

t73\_rvsum\_1  
(TMNSFk4iL5ybYhBvoBETSocieogX75JJJB9)

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Let  $v1\_xreal\_0 : \iota \Rightarrow o$  be given. Let  $k16\_rvsum\_1 : \iota \Rightarrow \iota$  be given. Let  $k9\_finseq\_1 : \iota \Rightarrow \iota$  be given. Let  $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $v1\_xboole\_0 : \iota \Rightarrow o$  be given. Let  $v1\_funct\_1 : \iota \Rightarrow o$  be given. Let  $v1\_funct\_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k2\_zfmisc\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k1\_zfmisc\_1 : \iota \Rightarrow \iota$  be given. Let  $k1\_finsop\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k12\_finseq\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $m2\_finseq\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $m1\_finseq\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k5\_finseq\_1 : \iota \Rightarrow \iota$  be given. Let  $k1\_numbers : \iota$  be given. Let  $k18\_rvsum\_1 : \iota \Rightarrow \iota$  be given. Let  $k33\_binop\_2 : \iota$  be given. Let  $k4\_tarski : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k2\_tarski : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k1\_tarski : \iota \Rightarrow \iota$  be given. Let  $np\_1 : \iota$  be given. Assume the following.

$$\forall X0. \forall X1. (X0 \in X1) \Rightarrow (m1\_subset\_1 X0 X1) \quad (1)$$

Assume the following.

$$\begin{aligned} & \forall X0. (\neg v1\_xboole\_0 X0) \Rightarrow (\forall X1. (m1\_subset\_1 X1 X0) \Rightarrow \\ & (\forall X2. ((v1\_funct\_1 X2) \wedge ((v1\_funct\_2 X2 (k2\_zfmisc\_1 X0 \\ & X0) X0) \wedge (m1\_subset\_1 X2 (k1\_zfmisc\_1 (k2\_zfmisc\_1 (k2\_zfmisc\_1 \\ & X0 X0) X0)))))) \Rightarrow (k1\_finsop\_1 X0 (k12\_finseq\_1 X0 X1) X2 = X1))) \end{aligned} \quad (2)$$

Assume the following.

$$\forall X0. \forall X1. (m2\_finseq\_1 X1 X0) \Leftrightarrow (m1\_finseq\_1 X1 X0) \quad (3)$$

Assume the following.

$$\forall X0. k9\_finseq\_1 X0 = k5\_finseq\_1 X0 \quad (4)$$

Assume the following.

$$\forall X0. (m1\_finseq\_1 X0 k1\_numbers) \Rightarrow (k18\_rvsum\_1 X0 = k16\_rvsum\_1 X0) \quad (5)$$

Assume the following.

$$\forall X0.\forall X1.((\neg v1\_xboole\_0 X0)\wedge(m1\_subset\_1 X1 X0))\Rightarrow (k12\_finseq\_1 X0 X1 = k5\_finseq\_1 X1) \quad (6)$$

Assume the following.

$$\neg v1\_xboole\_0 k1\_numbers \quad (7)$$

Assume the following.

$$(v1\_funct\_1 k33\_binop\_2)\wedge((v1\_funct\_2 k33\_binop\_2 (k2\_zfmisc\_1 k1\_numbers k1\_numbers) k1\_numbers)\wedge(m1\_subset\_1 k33\_binop\_2 (k1\_zfmisc\_1 (k2\_zfmisc\_1 (k2\_zfmisc\_1 k1\_numbers k1\_numbers) k1\_numbers)))) \quad (8)$$

Assume the following.

$$\forall X0.\forall X1.((\neg v1\_xboole\_0 X0)\wedge(m1\_subset\_1 X1 X0))\Rightarrow (m2\_finseq\_1 (k12\_finseq\_1 X0 X1) X0) \quad (9)$$

Assume the following.

$$\forall X0.\forall X1.k4\_tarski X0 X1 = k2\_tarski (k2\_tarski X0 X1) (k1\_tarski X0) \quad (10)$$

Assume the following.

$$\forall X0.k5\_finseq\_1 X0 = k1\_tarski (k4\_tarski np\_1 X0) \quad (11)$$

Assume the following.

$$\forall X0.(v1\_xreal\_0 X0)\Leftrightarrow(X0 \in k1\_numbers) \quad (12)$$

Assume the following.

$$\forall X0.(m2\_finseq\_1 X0 k1\_numbers)\Rightarrow(k18\_rvsum\_1 X0 = k1\_finsop\_1 k1\_numbers X0 k33\_binop\_2) \quad (13)$$

**Theorem 1**  $\forall X0.(v1\_xreal\_0 X0)\Rightarrow(k16\_rvsum\_1 (k9\_finseq\_1 X0) = X0).$