

t73_prob_3

(TMKPr2zMKBW2qLX5iTTdBNc7TvbeDd7bgK1)

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Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $v2_finsub_1 : \iota \Rightarrow o$ be given. Let $v1_prob_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $k9_prob_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k10_prob_3 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v4_prob_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v2_prob_3 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v3_prob_3 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $r1_tarski : \iota \Rightarrow \iota \Rightarrow o$ be given. Assume the following.

$$\begin{aligned} & \forall X0. (\neg v1_xboole_0 X0) \Rightarrow (\forall X1. ((\neg v1_xboole_0 X1) \wedge \\ & ((v2_finsub_1 X1) \wedge ((v1_prob_1 X1 X0) \wedge (m1_subset_1 X1 (k1_zfmisc_1 \\ & (k1_zfmisc_1 X0)))))) \Rightarrow ((\neg v1_xboole_0 (k10_prob_3 X0 X1)) \wedge ((\\ & v2_finsub_1 (k10_prob_3 X0 X1)) \wedge ((v1_prob_1 (k10_prob_3 X0 X1) \\ & X0) \wedge (m1_subset_1 (k10_prob_3 X0 X1) (k1_zfmisc_1 (k1_zfmisc_1 \\ & X0)))))) \end{aligned} \tag{1}$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. ((\neg v1_xboole_0 X1) \wedge ((v2_finsub_1 X1) \wedge \\ & ((v1_prob_1 X1 X0) \wedge (m1_subset_1 X1 (k1_zfmisc_1 (k1_zfmisc_1 \\ & X0)))))) \Rightarrow (((\neg v1_xboole_0 X1) \wedge ((v1_prob_1 X1 X0) \wedge ((v4_prob_1 \\ & X1 X0) \wedge (m1_subset_1 X1 (k1_zfmisc_1 (k1_zfmisc_1 X0)))))) \Leftrightarrow ((\\ & v2_prob_3 X1 X0) \wedge ((v3_prob_3 X1 X0) \wedge (m1_subset_1 X1 (k1_zfmisc_1 \\ & (k1_zfmisc_1 X0)))))) \end{aligned} \tag{2}$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. ((\neg v1_xboole_0 X0) \wedge (m1_subset_1 X1 (k1_zfmisc_1 \\ & (k1_zfmisc_1 X0)))) \Rightarrow ((v2_prob_3 (k10_prob_3 X0 X1) X0) \wedge ((v3_prob_3 \\ & (k10_prob_3 X0 X1) X0) \wedge (m1_subset_1 (k10_prob_3 X0 X1) (k1_zfmisc_1 \\ & (k1_zfmisc_1 X0)))))) \end{aligned} \tag{3}$$

Assume the following.

$$\begin{aligned}
& \forall X0.(\neg v1_xboole_0 X0) \Rightarrow (\forall X1.(m1_subset_1 X1 (k1_zfmisc_1 \\
& \quad (k1_zfmisc_1 X0))) \Rightarrow (\forall X2.((\neg v1_xboole_0 X2) \wedge ((v1_prob_1 \\
& X2 X0) \wedge ((v4_prob_1 X2 X0) \wedge (m1_subset_1 X2 (k1_zfmisc_1 (k1_zfmisc_1 \\
& \quad X0)))))) \Rightarrow ((X2 = k9_prob_1 X0 X1) \Leftrightarrow ((r1_tarski X1 X2) \wedge (\forall X3. \\
& ((r1_tarski X1 X3) \wedge ((\neg v1_xboole_0 X3) \wedge ((v1_prob_1 X3 X0) \wedge ((v4_prob_1 \\
& \quad X3 X0) \wedge (m1_subset_1 X3 (k1_zfmisc_1 (k1_zfmisc_1 X0)))))) \Rightarrow (\\
& \quad \quad r1_tarski X2 X3))))))
\end{aligned} \tag{4}$$

Assume the following.

$$\begin{aligned}
& \forall X0.(\neg v1_xboole_0 X0) \Rightarrow (\forall X1.(m1_subset_1 X1 (k1_zfmisc_1 \\
& \quad (k1_zfmisc_1 X0))) \Rightarrow (\forall X2.((v2_prob_3 X2 X0) \wedge ((v3_prob_3 \\
& X2 X0) \wedge (m1_subset_1 X2 (k1_zfmisc_1 (k1_zfmisc_1 X0)))))) \Rightarrow ((X2 = \\
& \quad k10_prob_3 X0 X1) \Leftrightarrow ((r1_tarski X1 X2) \wedge (\forall X3.((r1_tarski \\
& X1 X3) \wedge ((v2_prob_3 X3 X0) \wedge ((v3_prob_3 X3 X0) \wedge (m1_subset_1 X3 (\\
& \quad k1_zfmisc_1 (k1_zfmisc_1 X0)))))) \Rightarrow (r1_tarski X2 X3))))))
\end{aligned} \tag{5}$$

Assume the following.

$$\begin{aligned}
& \forall X0.\forall X1.(m1_subset_1 X1 (k1_zfmisc_1 (k1_zfmisc_1 \\
& X0))) \Rightarrow (((\neg v1_xboole_0 X1) \wedge ((v1_prob_1 X1 X0) \wedge (v4_prob_1 X1 X0))) \Rightarrow \\
& ((\neg v1_xboole_0 X1) \wedge ((v2_finsub_1 X1) \wedge ((v1_prob_1 X1 X0) \wedge (v4_prob_1 \\
& \quad X1 X0))))))
\end{aligned} \tag{6}$$

Theorem 1

$$\begin{aligned}
& \forall X0.(\neg v1_xboole_0 X0) \Rightarrow (\forall X1.((\neg v1_xboole_0 X1) \wedge \\
& ((v2_finsub_1 X1) \wedge ((v1_prob_1 X1 X0) \wedge (m1_subset_1 X1 (k1_zfmisc_1 \\
& \quad (k1_zfmisc_1 X0)))))) \Rightarrow (k9_prob_1 X0 X1 = k10_prob_3 X0 X1))
\end{aligned}$$