

t2_euclmetr

(TMV7HsR8XKKtBNfMdkkc5xF1Z3uLFeaML7z)

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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 $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $r6_analmetr : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $r2_analoaf : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $r4_analmetr : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v2_analmetr : \iota \Rightarrow o$ be given. Let $r5_analmetr : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k4_analmetr : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ 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.

$$\begin{aligned} \forall X0.((\neg v2_struct_0 X0) \wedge ((v2_analmetr X0) \wedge (l1_analmetr \\ X0))) \Rightarrow (\forall X1.(m1_subset_1 X1 (k1_zfmisc_1 (u1_struct_0 \\ X0))) \Rightarrow (\forall X2.(m1_subset_1 X2 (u1_struct_0 X0)) \Rightarrow (\forall X3. \\ (m1_subset_1 X3 (u1_struct_0 X0)) \Rightarrow (\forall X4.(m1_subset_1 X4 \\ (u1_struct_0 X0)) \Rightarrow (\forall X5.(m1_subset_1 X5 (u1_struct_0 X0)) \Rightarrow \\ (((X2 \in X1) \wedge ((X3 \in X1) \wedge (r6_analmetr X0 X4 X5 X1))) \Rightarrow ((r4_analmetr \\ X0 X4 X5 X2 X3) \wedge (r4_analmetr X0 X2 X3 X4 X5))))))) \end{aligned} \quad (4)$$

Assume the following.

$$\forall X0. \forall X1. \forall X2. ((X0 \in X1) \wedge (m1_subset_1 X1 (k1_zfmisc_1 X2))) \Rightarrow (m1_subset_1 X0 X2) \quad (5)$$

Assume the following.

$$\begin{aligned} \forall X0.((\neg v2_struct_0 X0) \wedge ((v2_analmetr X0) \wedge (l1_analmetr \\ X0))) \Rightarrow (\forall X1.(m1_subset_1 X1 (k1_zfmisc_1 (u1_struct_0 \\ X0))) \Rightarrow (\forall X2.(m1_subset_1 X2 (u1_struct_0 X0)) \Rightarrow (\forall X3. \\ (m1_subset_1 X3 (u1_struct_0 X0)) \Rightarrow ((r6_analmetr X0 X2 X3 X1) \Rightarrow (\\ r6_analmetr X0 X3 X2 X1)))))) \end{aligned} \quad (6)$$

Assume the following.

$$\begin{aligned} \forall X0.((\neg v2_struct_0 X0) \wedge ((v3_analmetr X0) \wedge (l1_analmetr \\ X0))) \Rightarrow (\forall X1.(m1_subset_1 X1 (u1_struct_0 X0)) \Rightarrow (\forall X2. \\ (m1_subset_1 X2 (u1_struct_0 X0)) \Rightarrow (\exists X3.(m1_subset_1 X3 \\ (u1_struct_0 X0)) \wedge ((r5_analmetr X0 X1 X2 X3) \wedge ((X1 \neq X3) \wedge (X2 \neq X3)))))) \end{aligned} \quad (7)$$

Assume the following.

$$\forall X0. \forall X1. (X0 \in X1) \Rightarrow (m1_subset_1 X0 X1) \quad (8)$$

Assume the following.

$$\forall X0. \forall X1. (m1_subset_1 X1 (k1_zfmisc_1 X0)) \Rightarrow (\forall X2. (X2 \in X1) \Rightarrow (X2 \in X0)) \quad (9)$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. \forall X2. (((\neg v2_struct_0 X0) \wedge (l1_analmetr \\ & X0)) \wedge ((m1_subset_1 X1 (u1_struct_0 X0)) \wedge (m1_subset_1 X2 (u1_struct_0 \\ & X0)))) \Rightarrow (m1_subset_1 (k4_analmetr X0 X1 X2) (k1_zfmisc_1 (u1_struct_0 \\ & X0))) \end{aligned} \quad (10)$$

Assume the following.

