

t8_kolmog01
(TMKqSRb26LHGcHdfxtAf34EBrPWKdTNU6Sp)

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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 $r1_tarski : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_kolmog01 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $m1_prob_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $r1_prob_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Assume the following.

$$\begin{aligned}
& \forall X0.(\neg v1_xboole_0 X0) \Rightarrow (\forall X1.((\neg v1_xboole_0 X1) \wedge \\
& ((v1_prob_1 X1 X0) \wedge ((v4_prob_1 X1 X0) \wedge (m1_subset_1 X1 (k1_zfmisc_1 \\
& (k1_zfmisc_1 X0)))))) \Rightarrow (\forall X2.(m2_prob_1 X2 X0 X1) \Rightarrow (\forall X3. \\
& ((\neg v1_xboole_0 X3) \wedge (m1_subset_1 X3 (k1_zfmisc_1 X1))) \Rightarrow (\forall X4. \\
& ((\neg v1_xboole_0 X4) \wedge (m1_subset_1 X4 (k1_zfmisc_1 X1))) \Rightarrow ((r1_tarski \\
& X3 (k1_kolmog01 X0 X1 X4 X2)) \Leftrightarrow (\forall X5.(m1_prob_1 X5 X0 X1) \Rightarrow (\\
& \forall X6.(m1_prob_1 X6 X0 X1) \Rightarrow (((X5 \in X3) \wedge (X6 \in X4)) \Rightarrow (r1_prob_2 \\
& X0 X1 X2 X5 X6)))))))))
\end{aligned} \tag{1}$$

Assume the following.

$$\begin{aligned}
& \forall X0.(\neg v1_xboole_0 X0) \Rightarrow (\forall X1.((\neg v1_xboole_0 X1) \wedge \\
& ((v1_prob_1 X1 X0) \wedge ((v4_prob_1 X1 X0) \wedge (m1_subset_1 X1 (k1_zfmisc_1 \\
& (k1_zfmisc_1 X0)))))) \Rightarrow (\forall X2.(m1_prob_1 X2 X0 X1) \Rightarrow (\forall X3. \\
& (m1_prob_1 X3 X0 X1) \Rightarrow (\forall X4.(m2_prob_1 X4 X0 X1) \Rightarrow ((r1_prob_2 \\
& X0 X1 X4 X2 X3) \Rightarrow (r1_prob_2 X0 X1 X4 X3 X2))))))
\end{aligned} \tag{2}$$

Theorem 1

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