

t83_sprect_1

(TMQf7SJNhzYJ3EDjW92pW5pj9XHxqySidbN)

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Let $v1_sprect_1 : \iota \Rightarrow o$ be given. 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 $k7_partfun1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $np_1 : \iota$ be given. Let $k20_pscomp_1 : \iota \Rightarrow \iota$ be given. Let $k3_topreal1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k19_pscomp_1 : \iota \Rightarrow \iota$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $v2_compts_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $k1_sprect_1 : \iota \Rightarrow \iota$ be given. Let $k11_pscomp_1 : \iota \Rightarrow \iota$ be given. Let $v1_sppol_1 : \iota \Rightarrow o$ be given. Let $v2_sppol_1 : \iota \Rightarrow o$ be given. Assume the following.

$$\begin{aligned} & \forall X0. ((\neg v1_xboole_0 X0) \wedge ((v2_compts_1 X0 (k15_euclid np_2)) \wedge \\ & (m1_subset_1 X0 (k1_zfmisc_1 (u1_struct_0 (k15_euclid np_2)))))) \Rightarrow \\ & (k20_pscomp_1 (k3_topreal1 np_2 (k1_sprect_1 X0)) = k11_pscomp_1 X0) \end{aligned} \quad (1)$$

Assume the following.

$$\begin{aligned} & \forall X0. ((\neg v1_xboole_0 X0) \wedge ((v2_compts_1 X0 (k15_euclid np_2)) \wedge \\ & (m1_subset_1 X0 (k1_zfmisc_1 (u1_struct_0 (k15_euclid np_2)))))) \Rightarrow \\ & (k19_pscomp_1 (k3_topreal1 np_2 (k1_sprect_1 X0)) = k11_pscomp_1 X0) \end{aligned} \quad (2)$$

Assume the following.

$$\begin{aligned} & \forall X0. (m1_subset_1 X0 (k1_zfmisc_1 (u1_struct_0 (k15_euclid \\ & np_2)))) \Rightarrow (k7_partfun1 (u1_struct_0 (k15_euclid np_2)) (k1_sprect_1 \\ & X0) np_1 = k11_pscomp_1 X0) \end{aligned} \quad (3)$$

Assume the following.

$$\begin{aligned} & \forall X0. (m2_finseq_1 X0 (u1_struct_0 (k15_euclid np_2))) \Rightarrow \\ & ((v1_sprect_1 X0) \Leftrightarrow (\exists X1. ((\neg v1_xboole_0 X1) \wedge ((v2_compts_1 \\ & X1 (k15_euclid np_2)) \wedge ((\neg v1_sppol_1 X1) \wedge ((\neg v2_sppol_1 X1) \wedge \\ & (m1_subset_1 X1 (k1_zfmisc_1 (u1_struct_0 (k15_euclid np_2)))))))))) \wedge \\ & (X0 = k1_sprect_1 X1)) \end{aligned} \quad (4)$$

Theorem 1

$$\forall X0.((v1_sprect_1 X0) \wedge (m2_finseq_1 X0 (u1_struct_0 (k15_euclid np_2)))) \Rightarrow ((k7_partfun1 (u1_struct_0 (k15_euclid np_2)) X0 np_1 = k20_pscomp_1 (k3_topreal1 np_2 X0)) \wedge (k7_partfun1 (u1_struct_0 (k15_euclid np_2)) X0 np_1 = k19_pscomp_1 (k3_topreal1 np_2 X0)))$$