

t3_geomtrap
(TMVv14q3EfxzNdvi7FFBi171sJ1aSxUMiKQ)

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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 $r1_analmetr : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k2_diraf : \iota \Rightarrow \iota$ be given. Let $k2_analoaf : \iota \Rightarrow \iota$ be given. Let $r2_analoaf : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $r1_geomtrap : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v7_struct_0 : \iota \Rightarrow o$ be given. Let $v2_analoaf : \iota \Rightarrow o$ be given. Let $l1_analoaf : \iota \Rightarrow o$ be given. Let $r2_diraf : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $r1_analoaf : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $k2_zfmisc_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $g1_analoaf : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1_analoaf : \iota \Rightarrow o$ be given. Let $u1_analoaf : \iota \Rightarrow \iota$ be given. Let $k1_diraf : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\begin{aligned}
& \forall X0.((\neg v7_struct_0 X0) \wedge ((v2_analoaf X0) \wedge (l1_analoaf X0))) \Rightarrow (\forall X1.((\neg v2_struct_0 X1) \wedge (l1_analoaf X1)) \Rightarrow ((X1 = \\
& k2_diraf X0) \Rightarrow (\forall X2.(m1_subset_1 X2 (u1_struct_0 X0)) \Rightarrow (\\
& \forall X3.(m1_subset_1 X3 (u1_struct_0 X0)) \Rightarrow (\forall X4.(m1_subset_1 X4 (u1_struct_0 X0)) \Rightarrow (\forall X5.(m1_subset_1 X5 (u1_struct_0 \\
& X0)) \Rightarrow (\forall X6.(m1_subset_1 X6 (u1_struct_0 X1)) \Rightarrow (\forall X7. \\
& (m1_subset_1 X7 (u1_struct_0 X1)) \Rightarrow (\forall X8.(m1_subset_1 X8 \\
& (u1_struct_0 X1)) \Rightarrow (\forall X9.(m1_subset_1 X9 (u1_struct_0 X1)) \Rightarrow \\
& (((X2 = X6) \wedge ((X3 = X7) \wedge ((X4 = X8) \wedge (X5 = X9)))) \Rightarrow ((r2_analoaf X1 X6 \\
& X7 X8 X9) \Leftrightarrow (r2_diraf X0 X2 X3 X4 X5))))))))))
\end{aligned} \tag{1}$$

Assume the following.

$$\begin{aligned}
& \forall X0.((\neg v2_struct_0 X0) \wedge ((v13_algstr_0 X0) \wedge ((v2_rlvect_1 \\
& X0) \wedge ((v3_rlvect_1 X0) \wedge ((v4_rlvect_1 X0) \wedge ((v5_rlvect_1 X0) \wedge \\
& ((v6_rlvect_1 X0) \wedge ((v7_rlvect_1 X0) \wedge ((v8_rlvect_1 X0) \wedge (l1_rlvect_1 \\
& X0)))))))))) \Rightarrow (\forall X1.(m1_subset_1 X1 (u1_struct_0 X0)) \Rightarrow \\
& (\forall X2.(m1_subset_1 X2 (u1_struct_0 X0)) \Rightarrow (\forall X3.(m1_subset_1 \\
& X3 (u1_struct_0 X0)) \Rightarrow (\forall X4.(m1_subset_1 X4 (u1_struct_0 \\
& X0)) \Rightarrow (\forall X5.(m1_subset_1 X5 (u1_struct_0 (k2_analoaf X0)) \Rightarrow \\
& (\forall X6.(m1_subset_1 X6 (u1_struct_0 (k2_analoaf X0)) \Rightarrow (\\
& \forall X7.(m1_subset_1 X7 (u1_struct_0 (k2_analoaf X0)) \Rightarrow (\forall X8. \\
& (m1_subset_1 X8 (u1_struct_0 (k2_analoaf X0)) \Rightarrow (((X5 = X1) \wedge ((\\
& X6 = X2) \wedge ((X7 = X3) \wedge (X8 = X4)))) \Rightarrow ((r2_analoaf (k2_analoaf X0) X5 \\
& X6 X7 X8) \Leftrightarrow (r1_analoaf X0 X1 X2 X3 X4))))))))))
\end{aligned} \tag{2}$$

Assume the following.

