

l94_turing_1

(TMLZ3H3z7kCvtz9qj3DcWFEGAAyQxFaLksa)

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Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k3_zfmisc_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $u2_turing_1 : \iota \Rightarrow \iota$ be given. Let $k18_turing_1 : \iota$ be given. Let $k4_numbers : \iota$ be given. Let $k9_funct_2 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $u1_turing_1 : \iota \Rightarrow \iota$ be given. Let $m2_funct_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. 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 $k4_domain_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k6_numbers : \iota$ be given. Let $r2_turing_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k2_finseq_4 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v2_turing_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k2_mcart_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k11_turing_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k3_mcart_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ 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 $k9_finseq_1 : \iota \Rightarrow \iota$ be given. Let $k3_finseq_1 : \iota \Rightarrow \iota$ be given. Let $np_1 : \iota$ be given. Let $k10_xtuple_0 : \iota \Rightarrow \iota$ be given. Let $k1_tarski : \iota \Rightarrow \iota$ be given. Let $m2_finseq_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $r1_xxreal_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k8_finseq_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k12_finseq_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $m1_finseq_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k5_finseq_1 : \iota \Rightarrow \iota$ be given. Let $k7_finseq_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k4_ordinal1 : \iota$ be given. Let $k10_finseq_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v3_ordinal1 : \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0. \forall X1. ((v1_relat_1 X1) \wedge ((v1_funct_1 X1) \wedge (v1_finseq_1 X1))) \Rightarrow ((X1 = k9_finseq_1 X0) \Leftrightarrow ((k3_finseq_1 X1 = np_1) \wedge (k10_xtuple_0 X1 = k1_tarski X0)))$$

(1)

Assume the following.

$$\begin{aligned}
& \forall X0.(m1_subset_1 X0 (k3_zfmisc_1 (u2_turing_1 k18_turing_1) \\
& k4_numbers (k9_funct_2 k4_numbers (u1_turing_1 k18_turing_1)))) \Rightarrow \\
& (\forall X1.(m2_funct_2 X1 k4_numbers (u1_turing_1 k18_turing_1) \\
& (k9_funct_2 k4_numbers (u1_turing_1 k18_turing_1))) \Rightarrow (\forall X2. \\
& (m2_subset_1 X2 k1_numbers k5_numbers) \Rightarrow (\forall X3.(m2_finseq_1 \\
& X3 k5_numbers) \Rightarrow (((r1_xxreal_0 np_1 (k3_finseq_1 X3)) \wedge ((X0 = \\
& k4_domain_1 k5_numbers k5_numbers (k9_funct_2 k4_numbers (u1_turing_1 \\
& k18_turing_1)) k6_numbers X2 X1) \wedge (r2_turing_1 (k8_finseq_1 k5_numbers \\
& (k12_finseq_1 k5_numbers X2) X3) k18_turing_1 X1))) \Rightarrow ((v2_turing_1 \\
& X0 k18_turing_1) \wedge ((k2_mcart_1 (u2_turing_1 k18_turing_1) k4_numbers \\
& (k9_funct_2 k4_numbers (u1_turing_1 k18_turing_1)) (k11_turing_1 \\
& k18_turing_1 X0) = X2) \wedge (r2_turing_1 (k2_finseq_4 k5_numbers X2 \\
& k6_numbers) k18_turing_1 (k3_mcart_1 (u2_turing_1 k18_turing_1) \\
& k4_numbers (k9_funct_2 k4_numbers (u1_turing_1 k18_turing_1)) \\
& (k11_turing_1 k18_turing_1 X0))))))))))
\end{aligned} \tag{2}$$

Assume the following.

$$r1_xxreal_0 np_1 np_1 \tag{3}$$

Assume the following.