$$\begin{aligned} & \forall X0. ((\neg v2_struct_0 X0) \wedge (l1_analmetr X0)) \Rightarrow (\forall X1. \\ & (m1_subset_1 X1 (u1_struct_0 X0)) \Rightarrow (\forall X2. (m1_subset_1 X2 \\ & (u1_struct_0 X0)) \Rightarrow (\forall X3. (m1_subset_1 X3 (k1_zfmisc_1 (\\ & u1_struct_0 X0)) \Rightarrow ((r6_analmetr X0 X1 X2 X3) \Leftrightarrow (\exists X4. (m1_subset_1 \\ & X4 (u1_struct_0 X0)) \wedge (\exists X5. (m1_subset_1 X5 (u1_struct_0 \\ & X0)) \wedge ((X4 \neq X5) \wedge ((X3 = k4_analmetr X0 X4 X5) \wedge (r4_analmetr X0 X1 X2 \\ & X4 X5)))))))))) \end{aligned} \quad (11)$$

Assume the following.

$$\begin{aligned} & \forall X0. ((\neg v2_struct_0 X0) \wedge (l1_analmetr X0)) \Rightarrow (\forall X1. \\ & (m1_subset_1 X1 (u1_struct_0 X0)) \Rightarrow (\forall X2. (m1_subset_1 X2 \\ & (u1_struct_0 X0)) \Rightarrow (\forall X3. (m1_subset_1 X3 (k1_zfmisc_1 (\\ & u1_struct_0 X0)) \Rightarrow ((X3 = k4_analmetr X0 X1 X2) \Leftrightarrow (\forall X4. (m1_subset_1 \\ & X4 (u1_struct_0 X0)) \Rightarrow ((X4 \in X3) \Leftrightarrow (r5_analmetr X0 X1 X2 X4)))))) \end{aligned} \quad (12)$$

Assume the following.

$$\begin{aligned} & \forall X0. ((\neg v2_struct_0 X0) \wedge (l1_analmetr X0)) \Rightarrow (\forall X1. \\ & (m1_subset_1 X1 (u1_struct_0 X0)) \Rightarrow (\forall X2. (m1_subset_1 X2 \\ & (u1_struct_0 X0)) \Rightarrow (\forall X3. (m1_subset_1 X3 (u1_struct_0 X0)) \Rightarrow \\ & ((r5_analmetr X0 X1 X2 X3) \Leftrightarrow (r2_analoaf X0 X1 X2 X1 X3)))) \end{aligned} \quad (13)$$

Assume the following.

$$\begin{aligned} & \forall X0. (l1_analmetr X0) \Rightarrow (((\neg v2_struct_0 X0) \wedge (v3_analmetr \\ & X0)) \Rightarrow ((\neg v2_struct_0 X0) \wedge (v2_analmetr X0))) \end{aligned} \quad (14)$$

Theorem 1

$$\begin{aligned} & \forall X0. ((\neg v2_struct_0 X0) \wedge ((v3_analmetr X0) \wedge (l1_analmetr \\ & X0))) \Rightarrow (\forall X1. (m1_subset_1 X1 (u1_struct_0 X0)) \Rightarrow (\forall X2. \\ & (m1_subset_1 X2 (u1_struct_0 X0)) \Rightarrow (\forall X3. (m1_subset_1 X3 \\ & (u1_struct_0 X0)) \Rightarrow (\forall X4. (m1_subset_1 X4 (u1_struct_0 X0)) \Rightarrow \\ & (\forall X5. (m1_subset_1 X5 (k1_zfmisc_1 (u1_struct_0 X0)) \Rightarrow \\ & (((r6_analmetr X0 X1 X2 X5) \wedge (r6_analmetr X0 X3 X4 X5)) \Rightarrow ((r2_analoaf \\ & X0 X1 X2 X3 X4) \wedge (r2_analoaf X0 X1 X2 X4 X3)))))))))) \end{aligned}$$