

## t26\_sprect\_3

(TMcaQjycWqZetLbfEVtqq45zKH1MiLMgMZi)

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Let  $v1\_xboole\_0 : \iota \Rightarrow o$  be given. Let  $v3\_funct\_1 : \iota \Rightarrow o$  be given. Let  $v1\_finseq\_6 : \iota \Rightarrow \iota \Rightarrow o$  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  $v1\_topreal1 : \iota \Rightarrow o$  be given. Let  $v2\_topreal1 : \iota \Rightarrow o$  be given. Let  $v1\_goboard5 : \iota \Rightarrow o$  be given. Let  $v2\_goboard5 : \iota \Rightarrow o$  be given. Let  $m2\_finseq\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $r1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k2\_goboard9 : \iota \Rightarrow \iota$  be given. Let  $k3\_topreal1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k3\_goboard9 : \iota \Rightarrow \iota$  be given. Let  $k1\_goboard9 : \iota \Rightarrow \iota$  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. Let  $v1\_relat\_1 : \iota \Rightarrow o$  be given. Let  $v1\_funct\_1 : \iota \Rightarrow o$  be given. Let  $v1\_finseq\_1 : \iota \Rightarrow o$  be given. Assume the following.

$$\begin{aligned} & \forall X0. ((\neg v1\_xboole\_0 X0) \wedge (\neg v3\_funct\_1 X0) \wedge ((v1\_finseq\_6 \\ & X0 (u1\_struct\_0 (k15\_euclid np\_2))) \wedge ((v1\_topreal1 X0) \wedge ((v2\_topreal1 \\ & X0) \wedge ((v1\_goboard5 X0) \wedge ((v2\_goboard5 X0) \wedge (m2\_finseq\_1 X0 (u1\_struct\_0 \\ & (k15\_euclid np\_2)))))))))) \Rightarrow (r1\_subset\_1 (k3\_goboard9 X0) ( \\ & k3\_topreal1 np\_2 X0)) \end{aligned} \tag{1}$$

Assume the following.

$$\begin{aligned} & \forall X0. ((\neg v1\_xboole\_0 X0) \wedge (\neg v3\_funct\_1 X0) \wedge ((v1\_finseq\_6 \\ & X0 (u1\_struct\_0 (k15\_euclid np\_2))) \wedge ((v1\_topreal1 X0) \wedge ((v2\_topreal1 \\ & X0) \wedge ((v1\_goboard5 X0) \wedge ((v2\_goboard5 X0) \wedge (m2\_finseq\_1 X0 (u1\_struct\_0 \\ & (k15\_euclid np\_2)))))))))) \Rightarrow (k3\_goboard9 (k1\_goboard9 X0) = \\ & k2\_goboard9 X0) \end{aligned} \tag{2}$$

Assume the following.

$$\begin{aligned} & \forall X0. (m2\_finseq\_1 X0 (u1\_struct\_0 (k15\_euclid np\_2))) \Rightarrow \\ & (k3\_topreal1 np\_2 X0 = k3\_topreal1 np\_2 (k4\_finseq\_5 (u1\_struct\_0 \\ & (k15\_euclid np\_2)) X0)) \end{aligned} \tag{3}$$

Assume the following.

$$\forall X0. \forall X1. (m2\_finseq\_1 X1 X0) \Leftrightarrow (m1\_finseq\_1 X1 X0) \tag{4}$$

Assume the following.

$$\forall X0.\forall X1.(m1\_finseq\_1 X1 X0)\Rightarrow(k4\_finseq\_5 X0 X1 = k3\_finseq\_5 X1) \quad (5)$$

Assume the following.

$$\forall X0.((\neg v1\_xboole\_0 X0)\wedge((v1\_finseq\_6 X0 (u1\_struct\_0 (k15\_euclid np\_2))))\wedge((v1\_topreal1 X0)\wedge((v2\_topreal1 X0)\wedge((v1\_goboard5 X0)\wedge((v2\_goboard5 X0)\wedge(m1\_finseq\_1 X0 (u1\_struct\_0 (k15\_euclid np\_2))))))))\Rightarrow(k1\_goboard9 X0 = k3\_finseq\_5 X0) \quad (6)$$

Assume the following.

$$\forall X0.((v1\_relat\_1 X0)\wedge((v1\_funct\_1 X0)\wedge((\neg v3\_funct\_1 X0)\wedge(v1\_finseq\_1 X0))))\Rightarrow((v1\_relat\_1 (k3\_finseq\_5 X0))\wedge((v1\_funct\_1 (k3\_finseq\_5 X0))\wedge((\neg v3\_funct\_1 (k3\_finseq\_5 X0))\wedge(v1\_finseq\_1 (k3\_finseq\_5 X0)))))) \quad (7)$$

Assume the following.

$$\forall X0.\forall X1.(m1\_finseq\_1 X1 X0)\Rightarrow((v1\_relat\_1 X1)\wedge((v1\_funct\_1 X1)\wedge(v1\_finseq\_1 X1))) \quad (8)$$

Assume the following.

$$\forall X0.((\neg v1\_xboole\_0 X0)\wedge((v1\_finseq\_6 X0 (u1\_struct\_0 (k15\_euclid np\_2))))\wedge((v1\_topreal1 X0)\wedge((v2\_topreal1 X0)\wedge((v1\_goboard5 X0)\wedge((v2\_goboard5 X0)\wedge(m1\_finseq\_1 X0 (u1\_struct\_0 (k15\_euclid np\_2))))))))\Rightarrow((\neg v1\_xboole\_0 (k1\_goboard9 X0))\wedge((v1\_finseq\_6 (k1\_goboard9 X0) (u1\_struct\_0 (k15\_euclid np\_2))))\wedge((v1\_topreal1 (k1\_goboard9 X0))\wedge((v2\_topreal1 (k1\_goboard9 X0))\wedge((v1\_goboard5 (k1\_goboard9 X0))\wedge((v2\_goboard5 (k1\_goboard9 X0))\wedge(m2\_finseq\_1 (k1\_goboard9 X0) (u1\_struct\_0 (k15\_euclid np\_2)))))))))) \quad (9)$$

**Theorem 1**

$$\forall X0.((\neg v1\_xboole\_0 X0)\wedge((\neg v3\_funct\_1 X0)\wedge((v1\_finseq\_6 X0 (u1\_struct\_0 (k15\_euclid np\_2))))\wedge((v1\_topreal1 X0)\wedge((v2\_topreal1 X0)\wedge((v1\_goboard5 X0)\wedge((v2\_goboard5 X0)\wedge(m2\_finseq\_1 X0 (u1\_struct\_0 (k15\_euclid np\_2))))))))\Rightarrow(r1\_subset\_1 (k2\_goboard9 X0) (k3\_topreal1 np\_2 X0))$$