

t24_euclid_6 (TMdCwk- TMR4swfkSqn4FhvsUYpYsLAc24kEb)

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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 $r1_zfmisc_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $r1_xxreal_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k4_euclid_3 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k32_sin_cos : \iota$ be given. Assume the following.

$$\begin{aligned}
 & \forall X0.(m1_subset_1 X0 (u1_struct_0 (k15_euclid np_2))) \Rightarrow \\
 & (\forall X1.(m1_subset_1 X1 (u1_struct_0 (k15_euclid np_2))) \Rightarrow \\
 & (\forall X2.(m1_subset_1 X2 (u1_struct_0 (k15_euclid np_2))) \Rightarrow \\
 & (((r1_zfmisc_1 X0 X1 X2) \wedge (r1_xxreal_0 (k4_euclid_3 X0 X1 X2) k32_sin_cos)) \Rightarrow \\
 & ((r1_xxreal_0 (k4_euclid_3 X1 X2 X0) k32_sin_cos) \wedge (r1_xxreal_0 \\
 & (k4_euclid_3 X2 X0 X1) k32_sin_cos))))))
 \end{aligned} \tag{1}$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.(r1_zfmisc_1 X0 X1 X2) \Leftrightarrow ((X0 \neq X1) \wedge ((X0 \neq X2) \wedge (X1 \neq X2))) \tag{2}$$

Theorem 1

$$\begin{aligned}
 & \forall X0.(m1_subset_1 X0 (u1_struct_0 (k15_euclid np_2))) \Rightarrow \\
 & (\forall X1.(m1_subset_1 X1 (u1_struct_0 (k15_euclid np_2))) \Rightarrow \\
 & (\forall X2.(m1_subset_1 X2 (u1_struct_0 (k15_euclid np_2))) \Rightarrow \\
 & ((r1_zfmisc_1 X0 X1 X2) \Rightarrow ((r1_xxreal_0 (k4_euclid_3 X0 X1 X2) k32_sin_cos) \vee \\
 & ((\neg r1_xxreal_0 (k4_euclid_3 X1 X2 X0) k32_sin_cos) \wedge (\neg r1_xxreal_0 \\
 & (k4_euclid_3 X2 X0 X1) k32_sin_cos))))))
 \end{aligned}$$