assume the following.

$$\forall X0.((v1_relat_1 \ X0) \wedge ((v1_funct_1 \ X0) \wedge (v1_finseq_1 \ X0))) \Rightarrow (k3_finseq_1 \ X0 = k1_card_1 \ X0) \quad (9)$$

Assume the following.

$$\forall X0.((v1_relat_1 \ X0) \wedge (v3_valued_0 \ X0)) \Rightarrow (k1_rvsum_1 \ X0 = k10_xtuple_0 \ X0) \quad (10)$$

Assume the following.

$$\forall X0.\forall X1.((v1_relat_1 \ X1) \wedge (v4_relat_1 \ X1 \ X0)) \Rightarrow (k1_relset_1 \ X0 \ X1 = k9_xtuple_0 \ X1) \quad (11)$$

Assume the following.

$$\forall X0.\exists X1.(v1_relat_1 \ X1) \wedge ((v4_relat_1 \ X1 \ X0) \wedge ((v1_funct_1 \ X1) \wedge ((v1_partfun1 \ X1 \ X0) \wedge (v4_valued_0 \ X1)))) \quad (12)$$

Assume the following.

$$\forall X0.\exists X1.(m1_finseq_1 \ X1 \ X0) \wedge ((v1_relat_1 \ X1) \wedge ((v4_relat_1 \ X1 \ k5_numbers) \wedge ((v5_relat_1 \ X1 \ X0) \wedge ((v1_funct_1 \ X1) \wedge ((v1_xboole_0 \ X1) \wedge ((v1_finset_1 \ X1) \wedge (v1_finseq_1 \ X1))))))) \quad (13)$$

Assume the following.

$$\forall X0.\forall X1.\exists X2.(m1_subset_1 \ X2 \ (k1_zfmisc_1 \ (k2_zfmisc_1 \ X0 \ X1))) \wedge ((v1_xboole_0 \ X2) \wedge ((v1_relat_1 \ X2) \wedge ((v4_relat_1 \ X2 \ X0) \wedge (v5_relat_1 \ X2 \ X1)))) \quad (14)$$

Assume the following.

$$\forall X0.\forall X1.((v1_relat_1 \ X0) \wedge ((v1_funct_1 \ X0) \wedge (v4_valued_0 \ X0))) \Rightarrow (v7_ordinal1 \ (k1_funct_1 \ X0 \ X1)) \quad (15)$$

Assume the following.

$$\forall X0.v1_xboole_0 (k6_finseq_1 X0) \quad (16)$$

Assume the following.

$$\forall X0.\forall X1.((v1_relat_1 X0)\wedge((v3_relat_1 X0)\wedge(v1_funct_1 X0)))\Rightarrow(v1_xboole_0 (k1_funct_1 X0 X1)) \quad (17)$$

Assume the following.

$$\forall X0.(v1_xboole_0 X0)\Rightarrow(v1_xboole_0 (k10_xtuple_0 X0)) \quad (18)$$

Assume the following.

$$\forall X0.(v1_xboole_0 X0)\Rightarrow(v1_xboole_0 (k9_xtuple_0 X0)) \quad (19)$$

Assume the following.

$$\forall X0.m2_finseq_1 (k6_finseq_1 X0) X0 \quad (20)$$

Assume the following.

$$\forall X0.k6_finseq_1 X0 = k1_xboole_0 \quad (21)$$

Assume the following.

$$\begin{aligned} \forall X0.(v7_ordinal1 X0)\Rightarrow(\forall X1.(r1_int_4 X0 X1)\Leftrightarrow(\exists X2. \\ (m2_finseq_1 X2 k4_numbers)\wedge((X1 = k1_rvsum_1 X2)\wedge((k3_finseq_1 \\ X2 = X0)\wedge(\forall X3.(v7_ordinal1 X3)\Rightarrow((X3 \in k1_relset_1 k5_numbers \\ X2)\Rightarrow(k1_funct_1 X2 X3 \in k6_eqrel_1 k4_numbers k4_numbers (k1_int_4 \\ X0) (k7_nat_d X3 np_1)))))))) \quad (22) \end{aligned}$$

Assume the following.

$$\forall X0.(v1_xboole_0 X0)\Rightarrow(\forall X1.((v1_relat_1 X1)\wedge(v4_relat_1 X1 X0))\Rightarrow((v1_xboole_0 X1)\wedge((v1_relat_1 X1)\wedge(v4_relat_1 X1 X0)))) \quad (23)$$

Assume the following.

$$\forall X0.(m1_finseq_1 X0 k1_numbers)\Rightarrow(v3_valued_0 X0) \quad (24)$$

Assume the following.

$$\forall X0.(m1_subset_1 X0 k4_ordinal1)\Rightarrow(v1_finset_1 X0) \quad (25)$$

Assume the following.

$$\forall X0.((v1_xboole_0 X0)\wedge(v1_relat_1 X0))\Rightarrow((v1_relat_1 X0)\wedge(v3_relat_1 X0)) \quad (26)$$

Assume the following.

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

Assume the following.

$$\forall X0.(v1_xboole_0 X0) \Rightarrow (v1_funct_1 X0) \quad (28)$$

Theorem 1

$$\forall X0.(m2_subset_1 X0 \ k1_numbers \ k5_numbers) \Rightarrow ((r1_int_4 \ X0 \ k1_xboole_0) \Leftrightarrow (X0 = k6_numbers))$$