

l6_analmetr

(TMdJvxM7Zea6K8Cx4ZFhatM2yrqir9TFn8s)

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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 $k1_numbers : \iota$ be given. Let $r1_analmetr : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k3_rlvect_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_rlvect_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $r1_anproj_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v9_struct_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k4_struct_0 : \iota \Rightarrow \iota$ be given. Let $k6_numbers : \iota$ be given. Assume the following.

$$\begin{aligned}
 & \forall X0. ((\neg v2_struct_0 X0) \wedge ((v13_algstr_0 X0) \wedge ((v2_rlvect_1 X0) \wedge ((v3_rlvect_1 X0) \wedge ((v4_rlvect_1 X0) \wedge ((v5_rlvect_1 X0) \wedge \\
 & ((v6_rlvect_1 X0) \wedge ((v7_rlvect_1 X0) \wedge ((v8_rlvect_1 X0) \wedge (l1_rlvect_1 X0)))))))))) \Rightarrow (\forall X1. (m1_subset_1 X1 (u1_struct_0 X0)) \Rightarrow \\
 & (\forall X2. (m1_subset_1 X2 (u1_struct_0 X0)) \Rightarrow (\forall X3. (m1_subset_1 X3 k1_numbers) \Rightarrow (\forall X4. (m1_subset_1 X4 k1_numbers) \Rightarrow (\forall X5. \\
 & (m1_subset_1 X5 k1_numbers) \Rightarrow (\forall X6. (m1_subset_1 X6 k1_numbers) \Rightarrow \\
 & ((k3_rlvect_1 X0 (k1_rlvect_1 X0 X1 X3) (k1_rlvect_1 X0 X2 X4) = k3_rlvect_1 X0 (k1_rlvect_1 X0 X1 X5) (k1_rlvect_1 X0 X2 X6)) \Rightarrow ((r1_anproj_1 X0 X1 X2) \vee ((v9_struct_0 X1 X0) \vee ((v9_struct_0 X2 X0) \vee ((X3 = X5) \wedge (X4 = X6))))))))))))) \\
 & \tag{1}
 \end{aligned}$$

Assume the following.

$$\begin{aligned}
 & \forall X0. ((\neg v2_struct_0 X0) \wedge ((v13_algstr_0 X0) \wedge ((v2_rlvect_1 X0) \wedge ((v3_rlvect_1 X0) \wedge ((v4_rlvect_1 X0) \wedge ((v5_rlvect_1 X0) \wedge \\
 & ((v6_rlvect_1 X0) \wedge ((v7_rlvect_1 X0) \wedge ((v8_rlvect_1 X0) \wedge (l1_rlvect_1 X0)))))))))) \Rightarrow (\forall X1. (m1_subset_1 X1 (u1_struct_0 X0)) \Rightarrow \\
 & (\forall X2. (m1_subset_1 X2 (u1_struct_0 X0)) \Rightarrow ((\forall X3. (m1_subset_1 X3 k1_numbers) \Rightarrow (\forall X4. (m1_subset_1 X4 k1_numbers) \Rightarrow \\
 & ((k3_rlvect_1 X0 (k1_rlvect_1 X0 X1 X3) (k1_rlvect_1 X0 X2 X4) = k4_struct_0 X0) \Rightarrow ((X3 = k6_numbers) \wedge (X4 = k6_numbers)))))) \Rightarrow ((\neg v9_struct_0 X1 X0) \wedge ((\neg v9_struct_0 X2 X0) \wedge (\neg r1_anproj_1 X0 X1 X2)))))) \\
 & \tag{2}
 \end{aligned}$$

Assume the following.

$$\begin{aligned}
& \forall X0.((\neg v2_struct_0 X0) \wedge ((v13_algstr_0 X0) \wedge ((v2_rlvect_1 \\
& X0) \wedge ((v3_rlvect_1 X0) \wedge ((v4_rlvect_1 X0) \wedge ((v5_rlvect_1 X0) \wedge \\
& ((v6_rlvect_1 X0) \wedge ((v7_rlvect_1 X0) \wedge ((v8_rlvect_1 X0) \wedge (l1_rlvect_1 \\
& X0)))))))))) \Rightarrow (\forall X1.(m1_subset_1 X1 (u1_struct_0 X0)) \Rightarrow \\
& (\forall X2.(m1_subset_1 X2 (u1_struct_0 X0)) \Rightarrow ((r1_analmetr \\
& X0 X1 X2) \Leftrightarrow ((\forall X3.(m1_subset_1 X3 (u1_struct_0 X0)) \Rightarrow (\exists X4. \\
& (m1_subset_1 X4 k1_numbers) \wedge (\exists X5.(m1_subset_1 X5 k1_numbers) \wedge \\
& (X3 = k3_rlvect_1 X0 (k1_rlvect_1 X0 X1 X4) (k1_rlvect_1 X0 X2 X5)))))) \wedge \\
& (\forall X3.(m1_subset_1 X3 k1_numbers) \Rightarrow (\forall X4.(m1_subset_1 \\
& X4 k1_numbers) \Rightarrow ((k3_rlvect_1 X0 (k1_rlvect_1 X0 X1 X3) (k1_rlvect_1 \\
& X0 X2 X4) = k4_struct_0 X0) \Rightarrow ((X3 = k6_numbers) \wedge (X4 = k6_numbers))))))))) \\
& \tag{3}
\end{aligned}$$

Theorem 1

$$\begin{aligned}
& \forall X0.((\neg v2_struct_0 X0) \wedge ((v13_algstr_0 X0) \wedge ((v2_rlvect_1 \\
& X0) \wedge ((v3_rlvect_1 X0) \wedge ((v4_rlvect_1 X0) \wedge ((v5_rlvect_1 X0) \wedge \\
& ((v6_rlvect_1 X0) \wedge ((v7_rlvect_1 X0) \wedge ((v8_rlvect_1 X0) \wedge (l1_rlvect_1 \\
& X0)))))))))) \Rightarrow (\forall X1.(m1_subset_1 X1 (u1_struct_0 X0)) \Rightarrow \\
& (\forall X2.(m1_subset_1 X2 (u1_struct_0 X0)) \Rightarrow (\forall X3.(m1_subset_1 \\
& X3 k1_numbers) \Rightarrow (\forall X4.(m1_subset_1 X4 k1_numbers) \Rightarrow (\forall X5. \\
& (m1_subset_1 X5 k1_numbers) \Rightarrow (\forall X6.(m1_subset_1 X6 k1_numbers) \Rightarrow \\
& (((r1_analmetr X0 X1 X2) \wedge (k3_rlvect_1 X0 (k1_rlvect_1 X0 X1 X3) \\
& (k1_rlvect_1 X0 X2 X4) = k3_rlvect_1 X0 (k1_rlvect_1 X0 X1 X5) (k1_rlvect_1 \\
& X0 X2 X6))) \Rightarrow ((X3 = X5) \wedge (X4 = X6)))))))))
\end{aligned}$$