

t11_random_1
(TMNsS52CKkBNGaRC5honAKBMqQRt6P4bjA7)

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Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $v1_finset_1 : \iota \Rightarrow o$ be given. Let $v1_funct_1 : \iota \Rightarrow o$ be given. Let $v1_funct_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_random_1 : \iota \Rightarrow \iota$ be given. Let $k7_numbers : \iota$ be given. Let $v10_valued_0 : \iota \Rightarrow o$ be given. Let $v6_supinf_2 : \iota \Rightarrow o$ be given. Let $v4_measure1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $k2_zfmisc_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_numbers : \iota$ be given. Let $r1_xxreal_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_xxreal_0 : \iota$ be given. Let $k12_supinf_2 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $m2_finseq_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k3_finseq_1 : \iota \Rightarrow \iota$ be given. Let $k5_card_1 : \iota \Rightarrow \iota$ be given. Let $v2_funct_1 : \iota \Rightarrow o$ be given. Let $k2_relset_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v7_ordinal1 : \iota \Rightarrow o$ be given. Let $k4_finseq_1 : \iota \Rightarrow \iota$ be given. Let $k1_extreal1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_measure6 : \iota \Rightarrow \iota$ be given. Let $k1_seq_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_funct_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_tarski : \iota \Rightarrow \iota$ be given. Let $k1_mesfunc6 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k4_extreal1 : \iota \Rightarrow \iota$ be given. Let $k1_uproots : \iota \Rightarrow \iota$ be given. Let $m1_finseq_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v2_funct_2 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v1_relat_1 : \iota \Rightarrow o$ be given. Let $v1_finseq_1 : \iota \Rightarrow o$ be given. Let $v1_prob_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v4_prob_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v5_relat_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0.(v1_finset_1 X0) \Rightarrow (k3_finseq_1 (k1_uproots X0) = k5_card_1 X0) \quad (1)$$

Assume the following.

$$\forall X0.\forall X1.(m2_finseq_1 X1 X0) \Leftrightarrow (m1_finseq_1 X1 X0) \quad (2)$$

Assume the following.

$$\forall X0.(\neg v1_xboole_0 X0) \Rightarrow (k1_random_1 X0 = k1_zfmisc_1 X0) \quad (3)$$

Assume the following.

$$\begin{aligned} & \forall X0.((\neg v1_xboole_0 X0) \wedge (v1_finset_1 X0)) \Rightarrow (\forall X1. \\ & ((v1_funct_1 X1) \wedge ((v1_funct_2 X1 (k1_random_1 X0) k7_numbers) \wedge \\ & ((v10_valued_0 X1) \wedge ((v6_supinf_2 X1) \wedge ((v4_measure1 X1 X0 (k1_random_1 \\ & X0)) \wedge (m1_subset_1 X1 (k1_zfmisc_1 (k2_zfmisc_1 (k1_random_1 \\ & X0) k7_numbers)))))) \Rightarrow (\forall X2.((v1_funct_1 X2) \wedge ((v1_funct_2 \\ & X2 X0 k1_numbers) \wedge (m1_subset_1 X2 (k1_zfmisc_1 (k2_zfmisc_1 X0 \\ & k1_numbers)))))) \Rightarrow (\neg(\neg r1_xxreal_0 k1_xxreal_0 (k12_supinf_2 \\ & X1 X0)) \wedge (\forall X3.(m2_finseq_1 X3 k7_numbers) \Rightarrow (\neg(k3_finseq_1 \\ & X3 = k5_card_1 X0) \wedge ((\forall X4.(v7_ordinal1 X4) \Rightarrow ((X4 \in k4_finseq_1 \\ & X3) \Rightarrow (k12_supinf_2 X3 X4 = k1_extreal1 (k1_measure6 (k1_seq_1 X2 \\ & (k1_funct_1 (k1_uproots X0) X4))) (k12_supinf_2 X1 (k1_tarski \\ & (k1_funct_1 (k1_uproots X0) X4)))))) \wedge (k1_mesfunc6 X0 (k1_random_1 \\ & X0) X1 X2 = k4_extreal1 X3)))))) \end{aligned} \quad (4)$$

Assume the following.

$$\neg v1_xboole_0 k7_numbers \quad (5)$$

Assume the following.

$$\forall X0.(v1_finset_1 X0) \Rightarrow ((v2_funct_1 (k1_uproots X0)) \wedge (v2_funct_2 (k1_uproots X0) X0)) \quad (6)$$

