

t8_turing_1

(TMLkrsUuW4faFyaPsLZzMVn1Vey6zaLYqo4)

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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 $l1_turing_1 : \iota \Rightarrow o$ 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 $k2_nat_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $np_1 : \iota$ be given. Let $k9_turing_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v2_xxreal_0 : \iota \Rightarrow o$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $k4_ordinal1 : \iota$ be given. Let $v7_ordinal1 : \iota \Rightarrow o$ be given. Let $k2_xcmplx_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_nat_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v3_ordinal1 : \iota \Rightarrow o$ 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 $k2_zfmisc_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k6_numbers : \iota$ be given. Assume the following.

$$\begin{aligned} & ((v2_xxreal_0\ np_1) \wedge (m2_subset_1\ np_1\ k1_numbers\ k5_numbers)) \wedge \\ & ((m1_subset_1\ np_1\ k5_numbers) \wedge (m1_subset_1\ np_1\ k1_numbers)) \end{aligned} \quad (1)$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. ((\neg v1_xboole_0\ X0) \wedge ((\neg v1_xboole_0\ X1) \wedge \\ & (m1_subset_1\ X1\ (k1_zfmisc_1\ X0)))) \Rightarrow (\forall X2. (m2_subset_1 \\ & X2\ X0\ X1) \Leftrightarrow (m1_subset_1\ X2\ X1)) \end{aligned} \quad (2)$$

Assume the following.

$$k5_numbers = k4_ordinal1 \quad (3)$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. ((m1_subset_1\ X0\ k5_numbers) \wedge (v7_ordinal1 \\ & X1)) \Rightarrow (k2_nat_1\ X0\ X1 = k2_xcmplx_0\ X0\ X1) \end{aligned} \quad (4)$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. ((v7_ordinal1\ X0) \wedge (m1_subset_1\ X1\ k5_numbers)) \Rightarrow \\ & (k1_nat_1\ X0\ X1 = k2_xcmplx_0\ X0\ X1) \end{aligned} \quad (5)$$

Assume the following.

$$(\neg v1_xboole_0 \ k4_ordinal1) \wedge (v3_ordinal1 \ k4_ordinal1) \quad (6)$$

Assume the following.

$$m1_subset_1 \ k5_numbers \ (k1_zfmisc_1 \ k1_numbers) \quad (7)$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. ((l1_turing_1 \ X0) \wedge (m1_subset_1 \ X1 \ (k3_zfmisc_1 \\ & (u2_turing_1 \ X0) \ k4_numbers \ (k9_funct_2 \ k4_numbers \ (u1_turing_1 \\ & X0)))) \Rightarrow ((v1_funct_1 \ (k10_turing_1 \ X0 \ X1)) \wedge ((v1_funct_2 \ (k10_turing_1 \\ & X0 \ X1) \ k5_numbers \ (k3_zfmisc_1 \ (u2_turing_1 \ X0) \ k4_numbers \ (k9_funct_2 \\ & k4_numbers \ (u1_turing_1 \ X0)))) \wedge (m1_subset_1 \ (k10_turing_1 \ X0 \\ & X1) \ (k1_zfmisc_1 \ (k2_zfmisc_1 \ k5_numbers \ (k3_zfmisc_1 \ (u2_turing_1 \\ & X0) \ k4_numbers \ (k9_funct_2 \ k4_numbers \ (u1_turing_1 \ X0)))))))))) \end{aligned} \quad (8)$$

Assume the following.

$$\begin{aligned} & \forall X0. (l1_turing_1 \ X0) \Rightarrow (\forall X1. (m1_subset_1 \ X1 \ (k3_zfmisc_1 \\ & (u2_turing_1 \ X0) \ k4_numbers \ (k9_funct_2 \ k4_numbers \ (u1_turing_1 \\ & X0)))) \Rightarrow (\forall X2. ((v1_funct_1 \ X2) \wedge ((v1_funct_2 \ X2 \ k5_numbers \\ & (k3_zfmisc_1 \ (u2_turing_1 \ X0) \ k4_numbers \ (k9_funct_2 \ k4_numbers \\ & (u1_turing_1 \ X0)))) \wedge (m1_subset_1 \ X2 \ (k1_zfmisc_1 \ (k2_zfmisc_1 \\ & k5_numbers \ (k3_zfmisc_1 \ (u2_turing_1 \ X0) \ k4_numbers \ (k9_funct_2 \\ & k4_numbers \ (u1_turing_1 \ X0)))))))) \Rightarrow ((X2 = k10_turing_1 \ X0 \ X1) \Leftrightarrow \\ & ((k8_nat_1 \ (k3_zfmisc_1 \ (u2_turing_1 \ X0) \ k4_numbers \ (k9_funct_2 \\ & k4_numbers \ (u1_turing_1 \ X0))) \ X2 \ k6_numbers = X1) \wedge (\forall X3. \\ & (v7_ordinal1 \ X3) \Rightarrow (k8_nat_1 \ (k3_zfmisc_1 \ (u2_turing_1 \ X0) \ k4_numbers \\ & (k9_funct_2 \ k4_numbers \ (u1_turing_1 \ X0))) \ X2 \ (k1_nat_1 \ X3 \ np_1) = \\ & k9_turing_1 \ X0 \ (k8_nat_1 \ (k3_zfmisc_1 \ (u2_turing_1 \ X0) \ k4_numbers \\ & (k9_funct_2 \ k4_numbers \ (u1_turing_1 \ X0))) \ X2 \ X3)))))) \end{aligned} \quad (9)$$

Assume the following.

$$\forall X0. (m1_subset_1 \ X0 \ k4_ordinal1) \Rightarrow (v7_ordinal1 \ X0) \quad (10)$$

Assume the following.

$$\forall X0. (v1_xboole_0 \ X0) \Rightarrow (\forall X1. (m1_subset_1 \ X1 \ (k1_zfmisc_1 \ X0)) \Rightarrow (v1_xboole_0 \ X1)) \quad (11)$$

Theorem 1

$$\begin{aligned} & \forall X0. (m2_subset_1 \ X0 \ k1_numbers \ k5_numbers) \Rightarrow (\forall X1. \\ & (l1_turing_1 \ X1) \Rightarrow (\forall X2. (m1_subset_1 \ X2 \ (k3_zfmisc_1 \ (u2_turing_1 \\ & X1) \ k4_numbers \ (k9_funct_2 \ k4_numbers \ (u1_turing_1 \ X1)))) \Rightarrow (k8_nat_1 \\ & (k3_zfmisc_1 \ (u2_turing_1 \ X1) \ k4_numbers \ (k9_funct_2 \ k4_numbers \\ & (u1_turing_1 \ X1))) \ (k10_turing_1 \ X1 \ X2) \ (k2_nat_1 \ X0 \ np_1) = k9_turing_1 \\ & X1 \ (k8_nat_1 \ (k3_zfmisc_1 \ (u2_turing_1 \ X1) \ k4_numbers \ (k9_funct_2 \\ & k4_numbers \ (u1_turing_1 \ X1))) \ (k10_turing_1 \ X1 \ X2) \ X0)))) \end{aligned}$$