$$\begin{aligned}
& \forall X0.((\neg v2_struct_0 X0) \wedge ((v13_algstr_0 X0) \wedge ((v2_rlvect_1 \\
& X0) \wedge ((v3_rlvect_1 X0) \wedge ((v4_rlvect_1 X0) \wedge ((v5_rlvect_1 X0) \wedge \\
& ((v6_rlvect_1 X0) \wedge ((v7_rlvect_1 X0) \wedge ((v8_rlvect_1 X0) \wedge (l1_rlvect_1 \\
& X0)))))))))) \Rightarrow (\forall X1.(m1_subset_1 X1 (u1_struct_0 X0)) \Rightarrow \\
& (\forall X2.(m1_subset_1 X2 (u1_struct_0 X0)) \Rightarrow ((r1_analmetr \\
& X0 X1 X2) \Rightarrow ((\neg v7_struct_0 (k2_analoaf X0)) \wedge ((v2_analoaf (k2_analoaf \\
& X0)) \wedge (l1_analoaf (k2_analoaf X0))))))
\end{aligned} \tag{3}$$

Assume the following.

$$\begin{aligned}
& \forall X0. \forall X1.(m1_subset_1 X1 (k1_zfmisc_1 (k2_zfmisc_1 \\
& (k2_zfmisc_1 X0 X0) (k2_zfmisc_1 X0 X0))) \Rightarrow (\forall X2. \forall X3. \\
& (g1_analoaf X0 X1 = g1_analoaf X2 X3) \Rightarrow ((X0 = X2) \wedge (X1 = X3)))
\end{aligned} \tag{4}$$

Assume the following.

$$\forall X0.((\neg v2_struct_0 X0) \wedge (l1_analoaf X0)) \Rightarrow ((\neg v2_struct_0 (k2_diraf X0)) \wedge (v1_analoaf (k2_diraf X0))) \tag{5}$$

Assume the following.

$$\begin{aligned}
& \forall X0.((\neg v2_struct_0 X0) \wedge ((v13_algstr_0 X0) \wedge ((v2_rlvect_1 \\
& X0) \wedge ((v3_rlvect_1 X0) \wedge ((v4_rlvect_1 X0) \wedge ((v5_rlvect_1 X0) \wedge \\
& ((v6_rlvect_1 X0) \wedge ((v7_rlvect_1 X0) \wedge ((v8_rlvect_1 X0) \wedge (l1_rlvect_1 \\
& X0)))))))))) \Rightarrow ((\neg v2_struct_0 (k2_analoaf X0)) \wedge (v1_analoaf (\\
& k2_analoaf X0)))
\end{aligned} \tag{6}$$

Assume the following.

$$\begin{aligned}
& \forall X0.(l1_analoaf X0) \Rightarrow (m1_subset_1 (u1_analoaf X0) (k1_zfmisc_1 \\
& (k2_zfmisc_1 (k2_zfmisc_1 (u1_struct_0 X0) (u1_struct_0 X0)) \\
& (k2_zfmisc_1 (u1_struct_0 X0) (u1_struct_0 X0))))
\end{aligned} \tag{7}$$

Assume the following.

$$\forall X0.((\neg v2_struct_0 X0) \wedge (l1_analoaf X0)) \Rightarrow ((v1_analoaf (k2_diraf X0)) \wedge (l1_analoaf (k2_diraf X0))) \quad (8)$$

Assume the following.

$$\forall X0.((\neg v2_struct_0 X0) \wedge ((v13_algstr_0 X0) \wedge ((v2_rlvect_1 X0) \wedge ((v3_rlvect_1 X0) \wedge ((v4_rlvect_1 X0) \wedge ((v5_rlvect_1 X0) \wedge ((v6_rlvect_1 X0) \wedge ((v7_rlvect_1 X0) \wedge ((v8_rlvect_1 X0) \wedge (l1_rlvect_1 X0)))))))))) \Rightarrow ((v1_analoaf (k2_analoaf X0)) \wedge (l1_analoaf (k2_analoaf X0))) \quad (9)$$

Assume the following.

$$\forall X0.((\neg v2_struct_0 X0) \wedge (l1_analoaf X0)) \Rightarrow (\forall X1. (m1_subset_1 X1 (u1_struct_0 X0)) \Rightarrow (\forall X2. (m1_subset_1 X2 (u1_struct_0 X0)) \Rightarrow (\forall X3. (m1_subset_1 X3 (u1_struct_0 X0)) \Rightarrow (\forall X4. (m1_subset_1 X4 (u1_struct_0 X0)) \Rightarrow ((r2_diraf X0 X1 X2 X3 X4) \Leftrightarrow ((r2_analoaf X0 X1 X2 X3 X4) \vee (r2_analoaf X0 X1 X2 X4 X3))))))) \quad (10)$$