Assume the following.

$$\neg v1_xboole_0 k1_numbers \quad (7)$$

Assume the following.

$$\forall X0.\forall X1.(m1_finseq_1 X1 X0) \Rightarrow ((v1_relat_1 X1) \wedge ((v1_funct_1 X1) \wedge (v1_finseq_1 X1))) \quad (8)$$

Assume the following.

$$\forall X0.(v1_finset_1 X0) \Rightarrow (m2_finseq_1 (k1_uproots X0) X0) \quad (9)$$

Assume the following.

$$\begin{aligned} & \forall X0.(\neg v1_xboole_0 X0) \Rightarrow ((\neg v1_xboole_0 (k1_random_1 X0)) \wedge \\ & ((v1_prob_1 (k1_random_1 X0) X0) \wedge ((v4_prob_1 (k1_random_1 X0) \\ & X0) \wedge (m1_subset_1 (k1_random_1 X0) (k1_zfmisc_1 (k1_zfmisc_1 \\ & X0)))))) \end{aligned} \quad (10)$$

Assume the following.

$$\forall X0.\forall X1.((v1_relat_1 X1) \wedge (v5_relat_1 X1 X0)) \Rightarrow ((v2_funct_2 X1 X0) \Leftrightarrow (k2_relset_1 X0 X1 = X0)) \quad (11)$$

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.((\neg v1_xboole_0 X0) \wedge (\neg v1_xboole_0 X1)) \Rightarrow \\ & (\forall X2.(m1_subset_1 X2 (k1_zfmisc_1 (k2_zfmisc_1 X0 X1))) \Rightarrow \\ & (((v1_funct_1 X2) \wedge (v1_funct_2 X2 X0 X1)) \Rightarrow ((v1_funct_1 X2) \wedge ((\\ & \neg v1_xboole_0 X2) \wedge (v1_funct_2 X2 X0 X1)))))) \end{aligned} \quad (12)$$

Assume the following.

$$\forall X0.\forall X1.(m1_finseq_1 X1 X0)\Rightarrow(v5_relat_1 X1 X0) \quad (13)$$

Assume the following.

$$\forall X0.(v1_xboole_0 X0)\Rightarrow(\forall X1.(m1_subset_1 X1 (k1_zfmisc_1 X0))\Rightarrow(v1_xboole_0 X1)) \quad (14)$$

Theorem 1

$$\begin{aligned} & \forall X0.((\neg v1_xboole_0 X0)\wedge(v1_finset_1 X0))\Rightarrow(\forall X1. \\ & ((v1_funct_1 X1)\wedge((v1_funct_2 X1 (k1_random_1 X0) k7_numbers)\wedge \\ & ((v10_valued_0 X1)\wedge((v6_supinf_2 X1)\wedge((v4_measure1 X1 X0 (k1_random_1 \\ & X0))\wedge(m1_subset_1 X1 (k1_zfmisc_1 (k2_zfmisc_1 (k1_random_1 \\ & X0) k7_numbers))))))))\Rightarrow(\forall X2.((v1_funct_1 X2)\wedge((v1_funct_2 \\ & X2 X0 k1_numbers)\wedge(m1_subset_1 X2 (k1_zfmisc_1 (k2_zfmisc_1 X0 \\ & k1_numbers))))))\Rightarrow(\neg(\neg r1_xxreal_0 k1_xxreal_0 (k12_supinf_2 \\ & X1 X0))\wedge(\forall X3.(m2_finseq_1 X3 k7_numbers)\Rightarrow(\forall X4. \\ & (m2_finseq_1 X4 X0)\Rightarrow(\neg(k3_finseq_1 X3 = k5_card_1 X0)\wedge((v2_funct_1 \\ & X4)\wedge((k2_relset_1 X0 X4 = X0)\wedge((k3_finseq_1 X4 = k5_card_1 X0)\wedge \\ & ((\forall X5.(v7_ordinal1 X5)\Rightarrow((X5 \in k4_finseq_1 X3)\Rightarrow(k12_supinf_2 \\ & X3 X5 = k1_extreal1 (k1_measure6 (k1_seq_1 X2 (k1_funct_1 X4 X5))) \\ & (k12_supinf_2 X1 (k1_tarski (k1_funct_1 X4 X5))))))\wedge(k1_mesfunc6 \\ & X0 (k1_random_1 X0) X1 X2 = k4_extreal1 X3)))))))))) \end{aligned}$$