

t9_kolmog01
(TMEjcU1xrYbphNonJ3CcphamE2vgAf6JV2q)

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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 $m2_prob_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v2_finsub_1 : \iota \Rightarrow o$ be given. Let $r1_tarski : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_kolmog01 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k9_prob_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\begin{aligned}
& \forall X0. (\neg v1_xboole_0 X0) \Rightarrow (\forall X1. ((\neg v1_xboole_0 X1) \wedge \\
& ((v1_prob_1 X1 X0) \wedge ((v4_prob_1 X1 X0) \wedge (m1_subset_1 X1 (k1_zfmisc_1 \\
& (k1_zfmisc_1 X0)))))) \Rightarrow (\forall X2. (m2_prob_1 X2 X0 X1) \Rightarrow (\forall X3. \\
& ((\neg v1_xboole_0 X3) \wedge (m1_subset_1 X3 (k1_zfmisc_1 X1))) \Rightarrow (\forall X4. \\
& ((\neg v1_xboole_0 X4) \wedge (m1_subset_1 X4 (k1_zfmisc_1 X1))) \Rightarrow ((r1_tarski \\
& X3 (k1_kolmog01 X0 X1 X4 X2)) \Rightarrow (r1_tarski X4 (k1_kolmog01 X0 X1 X3 \\
& X2))))))
\end{aligned} \tag{1}$$

Assume the following.

$$\begin{aligned}
& \forall X0. (\neg v1_xboole_0 X0) \Rightarrow (\forall X1. ((\neg v1_xboole_0 X1) \wedge \\
& ((v1_prob_1 X1 X0) \wedge ((v4_prob_1 X1 X0) \wedge (m1_subset_1 X1 (k1_zfmisc_1 \\
& (k1_zfmisc_1 X0)))))) \Rightarrow (\forall X2. (m2_prob_1 X2 X0 X1) \Rightarrow (\forall X3. \\
& ((\neg v1_xboole_0 X3) \wedge (m1_subset_1 X3 (k1_zfmisc_1 X1))) \Rightarrow (\forall X4. \\
& (m1_subset_1 X4 (k1_zfmisc_1 (k1_zfmisc_1 X0))) \Rightarrow (((v2_finsub_1 \\
& X4) \wedge (r1_tarski X4 (k1_kolmog01 X0 X1 X3 X2))) \Rightarrow (r1_tarski (k9_prob_1 \\
& X0 X4) (k1_kolmog01 X0 X1 X3 X2))))))
\end{aligned} \tag{2}$$

Theorem 1

$$\begin{aligned} & \forall X0.(\neg v1_xboole_0 X0) \Rightarrow (\forall X1.((\neg v1_xboole_0 X1) \wedge \\ & ((v1_prob_1 X1 X0) \wedge ((v4_prob_1 X1 X0) \wedge (m1_subset_1 X1 (k1_zfmisc_1 \\ & (k1_zfmisc_1 X0)))))) \Rightarrow (\forall X2.(m2_prob_1 X2 X0 X1) \Rightarrow (\forall X3. \\ & (m1_subset_1 X3 (k1_zfmisc_1 (k1_zfmisc_1 X0))) \Rightarrow (((\neg v1_xboole_0 \\ & X3) \wedge (m1_subset_1 X3 (k1_zfmisc_1 X1))) \wedge (v2_finsub_1 X3)) \Rightarrow (\forall X4. \\ & ((\neg v1_xboole_0 X4) \wedge (m1_subset_1 X4 (k1_zfmisc_1 X1))) \Rightarrow (((v2_finsub_1 \\ & X4) \wedge (r1_tarski X3 (k1_kolmog01 X0 X1 X4 X2))) \Rightarrow (\forall X5.(m1_subset_1 \\ & X5 (k1_zfmisc_1 (k1_zfmisc_1 X0))) \Rightarrow (\forall X6.((\neg v1_xboole_0 \\ & X6) \wedge (m1_subset_1 X6 (k1_zfmisc_1 X1))) \Rightarrow (((X5 = X4) \wedge (k9_prob_1 \\ & X0 X5 = X6)) \Rightarrow (r1_tarski (k9_prob_1 X0 X3) (k1_kolmog01 X0 X1 X6 X2)))))))))) \end{aligned}$$