

t21_euclmetr
(TMau4Te83ELt17yU5Tj4zQNv9tgMB1Fsq3P)

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Let $v2_struct_0 : \iota \Rightarrow o$ be given. Let $v3_analmetr : \iota \Rightarrow o$ be given. Let $l1_analmetr : \iota \Rightarrow o$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $u1_struct_0 : \iota \Rightarrow \iota$ be given. Let $r4_analmetr : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $r2_analoaf : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v2_analmetr : \iota \Rightarrow o$ be given. Let $r5_analmetr : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Assume the following.

$$\begin{aligned}
& \forall X0.((\neg v2_struct_0 X0) \wedge ((v3_analmetr X0) \wedge (l1_analmetr X0))) \Rightarrow (\forall X1.(m1_subset_1 X1 (u1_struct_0 X0)) \Rightarrow (\forall X2. \\
& (m1_subset_1 X2 (u1_struct_0 X0)) \Rightarrow (\forall X3.(m1_subset_1 X3 \\
& (u1_struct_0 X0)) \Rightarrow (\forall X4.(m1_subset_1 X4 (u1_struct_0 X0)) \Rightarrow \\
& (\forall X5.(m1_subset_1 X5 (u1_struct_0 X0)) \Rightarrow (\forall X6.(m1_subset_1 \\
& X6 (u1_struct_0 X0)) \Rightarrow (\neg(X1 \neq X2) \wedge ((\neg(\neg(r4_analmetr X0 X1 X2 X3 X4) \wedge \\
& (r4_analmetr X0 X1 X2 X5 X6)) \wedge ((\neg(r4_analmetr X0 X1 X2 X3 X4) \wedge (r4_analmetr \\
& X0 X5 X6 X1 X2)) \wedge ((\neg(r4_analmetr X0 X3 X4 X1 X2) \wedge (r4_analmetr X0 X5 \\
& X6 X1 X2)) \wedge (\neg(r4_analmetr X0 X3 X4 X1 X2) \wedge (r4_analmetr X0 X1 X2 X5 \\
& X6)))))) \wedge (\neg r2_analoaf X0 X3 X4 X5 X6)))))))))
\end{aligned} \tag{1}$$

Assume the following.

$$\begin{aligned}
& \forall X0.((\neg v2_struct_0 X0) \wedge ((v2_analmetr X0) \wedge (l1_analmetr X0))) \Rightarrow (\forall X1.(m1_subset_1 X1 (u1_struct_0 X0)) \Rightarrow (\forall X2. \\
& (m1_subset_1 X2 (u1_struct_0 X0)) \Rightarrow (\forall X3.(m1_subset_1 X3 \\
& (u1_struct_0 X0)) \Rightarrow (\forall X4.(m1_subset_1 X4 (u1_struct_0 X0)) \Rightarrow \\
& ((r2_analoaf X0 X1 X2 X3 X4) \Rightarrow ((r2_analoaf X0 X1 X2 X4 X3) \wedge ((r2_analoaf \\
& X0 X2 X1 X3 X4) \wedge ((r2_analoaf X0 X2 X1 X4 X3) \wedge ((r2_analoaf X0 X3 X4 X1 \\
& X2) \wedge ((r2_analoaf X0 X3 X4 X2 X1) \wedge ((r2_analoaf X0 X4 X3 X1 X2) \wedge (r2_analoaf \\
& X0 X4 X3 X2 X1))))))))))
\end{aligned} \tag{2}$$

Assume the following.

$$\begin{aligned} \forall X0.((\neg v2_struct_0 X0) \wedge ((v2_analmetr X0) \wedge (l1_analmetr \\ X0))) \Rightarrow (\forall X1.(m1_subset_1 X1 (u1_struct_0 X0)) \Rightarrow (\forall X2. \\ (m1_subset_1 X2 (u1_struct_0 X0)) \Rightarrow (\forall X3.(m1_subset_1 X3 \\ (u1_struct_0 X0)) \Rightarrow ((r4_analmetr X0 X1 X2 X3 X3) \wedge ((r4_analmetr \\ X0 X3 X3 X1 X2) \wedge ((r2_analoaf X0 X1 X2 X3 X3) \wedge (r2_analoaf X0 X3 X3 X1 \\ X2))))))) \end{aligned} \quad (3)$$

Assume the following.

$$\begin{aligned} \forall X0.((\neg v2_struct_0 X0) \wedge ((v2_analmetr X0) \wedge (l1_analmetr \\ X0))) \Rightarrow (\forall X1.(m1_subset_1 X1 (u1_struct_0 X0)) \Rightarrow (\forall X2. \\ (m1_subset_1 X2 (u1_struct_0 X0)) \Rightarrow (\forall X3.(m1_subset_1 X3 \\ (u1_struct_0 X0)) \Rightarrow ((r5_analmetr X0 X1 X2 X3) \Rightarrow ((r5_analmetr X0 \\ X1 X3 X2) \wedge ((r5_analmetr X0 X2 X1 X3) \wedge ((r5_analmetr X0 X2 X3 X1) \wedge (\\ r5_analmetr X0 X3 X1 X2) \wedge (r5_analmetr X0 X3 X2 X1)))))))) \end{aligned} \quad (4)$$

Assume the following.

$$\begin{aligned} \forall X0.((\neg v2_struct_0 X0) \wedge (l1_analmetr X0)) \Rightarrow (\forall X1. \\ (m1_subset_1 X1 (u1_struct_0 X0)) \Rightarrow (\forall X2.(m1_subset_1 X2 \\ (u1_struct_0 X0)) \Rightarrow (\forall X3.(m1_subset_1 X3 (u1_struct_0 X0)) \Rightarrow \\ ((r5_analmetr X0 X1 X2 X3) \Leftrightarrow (r2_analoaf X0 X1 X2 X1 X3)))) \end{aligned} \quad (5)$$

Assume the following.

$$\forall X0.(l1_analmetr X0) \Rightarrow (((\neg v2_struct_0 X0) \wedge (v3_analmetr X0)) \Rightarrow ((\neg v2_struct_0 X0) \wedge (v2_analmetr X0))) \quad (6)$$

Theorem 1

$$\begin{aligned} \forall X0.((\neg v2_struct_0 X0) \wedge ((v3_analmetr X0) \wedge (l1_analmetr \\ X0))) \Rightarrow (\forall X1.(m1_subset_1 X1 (u1_struct_0 X0)) \Rightarrow (\forall X2. \\ (m1_subset_1 X2 (u1_struct_0 X0)) \Rightarrow (\forall X3.(m1_subset_1 X3 \\ (u1_struct_0 X0)) \Rightarrow (\forall X4.(m1_subset_1 X4 (u1_struct_0 X0)) \Rightarrow \\ (\forall X5.(m1_subset_1 X5 (u1_struct_0 X0)) \Rightarrow (\forall X6.(m1_subset_1 \\ X6 (u1_struct_0 X0)) \Rightarrow (\forall X7.(m1_subset_1 X7 (u1_struct_0 \\ X0)) \Rightarrow (((r4_analmetr X0 X1 X4 X1 X5) \wedge ((r4_analmetr X0 X1 X6 X1 X7) \wedge \\ ((r4_analmetr X0 X2 X4 X3 X5) \wedge ((r4_analmetr X0 X2 X6 X3 X7) \wedge (X1 = X3)))))) \Rightarrow \\ ((r2_analoaf X0 X1 X6 X1 X2) \vee ((r2_analoaf X0 X1 X2 X1 X4) \vee (r4_analmetr \\ X0 X4 X6 X5 X7)))))))))) \end{aligned}$$