

t36_prob_4
(TMHJREZRiyUH1HwYn2w1QRG3CG18ccJq4B)

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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 $k1_funct_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k6_subset_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k6_numbers : \iota$ be given. Let $k4_prob_4 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0. \forall X1. \neg(X0 \in X1) \wedge (v1_xboole_0 X1) \quad (1)$$

Assume the following.

$$\begin{aligned} & \forall X0. (\neg v1_xboole_0 X0) \Rightarrow (\forall X1. ((\neg v1_xboole_0 X1) \wedge \\ & ((v1_prob_1 X1 X0) \wedge ((v4_prob_1 X1 X0) \wedge (m1_subset_1 X1 (k1_zfmisc_1 \\ & (k1_zfmisc_1 X0)))))) \Rightarrow (\forall X2. (m2_prob_1 X2 X0 X1) \Rightarrow (\forall X3. \\ & (X3 \in k4_prob_4 X0 X1 X2) \Leftrightarrow (\exists X4. \exists X5. (X4 \in X1) \wedge ((X5 \in \\ & X1) \wedge ((r1_tarski X4 X3) \wedge ((r1_tarski X3 X5) \wedge (k1_funct_1 X2 (k6_subset_1 \\ & X5 X4) = k6_numbers))))))))) \end{aligned} \quad (2)$$

Assume the following.

$$\forall X0. \forall X1. (\forall X2. (X2 \in X0) \Leftrightarrow (X2 \in X1)) \Rightarrow (X0 = X1) \quad (3)$$

Theorem 1

$$\begin{aligned} & \forall X0. (\neg v1_xboole_0 X0) \Rightarrow (\forall X1. ((\neg v1_xboole_0 X1) \wedge \\ & ((v1_prob_1 X1 X0) \wedge ((v4_prob_1 X1 X0) \wedge (m1_subset_1 X1 (k1_zfmisc_1 \\ & (k1_zfmisc_1 X0)))))) \Rightarrow (\forall X2. (m2_prob_1 X2 X0 X1) \Rightarrow (\forall X3. \\ & ((\neg v1_xboole_0 X3) \wedge (m1_subset_1 X3 (k1_zfmisc_1 (k1_zfmisc_1 \\ & X0)))) \Rightarrow ((\forall X4. (X4 \in X3) \Leftrightarrow (\exists X5. \exists X6. (X5 \in X1) \wedge \\ & ((X6 \in X1) \wedge ((r1_tarski X5 X4) \wedge ((r1_tarski X4 X6) \wedge (k1_funct_1 X2 \\ & (k6_subset_1 X6 X5) = k6_numbers)))))) \Rightarrow (X3 = k4_prob_4 X0 X1 X2)))))) \end{aligned}$$