

t7_turing_1

(TMM8UcaJ9SoxocHVBorFEqA2sgfxYd44jce)

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Let $l1_turing_1 : \iota \Rightarrow o$ be given. 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 $k4_numbers : \iota$ be given. Let $k9_funct_2 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $u1_turing_1 : \iota \Rightarrow \iota$ be given. Let $k8_nat_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k10_turing_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k6_numbers : \iota$ 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 $k5_numbers : \iota$ 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 $k1_nat_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $np_1 : \iota$ be given. Let $k9_turing_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. ((l1_turing_1 X0) \wedge (m1_subset_1 X1 (k3_zfmisc_1 \\ & (u2_turing_1 X0) k4_numbers (k9_funct_2 k4_numbers (u1_turing_1 \\ & X0)))) \Rightarrow ((v1_funct_1 (k10_turing_1 X0 X1)) \wedge ((v1_funct_2 (k10_turing_1 \\ & X0 X1) k5_numbers (k3_zfmisc_1 (u2_turing_1 X0) k4_numbers (k9_funct_2 \\ & k4_numbers (u1_turing_1 X0)))) \wedge (m1_subset_1 (k10_turing_1 X0 \\ & X1) (k1_zfmisc_1 (k2_zfmisc_1 k5_numbers (k3_zfmisc_1 (u2_turing_1 \\ & X0) k4_numbers (k9_funct_2 k4_numbers (u1_turing_1 X0)))))))))) \end{aligned} \quad (1)$$

Assume the following.

$$\begin{aligned} & \forall X0. (l1_turing_1 X0) \Rightarrow (\forall X1. (m1_subset_1 X1 (k3_zfmisc_1 \\ & (u2_turing_1 X0) k4_numbers (k9_funct_2 k4_numbers (u1_turing_1 \\ & X0)))) \Rightarrow (\forall X2. ((v1_funct_1 X2) \wedge ((v1_funct_2 X2 k5_numbers \\ & (k3_zfmisc_1 (u2_turing_1 X0) k4_numbers (k9_funct_2 k4_numbers \\ & (u1_turing_1 X0)))) \wedge (m1_subset_1 X2 (k1_zfmisc_1 (k2_zfmisc_1 \\ & k5_numbers (k3_zfmisc_1 (u2_turing_1 X0) k4_numbers (k9_funct_2 \\ & k4_numbers (u1_turing_1 X0)))))) \Rightarrow ((X2 = k10_turing_1 X0 X1) \Leftrightarrow \\ & ((k8_nat_1 (k3_zfmisc_1 (u2_turing_1 X0) k4_numbers (k9_funct_2 \\ & k4_numbers (u1_turing_1 X0))) X2 k6_numbers = X1) \wedge (\forall X3. \\ & (v7_ordinal1 X3) \Rightarrow (k8_nat_1 (k3_zfmisc_1 (u2_turing_1 X0) k4_numbers \\ & (k9_funct_2 k4_numbers (u1_turing_1 X0))) X2 (k1_nat_1 X3 np_1) = \\ & k9_turing_1 X0 (k8_nat_1 (k3_zfmisc_1 (u2_turing_1 X0) k4_numbers \\ & (k9_funct_2 k4_numbers (u1_turing_1 X0))) X2 X3)))))) \end{aligned} \quad (2)$$

Theorem 1

$$\begin{aligned} \forall X0.(l1_turing_1 X0) \Rightarrow (\forall X1.(m1_subset_1 X1 (k3_zfmisc_1 \\ (u2_turing_1 X0) k4_numbers (k9_funct_2 k4_numbers (u1_turing_1 \\ X0)))) \Rightarrow (k8_nat_1 (k3_zfmisc_1 (u2_turing_1 X0) k4_numbers (k9_funct_2 \\ k4_numbers (u1_turing_1 X0))) (k10_turing_1 X0 X1) k6_numbers = \\ X1)) \end{aligned}$$