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

Assume the following.

$$\forall X0.\forall X1.(m2_finseq_1 X1 X0) \Leftrightarrow (m1_finseq_1 X1 X0) \tag{5}$$

Assume the following.

$$\forall X0.k9_finseq_1 X0 = k5_finseq_1 X0 \tag{6}$$

Assume the following.

$$\begin{aligned}
& \forall X0.\forall X1.\forall X2.((m1_finseq_1 X1 X0) \wedge (m1_finseq_1 \\
& X2 X0)) \Rightarrow (k8_finseq_1 X0 X1 X2 = k7_finseq_1 X1 X2)
\end{aligned} \tag{7}$$

Assume the following.

$$k5_numbers = k4_ordinal1 \tag{8}$$

Assume the following.

$$\begin{aligned}
& \forall X0.\forall X1.\forall X2.((\neg v1_xboole_0 X0) \wedge ((m1_subset_1 \\
& X1 X0) \wedge (m1_subset_1 X2 X0))) \Rightarrow (k2_finseq_4 X0 X1 X2 = k10_finseq_1 \\
& X1 X2)
\end{aligned} \tag{9}$$

Assume the following.

$$\forall X0.\forall X1.((\neg v1_xboole_0 X0)\wedge(m1_subset_1 X1 X0))\Rightarrow (k12_finseq_1 X0 X1 = k5_finseq_1 X1) \quad (10)$$

Assume the following.

$$\forall X0.v1_finseq_1 (k5_finseq_1 X0) \quad (11)$$

Assume the following.

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

Assume the following.

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

Assume the following.

$$\forall X0.\forall X1.((\neg v1_xboole_0 X0)\wedge((\neg v1_xboole_0 X1)\wedge (m1_subset_1 X1 (k1_zfmisc_1 X0))))\Rightarrow(\forall X2.(m2_subset_1 X2 X0 X1)\Rightarrow(m1_subset_1 X2 X0)) \quad (14)$$

Assume the following.

$$\forall X0.(v1_relat_1 (k9_finseq_1 X0))\wedge(v1_funct_1 (k9_finseq_1 X0)) \quad (15)$$

Assume the following.

$$m1_subset_1 k5_numbers (k1_zfmisc_1 k1_numbers) \quad (16)$$

Assume the following.

$$\forall X0.\forall X1.((\neg v1_xboole_0 X0)\wedge(m1_subset_1 X1 X0))\Rightarrow (m2_finseq_1 (k12_finseq_1 X0 X1) X0) \quad (17)$$

Assume the following.

$$\forall X0.\forall X1.k10_finseq_1 X0 X1 = k7_finseq_1 (k9_finseq_1 X0) (k9_finseq_1 X1) \quad (18)$$

Theorem 1

$$\begin{aligned} & \forall X0.(m1_subset_1 X0 (k3_zfmisc_1 (u2_turing_1 k18_turing_1) \\ & k4_numbers (k9_funct_2 k4_numbers (u1_turing_1 k18_turing_1))))\Rightarrow \\ & (\forall X1.(m2_funct_2 X1 k4_numbers (u1_turing_1 k18_turing_1) \\ & (k9_funct_2 k4_numbers (u1_turing_1 k18_turing_1))))\Rightarrow(\forall X2. \\ & (m2_subset_1 X2 k1_numbers k5_numbers)\Rightarrow(\forall X3.(m2_subset_1 \\ & X3 k1_numbers k5_numbers)\Rightarrow(((X0 = k4_domain_1 k5_numbers k5_numbers \\ & (k9_funct_2 k4_numbers (u1_turing_1 k18_turing_1)) k6_numbers \\ & X2 X1)\wedge(r2_turing_1 (k2_finseq_4 k5_numbers X2 X3) k18_turing_1 \\ & X1))\Rightarrow((v2_turing_1 X0 k18_turing_1)\wedge((k2_mcart_1 (u2_turing_1 \\ & k18_turing_1) k4_numbers (k9_funct_2 k4_numbers (u1_turing_1 \\ & k18_turing_1)) (k11_turing_1 k18_turing_1 X0) = X2)\wedge(r2_turing_1 \\ & (k2_finseq_4 k5_numbers X2 k6_numbers) k18_turing_1 (k3_mcart_1 \\ & (u2_turing_1 k18_turing_1) k4_numbers (k9_funct_2 k4_numbers \\ & (u1_turing_1 k18_turing_1)) (k11_turing_1 k18_turing_1 X0)))))))))) \end{aligned}$$