

t15_analmetr

(TMSHJpo7hHx4NHBexJXunc8h5VKP2VCj8rR)

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Let $v2_struct_0 : \iota \Rightarrow o$ be given. Let $v13_algstr_0 : \iota \Rightarrow o$ be given. Let $v2_rlvect_1 : \iota \Rightarrow o$ be given. Let $v3_rlvect_1 : \iota \Rightarrow o$ be given. Let $v4_rlvect_1 : \iota \Rightarrow o$ be given. Let $v5_rlvect_1 : \iota \Rightarrow o$ be given. Let $v6_rlvect_1 : \iota \Rightarrow o$ be given. Let $v7_rlvect_1 : \iota \Rightarrow o$ be given. Let $v8_rlvect_1 : \iota \Rightarrow o$ be given. Let $l1_rlvect_1 : \iota \Rightarrow o$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $u1_struct_0 : \iota \Rightarrow \iota$ be given. Let $k1_domain_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2_zfmisc_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_diraf : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_analoaf : \iota \Rightarrow \iota$ be given. Let $k1_numbers : \iota$ be given. Let $k1_rlvect_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k5_algstr_0 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k6_numbers : \iota$ be given. Let $r1_analoaf : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_xboole_0 : \iota$ be given. Let $l1_struct_0 : \iota \Rightarrow o$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $l2_struct_0 : \iota \Rightarrow o$ be given. Let $l2_algstr_0 : \iota \Rightarrow o$ be given. Let $l1_algstr_0 : \iota \Rightarrow o$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Assume the following.

$$\begin{aligned}
 & \forall X0. ((\neg v2_struct_0 X0) \wedge ((v13_algstr_0 X0) \wedge ((v2_rlvect_1 \\
 & X0) \wedge ((v3_rlvect_1 X0) \wedge ((v4_rlvect_1 X0) \wedge ((v5_rlvect_1 X0) \wedge \\
 & ((v6_rlvect_1 X0) \wedge ((v7_rlvect_1 X0) \wedge ((v8_rlvect_1 X0) \wedge (l1_rlvect_1 \\
 & X0)))))))))) \Rightarrow (\forall X1. (m1_subset_1 X1 (u1_struct_0 X0)) \Rightarrow \\
 & (\forall X2. (m1_subset_1 X2 (u1_struct_0 X0)) \Rightarrow (\forall X3. (m1_subset_1 \\
 & X3 (u1_struct_0 X0)) \Rightarrow (\forall X4. (m1_subset_1 X4 (u1_struct_0 \\
 & X0)) \Rightarrow ((k1_domain_1 (k2_zfmisc_1 (u1_struct_0 X0) (u1_struct_0 \\
 & X0)) (k2_zfmisc_1 (u1_struct_0 X0) (u1_struct_0 X0)) (k1_domain_1 \\
 & (u1_struct_0 X0) (u1_struct_0 X0) X1 X2) (k1_domain_1 (u1_struct_0 \\
 & X0) (u1_struct_0 X0) X3 X4) \in k1_analoaf X0) \Leftrightarrow (r1_analoaf X0 X1 X2 \\
 & X3 X4))))))
 \end{aligned} \tag{1}$$

Assume the following.

