

t1_euclmetr

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Let $v2_struct_0 : \iota \Rightarrow o$ be given. Let $v2_analmetr : \iota \Rightarrow o$ 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 $r5_analmetr : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v7_struct_0 : \iota \Rightarrow o$ be given. Let $v1_diraf : \iota \Rightarrow o$ be given. Let $l1_analoaf : \iota \Rightarrow o$ be given. Let $r1_aff_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k3_analmetr : \iota \Rightarrow \iota$ be given. Let $v1_analoaf : \iota \Rightarrow o$ be given. Assume the following.

$$\begin{aligned} & \forall X0.((\neg v7_struct_0 X0) \wedge ((v1_diraf X0) \wedge (l1_analoaf X0))) \Rightarrow \\ & (\forall X1.(m1_subset_1 X1 (u1_struct_0 X0)) \Rightarrow (\forall X2.(m1_subset_1 \\ & X2 (u1_struct_0 X0)) \Rightarrow ((r1_aff_1 X0 X1 X1 X2) \wedge ((r1_aff_1 X0 X1 X2 \\ & X2) \wedge (r1_aff_1 X0 X1 X2 X1)))))) \end{aligned} \tag{1}$$

Assume the following.

$$\begin{aligned} & \forall X0.((\neg v2_struct_0 X0) \wedge ((v2_analmetr X0) \wedge (l1_analmetr \\ & X0))) \Rightarrow (\forall X1.(m1_subset_1 X1 (u1_struct_0 X0)) \Rightarrow (\forall X2. \\ & (m1_subset_1 X2 (u1_struct_0 X0)) \Rightarrow (\forall X3.(m1_subset_1 X3 \\ & (u1_struct_0 X0)) \Rightarrow (\forall X4.(m1_subset_1 X4 (u1_struct_0 (\\ & k3_analmetr X0))) \Rightarrow (\forall X5.(m1_subset_1 X5 (u1_struct_0 (\\ & k3_analmetr X0))) \Rightarrow (\forall X6.(m1_subset_1 X6 (u1_struct_0 (\\ & k3_analmetr X0)))) \Rightarrow (((X1 = X4) \wedge ((X2 = X5) \wedge (X3 = X6))) \Rightarrow ((r5_analmetr \\ & X0 X1 X2 X3) \Leftrightarrow (r1_aff_1 (k3_analmetr X0) X4 X5 X6))))))))) \end{aligned} \tag{2}$$

Assume the following.

$$\begin{aligned} & \forall X0.((\neg v2_struct_0 X0) \wedge (l1_analmetr X0)) \Rightarrow (\forall X1. \\ & (m1_subset_1 X1 (u1_struct_0 X0)) \Leftrightarrow (m1_subset_1 X1 (u1_struct_0 \\ & (k3_analmetr X0)))) \end{aligned} \tag{3}$$

Assume the following.

$$\begin{aligned} & \forall X0.((\neg v2_struct_0 X0) \wedge ((v2_analmetr X0) \wedge (l1_analmetr \\ & X0))) \Rightarrow ((\neg v7_struct_0 (k3_analmetr X0)) \wedge ((v1_analoaf (k3_analmetr \\ & X0)) \wedge (v1_diraf (k3_analmetr X0)))) \end{aligned} \tag{4}$$

Assume the following.

$$\forall X0.((\neg v2_struct_0 X0) \wedge (l1_analmetr X0)) \Rightarrow ((v1_analoaf (k3_analmetr X0)) \wedge (l1_analoaf (k3_analmetr X0))) \quad (5)$$

Theorem 1

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