

l42_jgraph_2

(TMZSjy1PEF8uSm7CRABt6kfTWfe4oWNnnKc)

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 $k18_euclid : \iota \Rightarrow \iota$ be given. Let $k19_euclid : \iota \Rightarrow \iota \Rightarrow \iota$ 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.

$$\begin{aligned} & \forall X0.(m1_subset.1 X0 (u1_struct.0 (k15_euclid np_2))) \Rightarrow \\ & (\forall X1.(m1_subset.1 X1 (u1_struct.0 (k15_euclid np_2))) \Rightarrow \\ & (k5_algstr.0 (k15_euclid np_2) X0 X1 = k19_euclid (k9_real.1 (\\ & k17_euclid X0) (k17_euclid X1)) (k9_real.1 (k18_euclid X0) (k18_euclid \\ & X1)))) \end{aligned} \tag{1}$$

Assume the following.

$$\begin{aligned} & \forall X0.(m1_subset.1 X0 (u1_struct.0 (k15_euclid np_2))) \Rightarrow \\ & (k5_square.1 (k12_euclid X0) = k7_real.1 (k5_square.1 (k17_euclid \\ & X0)) (k5_square.1 (k18_euclid X0))) \end{aligned} \tag{2}$$

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.((m1_subset.1 X0 k1_numbers) \wedge (v1_xreal.0 \\ & X1)) \Rightarrow (m1_subset.1 (k9_real.1 X0 X1) k1_numbers) \end{aligned} \tag{3}$$

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.((v1_xreal.0 X0) \wedge (v1_xreal.0 X1)) \Rightarrow (m1_subset.1 \\ & (k19_euclid X0 X1) (u1_struct.0 (k15_euclid np_2))) \end{aligned} \tag{4}$$

Assume the following.

$$\begin{aligned} & \forall X0.(m1_subset.1 X0 (u1_struct.0 (k15_euclid np_2))) \Rightarrow \\ & (m1_subset.1 (k18_euclid X0) k1_numbers) \end{aligned} \tag{5}$$

Assume the following.

$$\begin{aligned} & \forall X0.(m1_subset.1 X0 (u1_struct.0 (k15_euclid np_2))) \Rightarrow \\ & (m1_subset.1 (k17_euclid X0) k1_numbers) \end{aligned} \tag{6}$$

Assume the following.

$$\forall X0.(m1_subset_1 X0 k1_numbers)\Rightarrow(v1_xreal_0 X0) \quad (7)$$

Theorem 1

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