

t21_topreal9 (TM-
FwyXBA16FXo1WZqB6SxLkoRgRQTJq3k9K)

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 $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $k1_topreal9 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $r1_xxreal_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k6_numbers : \iota$ be given. Let $k4_ordinal1 : \iota$ be given. Let $v7_ordinal1 : \iota \Rightarrow o$ be given. Let $v2_xxreal_0 : \iota \Rightarrow o$ be given. Let $v1_xxreal_0 : \iota \Rightarrow o$ be given. Assume the following.

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

Assume the following.

$$\forall X0. \forall X1. \forall X2. ((v7_ordinal1 X0) \wedge ((m1_subset_1 X1 (u1_struct_0 (k15_euclid X0))) \wedge ((v1_xreal_0 X2) \wedge (v2_xxreal_0 X2)))) \Rightarrow (\neg v1_xboole_0 (k1_topreal9 X0 X1 X2))) \tag{2}$$

Assume the following.

$$\forall X0. (v1_xxreal_0 X0) \Rightarrow ((v2_xxreal_0 X0) \Leftrightarrow (\neg r1_xxreal_0 X0 k6_numbers)) \tag{3}$$

Assume the following.

$$\forall X0. (m1_subset_1 X0 k4_ordinal1) \Rightarrow (v7_ordinal1 X0) \tag{4}$$

Assume the following.

$$\forall X0. (v1_xreal_0 X0) \Rightarrow (v1_xxreal_0 X0) \tag{5}$$

Theorem 1

$$\forall X0. (m1_subset_1 X0 k5_numbers) \Rightarrow (\forall X1. (v1_xreal_0 X1) \Rightarrow (\forall X2. (m1_subset_1 X2 (u1_struct_0 (k15_euclid X0))) \Rightarrow ((v1_xboole_0 (k1_topreal9 X0 X2 X1)) \Rightarrow (r1_xxreal_0 X1 k6_numbers))))))$$