

t32_jgraph_6

(TMG6psSLDmzDLVumN65aoMQBd1XshXyU9Dr)

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Let $v1_xreal_0 : \iota \Rightarrow o$ be given. Let $r1_xxreal_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k9_subset_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ 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 $k1_rltopsp1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k19_euclid : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_tarski : \iota \Rightarrow \iota$ be given. Let $k17_euclid : \iota \Rightarrow \iota$ be given. Let $k18_euclid : \iota \Rightarrow \iota$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0.(v1_xreal_0 X0) \Rightarrow (\forall X1.(v1_xreal_0 X1) \Rightarrow ((k17_euclid (k19_euclid X0 X1) = X0) \wedge (k18_euclid (k19_euclid X0 X1) = X1))) \quad (1)$$

Assume the following.

$$\begin{aligned} & \forall X0.(m1_subset_1 X0 (u1_struct_0 (k15_euclid np_2))) \Rightarrow \\ & (\forall X1.(m1_subset_1 X1 (u1_struct_0 (k15_euclid np_2))) \Rightarrow \\ & (k9_subset_1 (u1_struct_0 (k15_euclid np_2)) (k1_rltopsp1 (\\ & k15_euclid np_2) X0 (k19_euclid (k17_euclid X1) (k18_euclid X0))) \\ & (k1_rltopsp1 (k15_euclid np_2) (k19_euclid (k17_euclid X1) (\\ & k18_euclid X0)) X1) = k1_tarski (k19_euclid (k17_euclid X1) (k18_euclid \\ & X0)))) \end{aligned} \quad (2)$$

Assume the following.

$$\forall X0.\forall X1.((v1_xreal_0 X0) \wedge (v1_xreal_0 X1)) \Rightarrow (m1_subset_1 (k19_euclid X0 X1) (u1_struct_0 (k15_euclid np_2))) \quad (3)$$

Theorem 1

$$\begin{aligned} & \forall X0.(v1_xreal_0 X0) \Rightarrow (\forall X1.(v1_xreal_0 X1) \Rightarrow (\forall X2. \\ & (v1_xreal_0 X2) \Rightarrow (\forall X3.(v1_xreal_0 X3) \Rightarrow (((r1_xxreal_0 \\ & X0 X1) \wedge (r1_xxreal_0 X2 X3)) \Rightarrow (k9_subset_1 (u1_struct_0 (k15_euclid \\ & np_2)) (k1_rltopsp1 (k15_euclid np_2) (k19_euclid X0 X2) (k19_euclid \\ & X1 X2)) (k1_rltopsp1 (k15_euclid np_2) (k19_euclid X1 X2) (k19_euclid \\ & X1 X3)) = k1_tarski (k19_euclid X1 X2)))))) \end{aligned}$$