

t8_topreal9 (TM- SKBXXrHutERqsmWyAM73B9KnJSZPJdSg3)

October 27, 2020

Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k5_numbers : \iota$ be given. Let $v1_xreal_0 : \iota \Rightarrow o$ be given. Let $u1_struct_0 : \iota \Rightarrow \iota$ be given. Let $k15_euclid : \iota \Rightarrow \iota$ be given. Let $k2_topreal9 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $r1_xxreal_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k12_euclid : \iota \Rightarrow \iota$ be given. Let $k5_algstr_0 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k4_ordinal1 : \iota$ be given. Let $v7_ordinal1 : \iota \Rightarrow o$ be given. Assume the following.

$$k5_numbers = k4_ordinal1 \tag{1}$$

Assume the following.

$$\begin{aligned} \forall X0.(v7_ordinal1 X0) \Rightarrow (\forall X1.(m1_subset_1 X1 (u1_struct_0 \\ (k15_euclid X0))) \Rightarrow (\forall X2.(v1_xreal_0 X2) \Rightarrow (k2_topreal9 \\ X0 X1 X2 = ReplSep (toset (\lambda X3 : \iota.m1_subset_1 X3 (u1_struct_0 \\ (k15_euclid X0)))) (\lambda X3 : \iota.r1_xxreal_0 (k12_euclid (k5_algstr_0 \\ (k15_euclid X0) X3 X1)) X2) (\lambda X3 : \iota.X3)))))) \end{aligned} \tag{2}$$

Assume the following.

$$\forall X0.(m1_subset_1 X0 k4_ordinal1) \Rightarrow (v7_ordinal1 X0) \tag{3}$$

Theorem 1

$$\begin{aligned} \forall X0.(m1_subset_1 X0 k5_numbers) \Rightarrow (\forall X1.(v1_xreal_0 \\ X1) \Rightarrow (\forall X2.(m1_subset_1 X2 (u1_struct_0 (k15_euclid X0))) \Rightarrow \\ (\forall X3.(m1_subset_1 X3 (u1_struct_0 (k15_euclid X0))) \Rightarrow (\\ (X2 \in k2_topreal9 X0 X3 X1) \Leftrightarrow (r1_xxreal_0 (k12_euclid (k5_algstr_0 \\ (k15_euclid X0) X2 X3)) X1)))))) \end{aligned}$$