

t38_euclid_3

(TML2EwjfSKeiF9ccdTYynZyqNgvxxkXAE7Q)

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Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $u1_struct_0 : \iota \Rightarrow \iota$ be given. Let $k15_euclid : \iota \Rightarrow \iota$ be given. Let $np_2 : \iota$ be given. Let $k4_euclid_3 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k6_numbers : \iota$ be given. Let $k9_real_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k8_real_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k32_sin_cos : \iota$ be given. Let $k3_euclid_3 : \iota \Rightarrow \iota$ be given. Let $k5_algstr_0 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\begin{aligned}
 & \forall X0.(m1_subset_1 X0 (u1_struct_0 (k15_euclid np_2))) \Rightarrow \\
 & (\forall X1.(m1_subset_1 X1 (u1_struct_0 (k15_euclid np_2))) \Rightarrow \\
 & (\forall X2.(m1_subset_1 X2 (u1_struct_0 (k15_euclid np_2))) \Rightarrow \\
 & ((k4_euclid_3 X0 X1 X2 \neq k6_numbers) \Rightarrow (k4_euclid_3 X2 X1 X0 = k9_real_1 \\
 & (k8_real_1 np_2 k32_sin_cos) (k4_euclid_3 X0 X1 X2))))))
 \end{aligned} \tag{1}$$

Assume the following.

$$\begin{aligned}
 & \forall X0.(m1_subset_1 X0 (u1_struct_0 (k15_euclid np_2))) \Rightarrow \\
 & (\forall X1.(m1_subset_1 X1 (u1_struct_0 (k15_euclid np_2))) \Rightarrow \\
 & (\forall X2.(m1_subset_1 X2 (u1_struct_0 (k15_euclid np_2))) \Rightarrow \\
 & ((k4_euclid_3 X0 X1 X2 = k6_numbers) \Rightarrow ((k3_euclid_3 (k5_algstr_0 \\
 & (k15_euclid np_2) X0 X1) = k3_euclid_3 (k5_algstr_0 (k15_euclid \\
 & np_2) X2 X1)) \wedge (k4_euclid_3 X2 X1 X0 = k6_numbers))))))
 \end{aligned} \tag{2}$$

Theorem 1

$$\begin{aligned}
 & \forall X0.(m1_subset_1 X0 (u1_struct_0 (k15_euclid np_2))) \Rightarrow \\
 & (\forall X1.(m1_subset_1 X1 (u1_struct_0 (k15_euclid np_2))) \Rightarrow \\
 & (\forall X2.(m1_subset_1 X2 (u1_struct_0 (k15_euclid np_2))) \Rightarrow \\
 & ((k4_euclid_3 X2 X1 X0 \neq k6_numbers) \Rightarrow (k4_euclid_3 X2 X1 X0 = k9_real_1 \\
 & (k8_real_1 np_2 k32_sin_cos) (k4_euclid_3 X0 X1 X2))))))
 \end{aligned}$$