

t8_euclid_3

(TML3PSY5oGMMy65FgqGUHcmLNPyzLwDuurWM)

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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 $k2_xcmplx_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k17_euclid : \iota \Rightarrow \iota$ be given. Let $k3_rlvect_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k3_xcmplx_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k18_euclid : \iota \Rightarrow \iota$ be given. Let $k7_complex1 : \iota$ be given. Let $k7_real_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\begin{aligned}
 & \forall X0.(m1_subset_1 X0 (u1_struct_0 (k15_euclid np_2))) \Rightarrow \\
 & (\forall X1.(m1_subset_1 X1 (u1_struct_0 (k15_euclid np_2))) \Rightarrow \\
 & ((k17_euclid (k3_rlvect_1 (k15_euclid np_2) X0 X1) = k7_real_1 \\
 & (k17_euclid X0) (k17_euclid X1)) \wedge (k18_euclid (k3_rlvect_1 (k15_euclid \\
 & np_2) X0 X1) = k7_real_1 (k18_euclid X0) (k18_euclid X1))))
 \end{aligned} \tag{1}$$

Theorem 1

$$\begin{aligned}
 & \forall X0.(m1_subset_1 X0 (u1_struct_0 (k15_euclid np_2))) \Rightarrow \\
 & (\forall X1.(m1_subset_1 X1 (u1_struct_0 (k15_euclid np_2))) \Rightarrow \\
 & (k2_xcmplx_0 (k17_euclid (k3_rlvect_1 (k15_euclid np_2) X0 X1)) \\
 & (k3_xcmplx_0 (k18_euclid (k3_rlvect_1 (k15_euclid np_2) X0 X1)) \\
 & k7_complex1) = k2_xcmplx_0 (k7_real_1 (k17_euclid X0) (k17_euclid \\
 & X1)) (k3_xcmplx_0 (k7_real_1 (k18_euclid X0) (k18_euclid X1)) \\
 & k7_complex1)))
 \end{aligned}$$