$$\begin{aligned}
& \forall X0.((\neg v2_struct_0 X0) \wedge ((v13_algstr_0 X0) \wedge ((v2_rlvect_1 \\
& X0) \wedge ((v3_rlvect_1 X0) \wedge ((v4_rlvect_1 X0) \wedge ((v5_rlvect_1 X0) \wedge \\
& ((v6_rlvect_1 X0) \wedge ((v7_rlvect_1 X0) \wedge ((v8_rlvect_1 X0) \wedge (l1_rlvect_1 \\
& X0)))))))))) \Rightarrow (\forall X1.(m1_subset_1 X1 (u1_struct_0 X0)) \Rightarrow \\
& (\forall X2.(m1_subset_1 X2 (u1_struct_0 X0)) \Rightarrow (\forall X3.(m1_subset_1 \\
& X3 (u1_struct_0 X0)) \Rightarrow (\forall X4.(m1_subset_1 X4 (u1_struct_0 \\
& X0)) \Rightarrow ((\neg((r1_analoaf X0 X1 X2 X3 X4) \vee (r1_analoaf X0 X1 X2 X4 X3)) \wedge \\
& (\forall X5.(m1_subset_1 X5 k1_numbers) \Rightarrow (\forall X6.(m1_subset_1 \\
& X6 k1_numbers) \Rightarrow (\neg(k1_rlvect_1 X0 (k5_algstr_0 X0 X2 X1) X5 = k1_rlvect_1 \\
& X0 (k5_algstr_0 X0 X4 X3) X6) \wedge (\neg(X5 = k6_numbers) \wedge (X6 = k6_numbers)))))) \wedge \\
& (\neg(\exists X5.(m1_subset_1 X5 k1_numbers) \wedge (\exists X6.(m1_subset_1 \\
& X6 k1_numbers) \wedge ((k1_rlvect_1 X0 (k5_algstr_0 X0 X2 X1) X5 = k1_rlvect_1 \\
& X0 (k5_algstr_0 X0 X4 X3) X6) \wedge (\neg(X5 = k6_numbers) \wedge (X6 = k6_numbers)))))) \wedge \\
& ((\neg r1_analoaf X0 X1 X2 X3 X4) \wedge (\neg r1_analoaf X0 X1 X2 X4 X3))))))))) \\
& \tag{2}
\end{aligned}$$

Assume the following.

$$k6_numbers = k1_xboole_0 \tag{3}$$

Assume the following.

$$\forall X0.((\neg v2_struct_0 X0) \wedge (l1_struct_0 X0)) \Rightarrow (\neg v1_xboole_0 (u1_struct_0 X0)) \tag{4}$$

Assume the following.

$$\forall X0.(l2_struct_0 X0) \Rightarrow (l1_struct_0 X0) \tag{5}$$

Assume the following.

$$\forall X0.(l2_algstr_0 X0) \Rightarrow ((l2_struct_0 X0) \wedge (l1_algstr_0 X0)) \tag{6}$$

Assume the following.

$$\forall X0.(l1_rlvect_1 X0) \Rightarrow (l2_algstr_0 X0) \tag{7}$$

Assume the following.

$$\begin{aligned}
& \forall X0. \forall X1. ((\neg v1_xboole_0 X0) \wedge (m1_subset_1 X1 (k1_zfmisc_1 \\
& (k2_zfmisc_1 (k2_zfmisc_1 X0 X0) (k2_zfmisc_1 X0 X0)))) \Rightarrow (m1_subset_1 \\
& (k1_diraf X0 X1) (k1_zfmisc_1 (k2_zfmisc_1 (k2_zfmisc_1 X0 X0) \\
& (k2_zfmisc_1 X0 X0)))))) \\
& \tag{8}
\end{aligned}$$

Assume the following.

$$\begin{aligned} & \forall X0.((\neg v2_struct_0 X0) \wedge ((v13_algstr_0 X0) \wedge ((v2_rlvect_1 \\ & X0) \wedge ((v3_rlvect_1 X0) \wedge ((v4_rlvect_1 X0) \wedge ((v5_rlvect_1 X0) \wedge \\ & ((v6_rlvect_1 X0) \wedge ((v7_rlvect_1 X0) \wedge ((v8_rlvect_1 X0) \wedge (l1_rlvect_1 \\ & X0)))))))))) \Rightarrow (m1_subset_1 (k1_analoaf X0) (k1_zfmisc_1 (k2_zfmisc_1 \\ & (k2_zfmisc_1 (u1_struct_0 X0) (u1_struct_0 X0)) (k2_zfmisc_1 \\ & (u1_struct_0 X0) (u1_struct_0 X0)))))) \end{aligned} \quad (9)$$

