

t75_euclid

(TMFL7Nn4bPWjF8bzcqys8rvtQbE5BevqXPU)

October 27, 2020

Let $v7_ordinal1 : \iota \Rightarrow o$ be given. Let $r1_xxreal_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $np_1 : \iota$ be given. Let $k12_euclid : \iota \Rightarrow \iota$ be given. Let $k22_euclid : \iota \Rightarrow \iota$ be given. Let $k21_euclid : \iota \Rightarrow \iota$ be given. Let $k6_square_1 : \iota \Rightarrow \iota$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $k1_xboole_0 : \iota$ be given. Let $v1_xxreal_0 : \iota \Rightarrow o$ be given. Let $k6_numbers : \iota$ be given. Let $k7_square_1 : \iota \Rightarrow \iota$ be given. Let $v2_xxreal_0 : \iota \Rightarrow o$ be given. Let $m2_subset_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_numbers : \iota$ be given. Let $k5_numbers : \iota$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $np_0 : \iota$ be given. Assume the following.

$$\forall X0.(v7_ordinal1 X0) \Rightarrow (k12_euclid (k21_euclid X0) = k6_square_1 X0) \quad (1)$$

Assume the following.

$$\forall X0.(v1_xboole_0 X0) \Rightarrow (X0 = k1_xboole_0) \quad (2)$$

Assume the following.

$$\forall X0.(v1_xxreal_0 X0) \Rightarrow (\forall X1.(v1_xxreal_0 X1) \Rightarrow (((r1_xxreal_0 k6_numbers X0) \wedge (r1_xxreal_0 X0 X1)) \Rightarrow (r1_xxreal_0 (k6_square_1 X0) (k6_square_1 X1)))) \quad (3)$$

Assume the following.

$$k7_square_1 np_1 = np_1 \quad (4)$$

Assume the following.

$$((v2_xxreal_0 np_1) \wedge (m2_subset_1 np_1 k1_numbers k5_numbers)) \wedge ((m1_subset_1 np_1 k5_numbers) \wedge (m1_subset_1 np_1 k1_numbers)) \quad (5)$$

Assume the following.

$$v1_xboole_0 np_0 \quad (6)$$

Assume the following.

$$r1_xxreal_0 np_0 np_1 \quad (7)$$

Assume the following.

$$\forall X0.(m1_subset_1 X0 k1_numbers) \Rightarrow (k7_square_1 X0 = k6_square_1 X0) \quad (8)$$

Assume the following.

$$k6_numbers = k1_xboole_0 \quad (9)$$

Assume the following.

$$\forall X0.(v7_ordinal1 X0) \Rightarrow (k22_euclid X0 = k21_euclid X0) \quad (10)$$

Assume the following.

$$\forall X0.(v7_ordinal1 X0) \Rightarrow (v1_xreal_0 X0) \quad (11)$$

Assume the following.

$$\forall X0.(m1_subset_1 X0 k1_numbers) \Rightarrow (v1_xreal_0 X0) \quad (12)$$

Theorem 1

$$\forall X0.(v7_ordinal1 X0) \Rightarrow ((r1_xxreal_0 np_1 X0) \Rightarrow (r1_xxreal_0 np_1 (k12_euclid (k22_euclid X0))))$$