

t37_prob_3 (TMFAawYbCx- HUkE1XwY1WePy57Te4b2Vw5Er)

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Let $v1_xboole_0 : \iota \Rightarrow o$ 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 $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $v5_relat_1 : \iota \Rightarrow \iota \Rightarrow o$ 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 $k5_numbers : \iota$ be given. Let $k9_setfam_1 : \iota \Rightarrow \iota$ be given. Let $k2_zfmisc_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $m2_prob_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v7_valued_0 : \iota \Rightarrow o$ be given. Let $k8_prob_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2_prob_3 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v3_prob_1 : \iota \Rightarrow o$ be given. Assume the following.

$$\begin{aligned}
 & \forall X0. (\neg v1_xboole_0 X0) \Rightarrow (\forall X1. ((\neg v1_xboole_0 X1) \wedge \\
 & ((v1_prob_1 X1 X0) \wedge ((v4_prob_1 X1 X0) \wedge (m1_subset_1 X1 (k1_zfmisc_1 \\
 & (k1_zfmisc_1 X0)))))) \Rightarrow (\forall X2. ((v5_relat_1 X2 X1) \wedge ((v1_funct_1 \\
 & X2) \wedge ((v1_funct_2 X2 k5_numbers (k9_setfam_1 X0)) \wedge (m1_subset_1 \\
 & X2 (k1_zfmisc_1 (k2_zfmisc_1 k5_numbers (k9_setfam_1 X0)))))) \Rightarrow \\
 & (\forall X3. (m2_prob_1 X3 X0 X1) \Rightarrow ((v3_prob_1 X2) \Rightarrow (v7_valued_0 \\
 & (k8_prob_1 X0 X1 X2 X3))))))
 \end{aligned} \tag{1}$$

Assume the following.

$$\begin{aligned}
 & \forall X0. \forall X1. ((v1_funct_1 X1) \wedge ((v1_funct_2 X1 k5_numbers \\
 & (k9_setfam_1 X0)) \wedge (m1_subset_1 X1 (k1_zfmisc_1 (k2_zfmisc_1 \\
 & k5_numbers (k9_setfam_1 X0)))))) \Rightarrow (v3_prob_1 (k2_prob_3 X0 X1))
 \end{aligned} \tag{2}$$

Assume the following.

$$\forall X0. k9_setfam_1 X0 = k1_zfmisc_1 X0 \tag{3}$$

Assume the following.

$$\begin{aligned}
& \forall X0.\forall X1.\forall X2.(((\neg v1_xboole_0 X1)\wedge((v1_prob_1 \\
& X1 X0)\wedge((v4_prob_1 X1 X0)\wedge(m1_subset_1 X1 (k1_zfmisc_1 (k1_zfmisc_1 \\
& X0))))))\wedge((v5_relat_1 X2 X1)\wedge((v1_funct_1 X2)\wedge((v1_funct_2 \\
& X2 k5_numbers (k9_setfam_1 X0))\wedge(m1_subset_1 X2 (k1_zfmisc_1 \\
& (k2_zfmisc_1 k5_numbers (k9_setfam_1 X0)))))))\Rightarrow((v5_relat_1 \\
& (k2_prob_3 X0 X2) X1)\wedge((v1_funct_1 (k2_prob_3 X0 X2))\wedge(v1_funct_2 \\
& (k2_prob_3 X0 X2) k5_numbers (k9_setfam_1 X0))))
\end{aligned} \tag{4}$$

Assume the following.

$$\begin{aligned}
& \forall X0.\forall X1.((v1_funct_1 X1)\wedge((v1_funct_2 X1 k5_numbers \\
& (k9_setfam_1 X0))\wedge(m1_subset_1 X1 (k1_zfmisc_1 (k2_zfmisc_1 \\
& k5_numbers (k9_setfam_1 X0))))))\Rightarrow((v1_funct_1 (k2_prob_3 X0 \\
& X1))\wedge((v1_funct_2 (k2_prob_3 X0 X1) k5_numbers (k9_setfam_1 X0))\wedge \\
& (m1_subset_1 (k2_prob_3 X0 X1) (k1_zfmisc_1 (k2_zfmisc_1 k5_numbers \\
& (k9_setfam_1 X0))))))
\end{aligned} \tag{5}$$

Theorem 1

$$\begin{aligned}
& \forall X0.(\neg v1_xboole_0 X0)\Rightarrow(\forall X1.((\neg v1_xboole_0 X1)\wedge \\
& ((v1_prob_1 X1 X0)\wedge((v4_prob_1 X1 X0)\wedge(m1_subset_1 X1 (k1_zfmisc_1 \\
& (k1_zfmisc_1 X0))))))\Rightarrow(\forall X2.((v5_relat_1 X2 X1)\wedge((v1_funct_1 \\
& X2)\wedge((v1_funct_2 X2 k5_numbers (k9_setfam_1 X0))\wedge(m1_subset_1 \\
& X2 (k1_zfmisc_1 (k2_zfmisc_1 k5_numbers (k9_setfam_1 X0)))))))\Rightarrow \\
& (\forall X3.(m2_prob_1 X3 X0 X1)\Rightarrow(v7_valued_0 (k8_prob_1 X0 X1 \\
& (k2_prob_3 X0 X2) X3))))
\end{aligned}$$