Assume the following.

$$\begin{aligned} & \forall X0.(\neg v1_xboole_0 X0) \Rightarrow (\forall X1.(m1_subset_1 X1 (k1_zfmisc_1 \\ & (k2_zfmisc_1 (k2_zfmisc_1 X0 X0) (k2_zfmisc_1 X0 X0)))) \Rightarrow (\forall X2. \\ & (m1_subset_1 X2 (k1_zfmisc_1 (k2_zfmisc_1 (k2_zfmisc_1 X0 X0) \\ & (k2_zfmisc_1 X0 X0)))) \Rightarrow ((X2 = k1_diraf X0 X1) \Leftrightarrow (\forall X3.(m1_subset_1 \\ & X3 X0) \Rightarrow (\forall X4.(m1_subset_1 X4 X0) \Rightarrow (\forall X5.(m1_subset_1 \\ & X5 X0) \Rightarrow (\forall X6.(m1_subset_1 X6 X0) \Rightarrow ((k1_domain_1 (k2_zfmisc_1 \\ & X0 X0) (k2_zfmisc_1 X0 X0) (k1_domain_1 X0 X0 X3 X4) (k1_domain_1 \\ & X0 X0 X5 X6) \in X2) \Leftrightarrow ((k1_domain_1 (k2_zfmisc_1 X0 X0) (k2_zfmisc_1 \\ & X0 X0) (k1_domain_1 X0 X0 X3 X4) (k1_domain_1 X0 X0 X5 X6) \in X1) \vee (k1_domain_1 \\ & (k2_zfmisc_1 X0 X0) (k2_zfmisc_1 X0 X0) (k1_domain_1 X0 X0 X3 X4) \\ & (k1_domain_1 X0 X0 X6 X5) \in X1)))))))))) \end{aligned} \quad (10)$$

Theorem 1

$$\begin{aligned} & \forall X0.((\neg v2_struct_0 X0) \wedge ((v13_algstr_0 X0) \wedge ((v2_rlvect_1 \\ & X0) \wedge ((v3_rlvect_1 X0) \wedge ((v4_rlvect_1 X0) \wedge ((v5_rlvect_1 X0) \wedge \\ & ((v6_rlvect_1 X0) \wedge ((v7_rlvect_1 X0) \wedge ((v8_rlvect_1 X0) \wedge (l1_rlvect_1 \\ & X0)))))))))) \Rightarrow (\forall X1.(m1_subset_1 X1 (u1_struct_0 X0)) \Rightarrow \\ & (\forall X2.(m1_subset_1 X2 (u1_struct_0 X0)) \Rightarrow (\forall X3.(m1_subset_1 \\ & X3 (u1_struct_0 X0)) \Rightarrow (\forall X4.(m1_subset_1 X4 (u1_struct_0 \\ & X0)) \Rightarrow ((k1_domain_1 (k2_zfmisc_1 (u1_struct_0 X0) (u1_struct_0 \\ & X0)) (k2_zfmisc_1 (u1_struct_0 X0) (u1_struct_0 X0)) (k1_domain_1 \\ & (u1_struct_0 X0) (u1_struct_0 X0) X1 X2) (k1_domain_1 (u1_struct_0 \\ & X0) (u1_struct_0 X0) X3 X4) \in k1_diraf (u1_struct_0 X0) (k1_analoaf \\ & X0)) \Leftrightarrow (\exists X5.(m1_subset_1 X5 k1_numbers) \wedge (\exists X6.(m1_subset_1 \\ & X6 k1_numbers) \wedge ((k1_rlvect_1 X0 (k5_algstr_0 X0 X2 X1) X5 = k1_rlvect_1 \\ & X0 (k5_algstr_0 X0 X4 X3) X6) \wedge (\neg (X5 = k6_numbers) \wedge (X6 = k6_numbers)))))))))) \end{aligned}$$