

# t48\_sprect\_2 (TMMCvKZC- GoxyzfB6aQb3aSDWWxNgancNAxkD)

October 27, 2020

Let  $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k5\_numbers : \iota$  be given. 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  $r1\_xxreal\_0 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $np\_1 : \iota$  be given. Let  $k3\_finseq\_1 : \iota \Rightarrow \iota$  be given. Let  $r1\_xboole\_0 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k3\_topreal1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k3\_finseq\_6 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  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  $k4\_ordinal1 : \iota$  be given. Let  $v6\_membered : \iota \Rightarrow o$  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.

$$\begin{aligned}
& \forall X0.(m1\_subset\_1 X0 k5\_numbers) \Rightarrow (\forall X1.(m1\_subset\_1 \\
& X1 k5\_numbers) \Rightarrow (\forall X2.(m1\_subset\_1 X2 k5\_numbers) \Rightarrow (\forall X3. \\
& (m1\_subset\_1 X3 k5\_numbers) \Rightarrow (\forall X4. ((\neg v1\_xboole\_0 X4) \wedge \\
& ((\neg v3\_funct\_1 X4) \wedge ((v1\_finseq\_6 X4 (u1\_struct\_0 (k15\_euclid \\
& np\_2)))) \wedge ((v1\_topreal1 X4) \wedge ((v2\_topreal1 X4) \wedge ((v1\_goboard5 \\
& X4) \wedge ((v2\_goboard5 X4) \wedge (m2\_finseq\_1 X4 (u1\_struct\_0 (k15\_euclid \\
& np\_2)))))))))) \Rightarrow (((r1\_xxreal\_0 np\_1 X0) \wedge ((r1\_xxreal\_0 X0 X1) \wedge \\
& ((r1\_xxreal\_0 X2 X3) \wedge (r1\_xxreal\_0 X3 (k3\_finseq\_1 X4)))))) \Rightarrow (( \\
& r1\_xxreal\_0 X2 X1) \vee (((r1\_xxreal\_0 X0 np\_1) \wedge (r1\_xxreal\_0 (k3\_finseq\_1 \\
& X4) X3)) \vee (r1\_xboole\_0 (k3\_topreal1 np\_2 (k3\_finseq\_6 (u1\_struct\_0 \\
& (k15\_euclid np\_2)) X4 X0 X1)) (k3\_topreal1 np\_2 (k3\_finseq\_6 \\
& (u1\_struct\_0 (k15\_euclid np\_2)) X4 X2 X3)))))))))
\end{aligned} \tag{1}$$

Assume the following.

$$\begin{aligned}
& \forall X0.(m2\_finseq\_1 X0 (u1\_struct\_0 (k15\_euclid np\_2))) \Rightarrow \\
& (k3\_topreal1 np\_2 X0 = k3\_topreal1 np\_2 (k4\_finseq\_5 (u1\_struct\_0 \\
& (k15\_euclid np\_2)) X0))
\end{aligned} \tag{2}$$

Assume the following.

$$\begin{aligned} & \forall X0.(\neg v1\_xboole\_0 X0) \Rightarrow (\forall X1.(m2\_finseq\_1 X1 X0) \Rightarrow \\ & (\forall X2.(m1\_subset\_1 X2 k5\_numbers) \Rightarrow (\forall X3.(m1\_subset\_1 \\ & X3 k5\_numbers) \Rightarrow (k3\_finseq\_6 X0 X1 X2 X3 = k4\_finseq\_5 X0 (k3\_finseq\_6 \\ & X0 X1 X3 X2)))))) \end{aligned} \quad (3)$$

Assume the following.

$$\forall X0.\forall X1.(m2\_finseq\_1 X1 X0) \Leftrightarrow (m1\_finseq\_1 X1 X0) \quad (4)$$

Assume the following.

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

Assume the following.

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

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.(m2\_finseq\_1 X1 X0) \Rightarrow ((v1\_funct\_1 X1) \wedge ( \\ & (v1\_finseq\_1 X1) \wedge (m1\_subset\_1 X1 (k1\_zfmisc\_1 (k2\_zfmisc\_1 k5\_numbers \\ & X0)))))) \end{aligned} \quad (7)$$

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.\forall X2.\forall X3.((\neg v1\_xboole\_0 X0) \wedge \\ & ((m1\_finseq\_1 X1 X0) \wedge ((v7\_ordinal1 X2) \wedge (v7\_ordinal1 X3)))) \Rightarrow \\ & (m2\_finseq\_1 (k3\_finseq\_6 X0 X1 X2 X3) X0) \end{aligned} \quad (8)$$

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.(v1\_xboole\_0 X0) \Rightarrow (\forall X2.(m1\_subset\_1 \\ & X2 (k1\_zfmisc\_1 (k2\_zfmisc\_1 X1 X0))) \Rightarrow (v1\_xboole\_0 X2)) \end{aligned} \quad (9)$$

Assume the following.

$$\forall X0.(v6\_membered X0) \Rightarrow (\forall X1.(m1\_subset\_1 X1 X0) \Rightarrow (v7\_ordinal1 X1)) \quad (10)$$

### Theorem 1

$$\begin{aligned} & \forall X0.(m1\_subset\_1 X0 k5\_numbers) \Rightarrow (\forall X1.(m1\_subset\_1 \\ & X1 k5\_numbers) \Rightarrow (\forall X2.(m1\_subset\_1 X2 k5\_numbers) \Rightarrow (\forall X3. \\ & (m1\_subset\_1 X3 k5\_numbers) \Rightarrow (\forall X4.((\neg v1\_xboole\_0 X4) \wedge \\ & ((\neg v3\_funct\_1 X4) \wedge ((v1\_finseq\_6 X4 (u1\_struct\_0 (k15\_euclid \\ & np\_2)))) \wedge ((v1\_topreal1 X4) \wedge ((v2\_topreal1 X4) \wedge ((v1\_goboard5 \\ & X4) \wedge ((v2\_goboard5 X4) \wedge (m2\_finseq\_1 X4 (u1\_struct\_0 (k15\_euclid \\ & np\_2)))))))))) \Rightarrow (((r1\_xxreal\_0 np\_1 X0) \wedge (r1\_xxreal\_0 X0 X1) \wedge \\ & ((r1\_xxreal\_0 X2 X3) \wedge (r1\_xxreal\_0 X3 (k3\_finseq\_1 X4)))) \Rightarrow (( \\ & r1\_xxreal\_0 X2 X1) \vee (((r1\_xxreal\_0 X0 np\_1) \wedge (r1\_xxreal\_0 (k3\_finseq\_1 \\ & X4) X3)) \vee (r1\_xboole\_0 (k3\_topreal1 np\_2 (k3\_finseq\_6 (u1\_struct\_0 \\ & (k15\_euclid np\_2)) X4 X0 X1)) (k3\_topreal1 np\_2 (k3\_finseq\_6 \\ & (u1\_struct\_0 (k15\_euclid np\_2)) X4 X3 X2)))))))))) \end{aligned}$$