

t56_sprect_3

(TMGA4CE4BzPmCsHZogHnzpEmgMcLxwvDBk5)

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Let $m2_finseq_1 : \iota \Rightarrow \iota \Rightarrow o$ 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 $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $r1_sprect_2 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k4_matrix_2 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v4_topreal1 : \iota \Rightarrow o$ be given. Let $k3_topreal1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2_jordan3 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k3_jordan3 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k4_finseq_5 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $m1_finseq_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k3_finseq_5 : \iota \Rightarrow \iota$ be given. Assume the following.

$$\begin{aligned}
 & \forall X0.(m2_finseq_1 X0 (u1_struct_0 (k15_euclid np_2))) \Rightarrow \\
 & (\forall X1.(m2_finseq_1 X1 (u1_struct_0 (k15_euclid np_2))) \Rightarrow \\
 & (\forall X2.(m1_subset_1 X2 (u1_struct_0 (k15_euclid np_2))) \Rightarrow \\
 & (((r1_sprect_2 X0 X1) \wedge ((r1_sprect_2 X0 (k4_matrix_2 (u1_struct_0 \\
 & (k15_euclid np_2)) X2)) \wedge ((v4_topreal1 X1) \wedge (X2 \in k3_topreal1 \\
 & np_2 X1)))) \Rightarrow (r1_sprect_2 X0 (k3_jordan3 X1 X2)))))) \quad (1)
 \end{aligned}$$

Assume the following.

$$\begin{aligned}
 & \forall X0.(m2_finseq_1 X0 (u1_struct_0 (k15_euclid np_2))) \Rightarrow \\
 & (\forall X1.(m2_finseq_1 X1 (u1_struct_0 (k15_euclid np_2))) \Rightarrow \\
 & ((r1_sprect_2 X0 X1) \Rightarrow (r1_sprect_2 X0 (k4_finseq_5 (u1_struct_0 \\
 & (k15_euclid np_2)) X1)))) \quad (2)
 \end{aligned}$$

Assume the following.

$$\begin{aligned}
 & \forall X0.(m2_finseq_1 X0 (u1_struct_0 (k15_euclid np_2))) \Rightarrow \\
 & (\forall X1.(m2_finseq_1 X1 (u1_struct_0 (k15_euclid np_2))) \Rightarrow \\
 & (\forall X2.(m1_subset_1 X2 (u1_struct_0 (k15_euclid np_2))) \Rightarrow \\
 & (((r1_sprect_2 X0 X1) \wedge (X2 \in k3_topreal1 np_2 X1)) \Rightarrow (r1_sprect_2 \\
 & X0 (k4_matrix_2 (u1_struct_0 (k15_euclid np_2)) X2)))))) \quad (3)
 \end{aligned}$$

Assume the following.

$$\begin{aligned}
 & \forall X0.(m2_finseq_1 X0 (u1_struct_0 (k15_euclid np_2))) \Rightarrow \\
 & (k3_topreal1 np_2 X0 = k3_topreal1 np_2 (k4_finseq_5 (u1_struct_0 \\
 & (k15_euclid np_2)) X0)) \quad (4)
 \end{aligned}$$

Assume the following.

$$\begin{aligned} & \forall X0.(m2_finseq_1 X0 (u1_struct_0 (k15_euclid np_2))) \Rightarrow \\ & (\forall X1.(m1_subset_1 X1 (u1_struct_0 (k15_euclid np_2))) \Rightarrow \\ & (((v4_topreal1 X0) \wedge (X1 \in k3_topreal1 np_2 X0)) \Rightarrow (k2_jordan3 (\\ & k4_finseq_5 (u1_struct_0 (k15_euclid np_2)) X0) X1 = k4_finseq_5 \\ & (u1_struct_0 (k15_euclid np_2)) (k3_jordan3 X0 X1)))) \end{aligned} \quad (5)$$

Assume the following.

$$\forall X0.\forall X1.(m2_finseq_1 X1 X0) \Leftrightarrow (m1_finseq_1 X1 X0) \quad (6)$$

Assume the following.

$$\forall X0.\forall X1.(m1_finseq_1 X1 X0) \Rightarrow (k4_finseq_5 X0 X1 = k3_finseq_5 X1) \quad (7)$$

Assume the following.

$$\forall X0.\forall X1.(m1_finseq_1 X1 X0) \Rightarrow (k4_finseq_5 X0 (k4_finseq_5 X0 X1) = X1) \quad (8)$$

Assume the following.

$$\forall X0.(((v4_topreal1 X0) \wedge (m1_finseq_1 X0 (u1_struct_0 (k15_euclid np_2)))) \Rightarrow (v4_topreal1 (k3_finseq_5 X0))) \quad (9)$$

Assume the following.

$$\forall X0.\forall X1.(m1_finseq_1 X1 X0) \Rightarrow (m2_finseq_1 (k4_finseq_5 X0 X1) X0) \quad (10)$$

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.(((m1_finseq_1 X0 (u1_struct_0 (k15_euclid \\ & np_2))) \wedge (m1_subset_1 X1 (u1_struct_0 (k15_euclid np_2)))) \Rightarrow \\ & (m2_finseq_1 (k3_jordan3 X0 X1) (u1_struct_0 (k15_euclid np_2)))) \end{aligned} \quad (11)$$

Theorem 1

$$\begin{aligned} & \forall X0.(m2_finseq_1 X0 (u1_struct_0 (k15_euclid np_2))) \Rightarrow \\ & (\forall X1.(m2_finseq_1 X1 (u1_struct_0 (k15_euclid np_2))) \Rightarrow \\ & (\forall X2.(m1_subset_1 X2 (u1_struct_0 (k15_euclid np_2))) \Rightarrow \\ & (((r1_sprect_2 X0 X1) \wedge ((r1_sprect_2 X0 (k4_matrix_2 (u1_struct_0 \\ & (k15_euclid np_2)) X2)) \wedge ((v4_topreal1 X1) \wedge (X2 \in k3_topreal1 \\ & np_2 X1)))) \Rightarrow (r1_sprect_2 X0 (k2_jordan3 X1 X2)))) \end{aligned}$$