

t9_euclmetr

(TMF2TvhJHpMWXJiYPSpyquwabLE2yjLeWvR)

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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 $v7_euclmetr : \iota \Rightarrow o$ be given. Let $v4_conaffm : \iota \Rightarrow o$ be given. Let $v2_analmetr : \iota \Rightarrow o$ 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. Assume the following.

$$\begin{aligned}
 & \forall X0. ((\neg v2_struct_0 X0) \wedge ((v2_analmetr X0) \wedge (l1_analmetr \\
 & X0))) \Rightarrow ((v7_euclmetr X0) \Leftrightarrow (\forall X1. (m1_subset_1 X1 (u1_struct_0 \\
 & X0)) \Rightarrow (\forall X2. (m1_subset_1 X2 (u1_struct_0 X0)) \Rightarrow (\forall X3. \\
 & (m1_subset_1 X3 (u1_struct_0 X0)) \Rightarrow (\forall X4. (m1_subset_1 X4 \\
 & (u1_struct_0 X0)) \Rightarrow (\forall X5. (m1_subset_1 X5 (u1_struct_0 X0)) \Rightarrow \\
 & (\forall X6. (m1_subset_1 X6 (u1_struct_0 X0)) \Rightarrow (\forall X7. (m1_subset_1 \\
 & X7 (u1_struct_0 X0)) \Rightarrow (((r4_analmetr X0 X1 X2 X1 X3) \wedge ((r4_analmetr \\
 & X0 X1 X4 X1 X5) \wedge ((r4_analmetr X0 X1 X6 X1 X7) \wedge ((r4_analmetr X0 X2 X4 \\
 & X3 X5) \wedge (r4_analmetr X0 X2 X6 X3 X7)))))) \Rightarrow ((r2_analoaf X0 X1 X6 X1 X2) \vee \\
 & ((r2_analoaf X0 X1 X2 X1 X4) \vee (r4_analmetr X0 X4 X6 X5 X7)))))))))
 \end{aligned} \tag{1}$$

Assume the following.

$$\begin{aligned}
 & \forall X0. ((\neg v2_struct_0 X0) \wedge ((v3_analmetr X0) \wedge (l1_analmetr \\
 & X0))) \Rightarrow ((v4_conaffm X0) \Leftrightarrow (\forall X1. (m1_subset_1 X1 (u1_struct_0 \\
 & X0)) \Rightarrow (\forall X2. (m1_subset_1 X2 (u1_struct_0 X0)) \Rightarrow (\forall X3. \\
 & (m1_subset_1 X3 (u1_struct_0 X0)) \Rightarrow (\forall X4. (m1_subset_1 X4 \\
 & (u1_struct_0 X0)) \Rightarrow (\forall X5. (m1_subset_1 X5 (u1_struct_0 X0)) \Rightarrow \\
 & (\forall X6. (m1_subset_1 X6 (u1_struct_0 X0)) \Rightarrow (\forall X7. (m1_subset_1 \\
 & X7 (u1_struct_0 X0)) \Rightarrow (((r4_analmetr X0 X1 X2 X1 X3) \wedge ((r4_analmetr \\
 & X0 X1 X4 X1 X5) \wedge ((r4_analmetr X0 X1 X6 X1 X7) \wedge ((r4_analmetr X0 X2 X4 \\
 & X3 X5) \wedge (r4_analmetr X0 X2 X6 X3 X7)))))) \Rightarrow ((r2_analoaf X0 X1 X6 X1 X2) \vee \\
 & ((r2_analoaf X0 X1 X2 X1 X4) \vee (r4_analmetr X0 X4 X6 X5 X7)))))))))
 \end{aligned} \tag{2}$$

Assume the following.

$$\forall X0. (l1_analmetr X0) \Rightarrow (((\neg v2_struct_0 X0) \wedge (v3_analmetr X0)) \Rightarrow ((\neg v2_struct_0 X0) \wedge (v2_analmetr X0))) \tag{3}$$

Theorem 1

$$\forall X0.((\neg v2_struct_0 X0) \wedge ((v3_analmetr X0) \wedge (l1_analmetr X0))) \Rightarrow ((v7_euclmetr X0) \Leftrightarrow (v4_conafm X0))$$