

## t56\_sprect\_1

(TMYkCRY1bxd9aQEUyGmxL5MG2AFrwtPHvZ3)

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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  $r1\_xxreal\_0 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k18\_euclid : \iota \Rightarrow \iota$  be given. Let  $k7\_pscomp\_1 : \iota \Rightarrow \iota$  be given. Let  $k1\_rltopsp1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k7\_relset\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k1\_numbers : \iota$  be given. Let  $k5\_pscomp\_1 : \iota$  be given. Let  $k1\_rcomp\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k1\_zfmisc\_1 : \iota \Rightarrow \iota$  be given. Let  $k4\_seq\_4 : \iota \Rightarrow \iota$  be given. Let  $v1\_xreal\_0 : \iota \Rightarrow o$  be given. Let  $k5\_seq\_4 : \iota \Rightarrow \iota$  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  $k5\_numbers : \iota$  be given. Let  $k4\_ordinal1 : \iota$  be given. Let  $v6\_membered : \iota \Rightarrow o$  be given. Let  $v7\_ordinal1 : \iota \Rightarrow o$  be given. Let  $v2\_pre\_topc : \iota \Rightarrow o$  be given. Let  $v13\_algstr\_0 : \iota \Rightarrow o$  be given. Let  $v2\_rlvect\_1 : \iota \Rightarrow o$  be given. Let  $v3\_rlvect\_1 : \iota \Rightarrow o$  be given. Let  $v4\_rlvect\_1 : \iota \Rightarrow o$  be given. Let  $v5\_rlvect\_1 : \iota \Rightarrow o$  be given. Let  $v6\_rlvect\_1 : \iota \Rightarrow o$  be given. Let  $v7\_rlvect\_1 : \iota \Rightarrow o$  be given. Let  $v8\_rlvect\_1 : \iota \Rightarrow o$  be given. Let  $v5\_rltopsp1 : \iota \Rightarrow o$  be given. Let  $v2\_struct\_0 : \iota \Rightarrow o$  be given. Let  $l1\_rltopsp1 : \iota \Rightarrow o$  be given. Let  $l1\_rlvect\_1 : \iota \Rightarrow o$  be given. Let  $l1\_pre\_topc : \iota \Rightarrow o$  be given. Assume the following.

$$\begin{aligned}
 & \forall X0.(m1\_subset\_1 X0 (u1\_struct\_0 (k15\_euclid np\_2))) \Rightarrow \\
 & (\forall X1.(m1\_subset\_1 X1 (u1\_struct\_0 (k15\_euclid np\_2))) \Rightarrow \\
 & ((r1\_xxreal\_0 (k18\_euclid X0) (k18\_euclid X1)) \Rightarrow (k7\_relset\_1 \\
 & (u1\_struct\_0 (k15\_euclid np\_2)) k1\_numbers k5\_pscomp\_1 (k1\_rltopsp1 \\
 & (k15\_euclid np\_2) X0 X1) = k1\_rcomp\_1 (k18\_euclid X0) (k18\_euclid \\
 & X1)))) \\
 & \tag{1}
 \end{aligned}$$

Assume the following.

$$\begin{aligned}
 & \forall X0.(m1\_subset\_1 X0 (k1\_zfmisc\_1 (u1\_struct\_0 (k15\_euclid \\
 & np\_2)))) \Rightarrow (k7\_pscomp\_1 X0 = k4\_seq\_4 (k7\_relset\_1 (u1\_struct\_0 \\
 & (k15\_euclid np\_2)) k1\_numbers k5\_pscomp\_1 X0)) \\
 & \tag{2}
 \end{aligned}$$

Assume the following.

$$\forall X0.(v1\_xreal\_0 X0) \Rightarrow (\forall X1.(v1\_xreal\_0 X1) \Rightarrow ((r1\_xreal\_0 X0 X1) \Rightarrow ((k5\_seq\_4 (k1\_rcomp\_1 X0 X1) = X0) \wedge (k4\_seq\_4 (k1\_rcomp\_1 X0 X1) = X1)))) \quad (3)$$

Assume the following.

