

l38_turing_1 (TM-
StGk8o6ZD7ZWHT1ZJHjefaX7x4RmjD9Kv)

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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 $r1_xxreal_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $np_5 : \iota$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $u2_turing_1 : \iota \Rightarrow \iota$ be given. Let $k14_turing_1 : \iota$ be given. Let $k3_turing_1 : \iota \Rightarrow \iota$ be given. Let $v2_xxreal_0 : \iota \Rightarrow o$ be given. Let $v1_turing_1 : \iota \Rightarrow o$ be given. Let $l1_turing_1 : \iota \Rightarrow o$ be given. Let $u1_turing_1 : \iota \Rightarrow \iota$ be given. Let $k7_domain_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k6_numbers : \iota$ be given. Let $np_1 : \iota$ be given. Let $r1_funct_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k2_zfmisc_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k3_zfmisc_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k8_domain_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_real_1 : \iota \Rightarrow \iota$ be given. Let $k8_mcart_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k9_mcart_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $u3_turing_1 : \iota \Rightarrow \iota$ be given. Let $k13_turing_1 : \iota$ be given. Let $u4_turing_1 : \iota \Rightarrow \iota$ be given. Let $u5_turing_1 : \iota \Rightarrow \iota$ be given. Assume the following.

$$\begin{aligned} & \forall X0.(m2_subset_1 X0 k1_numbers k5_numbers) \Rightarrow (\forall X1. \\ & (m2_subset_1 X1 k1_numbers k5_numbers) \Rightarrow ((X0 \in k3_turing_1 X1) \Leftrightarrow \\ & (r1_xxreal_0 X0 X1))) \end{aligned} \tag{1}$$

Assume the following.

$$\forall X0.\forall X1.(X0 \in X1) \Rightarrow (m1_subset_1 X0 X1) \tag{2}$$

Assume the following.

$$\begin{aligned} & ((v2_xxreal_0 np_5) \wedge (m2_subset_1 np_5 k1_numbers k5_numbers)) \wedge \\ & ((m1_subset_1 np_5 k5_numbers) \wedge (m1_subset_1 np_5 k1_numbers)) \end{aligned} \tag{3}$$

Assume the following.

$$(v1_turing_1 k14_turing_1) \wedge (l1_turing_1 k14_turing_1) \tag{4}$$

Assume the following.

$$\begin{aligned}
& \forall X0.((v1_turing_1 X0) \wedge (l1_turing_1 X0)) \Rightarrow ((X0 = k14_turing_1) \Leftrightarrow \\
& ((u1_turing_1 X0 = k7_domain_1 k5_numbers k6_numbers np_1) \wedge (\\
& (u2_turing_1 X0 = k3_turing_1 np_5) \wedge ((r1_funct_2 (k2_zfmisc_1 \\
& (u2_turing_1 X0) (u1_turing_1 X0)) (k3_zfmisc_1 (u2_turing_1 \\
& X0) (u1_turing_1 X0) (k8_domain_1 k1_numbers (k1_real_1 np_1) \\
& k6_numbers np_1)) (k8_mcart_1 k5_numbers k5_numbers (k3_turing_1 \\
& np_5) (k7_domain_1 k5_numbers k6_numbers np_1)) (k9_mcart_1 \\
& k5_numbers k5_numbers k1_numbers (k3_turing_1 np_5) (k7_domain_1 \\
& k5_numbers k6_numbers np_1) (k8_domain_1 k1_numbers (k1_real_1 \\
& np_1) k6_numbers np_1)) (u3_turing_1 X0) k13_turing_1) \wedge ((u4_turing_1 \\
& X0 = k6_numbers) \wedge (u5_turing_1 X0 = np_5))))))
\end{aligned} \tag{5}$$

Theorem 1

$$\begin{aligned}
& \forall X0.(m2_subset_1 X0 k1_numbers k5_numbers) \Rightarrow ((r1_xxreal_0 \\
& X0 np_5) \Rightarrow (m1_subset_1 X0 (u2_turing_1 k14_turing_1)))
\end{aligned}$$