

## t17\_sprect\_5

(TMTchhbYgVZnEwgbNemfb6123qiiHK4K8PS)

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Let  $v3\_funct.1 : \iota \Rightarrow o$  be given. Let  $v1\_xboole.0 : \iota \Rightarrow o$  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  $r1\_xxreal.0 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k3\_finseq.1 : \iota \Rightarrow \iota$  be given. Let  $k4\_finseq.4 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k20\_pscomp.1 : \iota \Rightarrow \iota$  be given. Let  $k3\_topreal1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $m1\_subset.1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k10\_xtuple.0 : \iota \Rightarrow \iota$  be given. Let  $np\_1 : \iota$  be given. Let  $v1\_zfmisc.1 : \iota \Rightarrow o$  be given. Let  $k2\_relset.1 : \iota \Rightarrow \iota \Rightarrow \iota$  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  $k1\_numbers : \iota$  be given. Let  $k5\_numbers : \iota$  be given. Let  $m1\_finseq.1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k4\_ordinal1 : \iota$  be given. Let  $v1\_relat.1 : \iota \Rightarrow o$  be given. Let  $v5\_relat.1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $v1\_funct.1 : \iota \Rightarrow o$  be given. Let  $v1\_finseq.1 : \iota \Rightarrow o$  be given. Let  $k1\_zfmisc.1 : \iota \Rightarrow \iota$  be given. Let  $k2\_zfmisc.1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $v7\_ordinal1 : \iota \Rightarrow o$  be given. Assume the following.

$$\begin{aligned} & \forall X0. (\neg v1\_xboole.0 X0) \Rightarrow (\forall X1. ((v1\_finseq.6 X1 X0) \wedge \\ & (m2\_finseq.1 X1 X0)) \Rightarrow (\forall X2. (m1\_subset.1 X2 X0) \Rightarrow (\neg (X2 \in k10\_xtuple.0 \\ & X1) \wedge ((\neg r1\_xxreal.0 (k3\_finseq.1 X1) np\_1) \wedge (r1\_xxreal.0 (k3\_finseq.1 \\ & X1) (k4\_finseq.4 X1 X2)))))) \end{aligned} \tag{1}$$

Assume the following.

$$\begin{aligned} & \forall X0. ((\neg v1\_zfmisc.1 X0) \wedge (m2\_finseq.1 X0 (u1\_struct.0 ( \\ & k15\_euclid np\_2)))) \Rightarrow (k20\_pscomp.1 (k3\_topreal1 np\_2 X0) \in k2\_relset.1 \\ & (u1\_struct.0 (k15\_euclid np\_2)) X0) \end{aligned} \tag{2}$$

Assume the following.

$$\begin{aligned} & ((v2\_xxreal.0 np\_2) \wedge (m2\_subset.1 np\_2 k1\_numbers k5\_numbers)) \wedge \\ & ((m1\_subset.1 np\_2 k5\_numbers) \wedge (m1\_subset.1 np\_2 k1\_numbers)) \end{aligned} \tag{3}$$

Assume the following.

$$\forall X0. \forall X1. (m2\_finseq.1 X1 X0) \Leftrightarrow (m1\_finseq.1 X1 X0) \tag{4}$$

Assume the following.

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

Assume the following.

$$\forall X0.\forall X1.((v1\_relat\_1 X1)\wedge(v5\_relat\_1 X1 X0))\Rightarrow( \quad (6)$$

$$k2\_relset\_1 X0 X1 = k10\_xtuple\_0 X1)$$

Assume the following.

$$\forall X0.((\neg v3\_funct\_1 X0)\wedge((\neg v1\_xboole\_0 X0)\wedge((v1\_finseq\_6$$

$$X0 (u1\_struct\_0 (k15\_euclid np\_2)))\wedge((v1\_topreal1 X0)\wedge((v2\_topreal1$$

$$X0)\wedge((v1\_goboard5 X0)\wedge((v2\_goboard5 X0)\wedge(m2\_finseq\_1 X0 (u1\_struct\_0$$

$$(k15\_euclid np\_2))))))))))\Rightarrow(\neg r1\_xxreal\_0 (k3\_finseq\_1 X0)$$

$$np\_1) \quad (7)$$

Assume the following.

$$\forall X0.\forall X1.(m2\_finseq\_1 X1 X0)\Rightarrow((v1\_funct\_1 X1)\wedge($$

$$(v1\_finseq\_1 X1)\wedge(m1\_subset\_1 X1 (k1\_zfmisc\_1 (k2\_zfmisc\_1 k5\_numbers$$

$$X0)))) \quad (8)$$

Assume the following.

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

$$(v1\_funct\_1 X1)\wedge(v1\_finseq\_1 X1)) \quad (9)$$

Assume the following.

$$\forall X0.\forall X1.((v7\_ordinal1 X0)\wedge(m1\_finseq\_1 X1 (u1\_struct\_0$$

$$(k15\_euclid X0))))\Rightarrow(m1\_subset\_1 (k3\_topreal1 X0 X1) (k1\_zfmisc\_1$$

$$(u1\_struct\_0 (k15\_euclid X0)))) \quad (10)$$

Assume the following.

$$\forall X0.(m1\_subset\_1 X0 (k1\_zfmisc\_1 (u1\_struct\_0 (k15\_euclid$$

$$np\_2))))\Rightarrow(m1\_subset\_1 (k20\_pscomp\_1 X0) (u1\_struct\_0 (k15\_euclid$$

$$np\_2))) \quad (11)$$

Assume the following.

$$\forall X0.(m1\_subset\_1 X0 k4\_ordinal1)\Rightarrow(v7\_ordinal1 X0) \quad (12)$$

Assume the following.

$$\forall X0.((v1\_relat\_1 X0)\wedge((v1\_funct\_1 X0)\wedge(\neg v3\_funct\_1 X0)))\Rightarrow$$

$$((\neg v1\_zfmisc\_1 X0)\wedge((v1\_relat\_1 X0)\wedge(v1\_funct\_1 X0))) \quad (13)$$

Assume the following.

$$\forall X0.\forall X1.(v1\_xboole\_0 X0)\Rightarrow(\forall X2.(m1\_subset\_1 X2 (k1\_zfmisc\_1 (k2\_zfmisc\_1 X1 X0))\Rightarrow(v1\_xboole\_0 X2)) \quad (14)$$

Assume the following.

$$\forall X0.\forall X1.(m1\_finseq\_1 X1 X0)\Rightarrow(v5\_relat\_1 X1 X0) \quad (15)$$

**Theorem 1**

$$\forall X0.((\neg v3\_funct\_1 X0)\wedge((\neg v1\_xboole\_0 X0)\wedge((v1\_finseq\_6 X0 (u1\_struct\_0 (k15\_euclid np\_2))\wedge((v1\_topreal1 X0)\wedge((v2\_topreal1 X0)\wedge((v1\_goboard5 X0)\wedge((v2\_goboard5 X0)\wedge(m2\_finseq\_1 X0 (u1\_struct\_0 (k15\_euclid np\_2))))))))))\Rightarrow(\neg r1\_xxreal\_0 (k3\_finseq\_1 X0 (k4\_finseq\_4 X0 (k20\_pscomp\_1 (k3\_topreal1 np\_2 X0))))))$$