$$((v2\_xreal\_0 np\_2) \wedge (m2\_subset\_1 np\_2 k1\_numbers k5\_numbers)) \wedge ((m1\_subset\_1 np\_2 k5\_numbers) \wedge (m1\_subset\_1 np\_2 k1\_numbers)) \quad (4)$$

Assume the following.

$$k5\_numbers = k4\_ordinal1 \quad (5)$$

Assume the following.

$$v6\_membered k4\_ordinal1 \quad (6)$$

Assume the following.

$$\forall X0.(v7\_ordinal1 X0) \Rightarrow ((v2\_pre\_topc (k15\_euclid X0)) \wedge ((v13\_algstr\_0 (k15\_euclid X0)) \wedge (v2\_rlvect\_1 (k15\_euclid X0)) \wedge ((v3\_rlvect\_1 (k15\_euclid X0)) \wedge (v4\_rlvect\_1 (k15\_euclid X0)) \wedge ((v5\_rlvect\_1 (k15\_euclid X0)) \wedge (v6\_rlvect\_1 (k15\_euclid X0)) \wedge ((v7\_rlvect\_1 (k15\_euclid X0)) \wedge (v8\_rlvect\_1 (k15\_euclid X0)) \wedge (v5\_rltopsp1 (k15\_euclid X0)))))))))) \quad (7)$$

Assume the following.

$$\forall X0.(v7\_ordinal1 X0) \Rightarrow ((-v2\_struct\_0 (k15\_euclid X0)) \wedge (v5\_rltopsp1 (k15\_euclid X0))) \quad (8)$$

Assume the following.

$$\forall X0.(l1\_rltopsp1 X0) \Rightarrow ((l1\_rlvect\_1 X0) \wedge (l1\_pre\_topc X0)) \quad (9)$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.((( -v2\_struct\_0 X0) \wedge ((v13\_algstr\_0 X0) \wedge (v2\_rlvect\_1 X0) \wedge (v3\_rlvect\_1 X0) \wedge (v4\_rlvect\_1 X0) \wedge ((v5\_rlvect\_1 X0) \wedge (v6\_rlvect\_1 X0) \wedge (v7\_rlvect\_1 X0) \wedge (v8\_rlvect\_1 X0) \wedge (l1\_rlvect\_1 X0)))))) \wedge ((m1\_subset\_1 X1 (u1\_struct\_0 X0)) \wedge (m1\_subset\_1 X2 (u1\_struct\_0 X0))) \Rightarrow (m1\_subset\_1 (k1\_rltopsp1 X0 X1 X2) (k1\_zfmisc\_1 (u1\_struct\_0 X0))) \quad (10)$$

Assume the following.

$$\forall X0.(m1\_subset\_1 X0 (u1\_struct\_0 (k15\_euclid np\_2))) \Rightarrow (m1\_subset\_1 (k18\_euclid X0) k1\_numbers) \quad (11)$$

Assume the following.

$$\forall X0.(v7\_ordinal1 X0) \Rightarrow ((v5\_rltopsp1 (k15\_euclid X0)) \wedge (l1\_rltopsp1 (k15\_euclid X0))) \quad (12)$$

Assume the following.

$$\forall X0.(m1\_subset\_1 X0 k1\_numbers) \Rightarrow (v1\_xreal\_0 X0) \quad (13)$$

Assume the following.

$$\forall X0.(v6\_membered X0) \Rightarrow (\forall X1.(m1\_subset\_1 X1 X0) \Rightarrow (v7\_ordinal1 X1)) \quad (14)$$

**Theorem 1**

$$\begin{aligned} & \forall X0.(m1\_subset\_1 X0 (u1\_struct\_0 (k15\_euclid np\_2))) \Rightarrow \\ & (\forall X1.(m1\_subset\_1 X1 (u1\_struct\_0 (k15\_euclid np\_2))) \Rightarrow \\ & ((r1\_xxreal\_0 (k18\_euclid X0) (k18\_euclid X1)) \Rightarrow (k7\_pscomp\_1 \\ & (k1\_rltopsp1 (k15\_euclid np\_2) X0 X1) = k18\_euclid X1))) \end{aligned}$$