

t88_rewrite3
(TMVb7ciMZzEQuu3czMLTE9NhqBjPx5J716u)

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Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k8_afinsq_1 : \iota \Rightarrow \iota$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $v2_struct_0 : \iota \Rightarrow o$ be given. Let $l1_rewrite3 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $r3_rewrite3 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_flang_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $r1_rewrite1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_rewrite3 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k4_tarski : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\begin{aligned}
& \forall X0. \forall X1. \forall X2. (\neg v1_xboole_0 X2) \Rightarrow (\forall X3. \\
& (m1_subset_1 X3 (k8_afinsq_1 X2)) \Rightarrow (\forall X4. (m1_subset_1 X4 \\
& (k8_afinsq_1 X2)) \Rightarrow (\forall X5. (m1_subset_1 X5 (k1_zfmisc_1 (\\
& k8_afinsq_1 X2))) \Rightarrow (\forall X6. ((\neg v2_struct_0 X6) \wedge (l1_rewrite3 \\
& X6 X5)) \Rightarrow (\neg (r1_rewrite1 (k1_rewrite3 X2 X5 X6) (k4_tarski X0 X3) \\
& (k4_tarski X1 X4)) \wedge (\forall X7. (m1_subset_1 X7 (k8_afinsq_1 X2)) \Rightarrow \\
& (X3 \neq k1_flang_1 X2 X7 X4)))))))))
\end{aligned} \tag{1}$$

Assume the following.

$$\begin{aligned}
& \forall X0. (\neg v1_xboole_0 X0) \Rightarrow (\forall X1. (m1_subset_1 X1 (k1_zfmisc_1 \\
& (k8_afinsq_1 X0))) \Rightarrow (\forall X2. ((\neg v2_struct_0 X2) \wedge (l1_rewrite3 \\
& X2 X1)) \Rightarrow (\forall X3. \forall X4. \forall X5. \forall X6. (r3_rewrite3 \\
& X0 X1 X2 X3 X4 X5 X6) \Leftrightarrow (r1_rewrite1 (k1_rewrite3 X0 X1 X2) (k4_tarski \\
& X3 X4) (k4_tarski X5 X6))))))
\end{aligned} \tag{2}$$

Theorem 1

$$\begin{aligned}
& \forall X0. \forall X1. \forall X2. (\neg v1_xboole_0 X2) \Rightarrow (\forall X3. \\
& (m1_subset_1 X3 (k8_afinsq_1 X2)) \Rightarrow (\forall X4. (m1_subset_1 X4 \\
& (k8_afinsq_1 X2)) \Rightarrow (\forall X5. (m1_subset_1 X5 (k1_zfmisc_1 (\\
& k8_afinsq_1 X2))) \Rightarrow (\forall X6. ((\neg v2_struct_0 X6) \wedge (l1_rewrite3 \\
& X6 X5)) \Rightarrow (\neg (r3_rewrite3 X2 X5 X6 X0 X3 X1 X4) \wedge (\forall X7. (m1_subset_1 \\
& X7 (k8_afinsq_1 X2)) \Rightarrow (X3 \neq k1_flang_1 X2 X7 X4)))))))))
\end{aligned}$$