Assume the following.

$$\forall X0.((\neg v2_struct_0 X0) \wedge (l1_analoaf X0)) \Rightarrow (k2_diraf X0 = g1_analoaf (u1_struct_0 X0) (k1_diraf (u1_struct_0 X0) (u1_analoaf X0))) \quad (11)$$

Assume the following.

$$\forall X0.((\neg v2_struct_0 X0) \wedge ((v13_algstr_0 X0) \wedge ((v2_rlvect_1 X0) \wedge ((v3_rlvect_1 X0) \wedge ((v4_rlvect_1 X0) \wedge ((v5_rlvect_1 X0) \wedge ((v6_rlvect_1 X0) \wedge ((v7_rlvect_1 X0) \wedge ((v8_rlvect_1 X0) \wedge (l1_rlvect_1 X0)))))))))) \Rightarrow (\forall X1. (m1_subset_1 X1 (u1_struct_0 X0)) \Rightarrow (\forall X2. (m1_subset_1 X2 (u1_struct_0 X0)) \Rightarrow (\forall X3. (m1_subset_1 X3 (u1_struct_0 X0)) \Rightarrow (\forall X4. (m1_subset_1 X4 (u1_struct_0 X0)) \Rightarrow ((r1_geomtrap X0 X1 X2 X3 X4) \Leftrightarrow ((r1_analoaf X0 X1 X2 X3 X4) \vee (r1_analoaf X0 X1 X2 X4 X3))))))) \quad (12)$$

Assume the following.

$$\forall X0. (l1_analoaf X0) \Rightarrow ((v1_analoaf X0) \Rightarrow (X0 = g1_analoaf (u1_struct_0 X0) (u1_analoaf X0))) \quad (13)$$

Theorem 1

$$\begin{aligned} & \forall X0.((\neg v2_struct_0 X0) \wedge ((v13_algstr_0 X0) \wedge ((v2_rlvect_1 \\ & X0) \wedge ((v3_rlvect_1 X0) \wedge ((v4_rlvect_1 X0) \wedge ((v5_rlvect_1 X0) \wedge \\ & ((v6_rlvect_1 X0) \wedge ((v7_rlvect_1 X0) \wedge ((v8_rlvect_1 X0) \wedge (l1_rlvect_1 \\ & X0)))))))))) \Rightarrow (\forall X1.(m1_subset_1 X1 (u1_struct_0 X0)) \Rightarrow \\ & (\forall X2.(m1_subset_1 X2 (u1_struct_0 X0)) \Rightarrow (\forall X3.(m1_subset_1 \\ & X3 (u1_struct_0 X0)) \Rightarrow (\forall X4.(m1_subset_1 X4 (u1_struct_0 \\ & X0)) \Rightarrow (\forall X5.(m1_subset_1 X5 (u1_struct_0 X0)) \Rightarrow (\forall X6. \\ & (m1_subset_1 X6 (u1_struct_0 X0)) \Rightarrow ((r1_analmetr X0 X1 X2) \Rightarrow (\forall X7. \\ & (m1_subset_1 X7 (u1_struct_0 (k2_diraf (k2_analoaf X0)))) \Rightarrow (\forall X8. \\ & (m1_subset_1 X8 (u1_struct_0 (k2_diraf (k2_analoaf X0)))) \Rightarrow (\forall X9. \\ & (m1_subset_1 X9 (u1_struct_0 (k2_diraf (k2_analoaf X0)))) \Rightarrow (\forall X10. \\ & (m1_subset_1 X10 (u1_struct_0 (k2_diraf (k2_analoaf X0)))) \Rightarrow (\\ & ((X7 = X3) \wedge ((X8 = X4) \wedge ((X9 = X5) \wedge (X10 = X6)))) \Rightarrow ((r2_analoaf (k2_diraf \\ & (k2_analoaf X0)) X7 X8 X9 X10) \Leftrightarrow (r1_geomtrap X0 X3 X4 X5 X6)))))))))) \end{aligned}$$