

l57_jgraph_2 (TManXvt- dYTRj4ELm47ATQWz3SUyRt3i9FfZ)

October 27, 2020

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 $k5_square_1 : \iota \Rightarrow \iota$ be given. Let $k12_euclid : \iota \Rightarrow \iota$ be given. Let $k5_algstr_0 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k7_real_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k17_euclid : \iota \Rightarrow \iota$ be given. Let $k1_real_1 : \iota \Rightarrow \iota$ be given. Let $k18_euclid : \iota \Rightarrow \iota$ be given. Let $k9_real_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_numbers : \iota$ be given. Let $v1_xreal_0 : \iota \Rightarrow o$ be given. Assume the following.

$$\begin{aligned}
& \forall X0.(m1_subset_1 X0 (u1_struct_0 (k15_euclid np_2))) \Rightarrow \\
& (\forall X1.(m1_subset_1 X1 (u1_struct_0 (k15_euclid np_2))) \Rightarrow \\
& (k5_square_1 (k12_euclid (k5_algstr_0 (k15_euclid np_2) X0 X1)) = \\
& k7_real_1 (k5_square_1 (k1_real_1 (k18_euclid (k5_algstr_0 (\\
& k15_euclid np_2) X0 X1)))) (k5_square_1 (k17_euclid (k5_algstr_0 \\
& (k15_euclid np_2) X0 X1)))))) \tag{1}
\end{aligned}$$

Assume the following.

$$\begin{aligned}
& \forall X0.(m1_subset_1 X0 (u1_struct_0 (k15_euclid np_2))) \Rightarrow \\
& (\forall X1.(m1_subset_1 X1 (u1_struct_0 (k15_euclid np_2))) \Rightarrow \\
& ((k1_real_1 (k18_euclid (k5_algstr_0 (k15_euclid np_2) X0 X1)) = \\
& k9_real_1 (k1_real_1 (k18_euclid X0)) (k1_real_1 (k18_euclid \\
& X1))) \wedge (k17_euclid (k5_algstr_0 (k15_euclid np_2) X0 X1) = k9_real_1 \\
& (k17_euclid X0) (k17_euclid X1)))))) \tag{2}
\end{aligned}$$

Assume the following.

$$\begin{aligned}
& \forall X0.(m1_subset_1 X0 (u1_struct_0 (k15_euclid np_2))) \Rightarrow \\
& (\forall X1.(m1_subset_1 X1 (u1_struct_0 (k15_euclid np_2))) \Rightarrow \\
& ((k1_real_1 (k17_euclid (k5_algstr_0 (k15_euclid np_2) X0 X1)) = \\
& k9_real_1 (k1_real_1 (k17_euclid X0)) (k1_real_1 (k17_euclid \\
& X1))) \wedge (k18_euclid (k5_algstr_0 (k15_euclid np_2) X0 X1) = k9_real_1 \\
& (k18_euclid X0) (k18_euclid X1)))))) \tag{3}
\end{aligned}$$

Assume the following.

$$\forall X0.\forall X1.((m1_subset_1 X0 k1_numbers) \wedge (v1_xreal_0 X1)) \Rightarrow (m1_subset_1 (k9_real_1 X0 X1) k1_numbers) \tag{4}$$

Assume the following.

$$\forall X0.(m1_subset_1 X0 k1_numbers) \Rightarrow (m1_subset_1 (k5_square_1 X0) k1_numbers) \quad (5)$$

Assume the following.

$$\forall X0.(m1_subset_1 X0 k1_numbers) \Rightarrow (m1_subset_1 (k1_real_1 X0) k1_numbers) \quad (6)$$

Assume the following.

$$\forall X0.(m1_subset_1 X0 (u1_struct_0 (k15_euclid np_2))) \Rightarrow (m1_subset_1 (k18_euclid X0) k1_numbers) \quad (7)$$

Assume the following.

$$\forall X0.(m1_subset_1 X0 (u1_struct_0 (k15_euclid np_2))) \Rightarrow (m1_subset_1 (k17_euclid X0) k1_numbers) \quad (8)$$

Assume the following.

$$\forall X0.\forall X1.((m1_subset_1 X0 k1_numbers) \wedge (v1_xreal_0 X1)) \Rightarrow (k7_real_1 X0 X1 = k7_real_1 X1 X0) \quad (9)$$

Assume the following.

$$\forall X0.(m1_subset_1 X0 k1_numbers) \Rightarrow (v1_xreal_0 X0) \quad (10)$$

Theorem 1

$$\begin{aligned} & \forall X0.(m1_subset_1 X0 (u1_struct_0 (k15_euclid np_2))) \Rightarrow \\ & (\forall X1.(m1_subset_1 X1 (u1_struct_0 (k15_euclid np_2))) \Rightarrow \\ & (k5_square_1 (k12_euclid (k5_algstr_0 (k15_euclid np_2) X0 X1)) = \\ & k7_real_1 (k5_square_1 (k17_euclid (k5_algstr_0 (k15_euclid \\ & np_2) X0 X1))) (k5_square_1 (k1_real_1 (k18_euclid (k5_algstr_0 \\ & (k15_euclid np_2) X0 X1)))))) \end{aligned}$$