

t36_prob_2

(TMapJNSEdR5EWHPYjLHDBL7NnSJqLiDM8LK)

October 27, 2020

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 $m1_prob_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $m2_prob_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $r1_xxreal_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_seq_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k6_numbers : \iota$ be given. Let $k3_prob_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k10_real_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k8_real_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k5_prob_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\begin{aligned} & \forall X0. (\neg v1_xboole_0 X0) \Rightarrow (\forall X1. ((\neg v1_xboole_0 X1) \wedge \\ & ((v1_prob_1 X1 X0) \wedge ((v4_prob_1 X1 X0) \wedge (m1_subset_1 X1 (k1_zfmisc_1 \\ & (k1_zfmisc_1 X0)))))) \Rightarrow (\forall X2. (m2_prob_1 X2 X0 X1) \Rightarrow (\forall X3. \\ & (m1_prob_1 X3 X0 X1) \Rightarrow (\forall X4. (m1_prob_1 X4 X0 X1) \Rightarrow ((\neg r1_xxreal_0 \\ & (k1_seq_1 X2 X3) k6_numbers) \Rightarrow (k1_seq_1 X2 (k5_prob_1 X0 X1 X4 X3) = \\ & k8_real_1 (k1_seq_1 (k3_prob_2 X0 X1 X2 X3) X4) (k1_seq_1 X2 X3))))))))) \end{aligned} \quad (1)$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. ((\neg v1_xboole_0 X1) \wedge ((v1_prob_1 X1 X0) \wedge \\ & ((v4_prob_1 X1 X0) \wedge (m1_subset_1 X1 (k1_zfmisc_1 (k1_zfmisc_1 \\ & X0)))))) \Rightarrow (\forall X2. (m1_prob_1 X2 X0 X1) \Leftrightarrow (m1_subset_1 X2 X1)) \end{aligned} \quad (2)$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. \forall X2. \forall X3. ((\neg v1_xboole_0 X0) \wedge \\ & (((\neg v1_xboole_0 X1) \wedge ((v1_prob_1 X1 X0) \wedge ((v4_prob_1 X1 X0) \wedge (m1_subset_1 \\ & X1 (k1_zfmisc_1 (k1_zfmisc_1 X0)))))) \wedge ((m2_prob_1 X2 X0 X1) \wedge \\ & m1_subset_1 X3 X1))) \Rightarrow (m2_prob_1 (k3_prob_2 X0 X1 X2 X3) X0 X1) \end{aligned} \quad (3)$$

Assume the following.

$$\begin{aligned}
& \forall X0.(\neg v1_xboole_0 X0) \Rightarrow (\forall X1.((\neg v1_xboole_0 X1) \wedge \\
& ((v1_prob_1 X1 X0) \wedge ((v4_prob_1 X1 X0) \wedge (m1_subset_1 X1 (k1_zfmisc_1 \\
& (k1_zfmisc_1 X0)))))) \Rightarrow (\forall X2.(m2_prob_1 X2 X0 X1) \Rightarrow (\forall X3. \\
& (m1_prob_1 X3 X0 X1) \Rightarrow ((\neg r1_xxreal_0 (k1_seq_1 X2 X3) k6_numbers) \Rightarrow \\
& (\forall X4.(m2_prob_1 X4 X0 X1) \Rightarrow ((X4 = k3_prob_2 X0 X1 X2 X3) \Leftrightarrow (\forall X5. \\
& (m1_prob_1 X5 X0 X1) \Rightarrow (k1_seq_1 X4 X5 = k10_real_1 (k1_seq_1 X2 (k5_prob_1 \\
& X0 X1 X5 X3)) (k1_seq_1 X2 X3))))))))))
\end{aligned} \tag{4}$$

Assume the following.

$$\begin{aligned}
& \forall X0.\forall X1.\forall X2.\forall X3.(((\neg v1_xboole_0 \\
& X1) \wedge ((v1_prob_1 X1 X0) \wedge ((v4_prob_1 X1 X0) \wedge (m1_subset_1 X1 (k1_zfmisc_1 \\
& (k1_zfmisc_1 X0)))))) \wedge ((m1_subset_1 X2 X1) \wedge (m1_subset_1 X3 X1))) \Rightarrow \\
& (k5_prob_1 X0 X1 X2 X3 = k5_prob_1 X0 X1 X3 X2)
\end{aligned} \tag{5}$$

Theorem 1

$$\begin{aligned}
& \forall X0.(\neg v1_xboole_0 X0) \Rightarrow (\forall X1.((\neg v1_xboole_0 X1) \wedge \\
& ((v1_prob_1 X1 X0) \wedge ((v4_prob_1 X1 X0) \wedge (m1_subset_1 X1 (k1_zfmisc_1 \\
& (k1_zfmisc_1 X0)))))) \Rightarrow (\forall X2.(m1_prob_1 X2 X0 X1) \Rightarrow (\forall X3. \\
& (m1_prob_1 X3 X0 X1) \Rightarrow (\forall X4.(m2_prob_1 X4 X0 X1) \Rightarrow (\neg(\neg r1_xxreal_0 \\
& (k1_seq_1 X4 X2) k6_numbers) \wedge ((\neg r1_xxreal_0 (k1_seq_1 X4 X3) k6_numbers) \wedge \\
& (k1_seq_1 (k3_prob_2 X0 X1 X4 X3) X2 \neq k10_real_1 (k8_real_1 (k1_seq_1 \\
& (k3_prob_2 X0 X1 X4 X2) X3) (k1_seq_1 X4 X2)) (k1_seq_1 X4 X3))))))))))
\end{aligned}$$