

t29\_rvsum\_2  
(TMYxySuxXptk1fvdroVEyoYqsr fcs8GJYEV)

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Let  $k17_rvsum_1 : \iota \Rightarrow \iota$  be given. Let  $k6_finseq_1 : \iota \Rightarrow \iota$  be given. Let  $k2\_numbers : \iota$  be given. Let  $k5\_complex1 : \iota$  be given. Let  $k4\_binop_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k27\_binop_2 : \iota$  be given. Let  $k6\_numbers : \iota$  be given. Let  $v1\_xboole_0 : \iota \Rightarrow o$  be given. Let  $v1\_funct_1 : \iota \Rightarrow o$  be given. Let  $v1\_funct_2 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k2\_zfmisc_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $m1\_subset_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k1\_zfmisc_1 : \iota \Rightarrow \iota$  be given. Let  $v1\_setwiseo : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k1\_finsop_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k1\_xboole_0 : \iota$  be given. Let  $m2\_finseq_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Assume the following.

$$k4\_binop_1 \ k2\_numbers \ k27\_binop_2 = k6\_numbers \quad (1)$$

Assume the following.

$$\begin{aligned} \forall X0. (\neg v1\_xboole_0 \ X0) \Rightarrow (\forall X1. ((v1\_funct_1 \ X1) \wedge ( \\ (v1\_funct_2 \ X1 \ (k2\_zfmisc_1 \ X0 \ X0) \ X0) \wedge (m1\_subset_1 \ X1 \ (k1\_zfmisc_1 \\ (k2\_zfmisc_1 \ (k2\_zfmisc_1 \ X0 \ X0) \ X0)))))) \Rightarrow ((v1\_setwiseo \ X1 \ X0) \Rightarrow \\ (k1\_finsop_1 \ X0 \ (k6\_finseq_1 \ X0) \ X1 = k4\_binop_1 \ X0 \ X1))) \end{aligned} \quad (2)$$

Assume the following.

$$k6\_numbers = k1\_xboole_0 \quad (3)$$

Assume the following.

$$k5\_complex1 = k1\_xboole_0 \quad (4)$$

Assume the following.

$$\neg v1\_xboole_0 \ k2\_numbers \quad (5)$$

Assume the following.

$$\begin{aligned} (v1\_funct_1 \ k27\_binop_2) \wedge ((v1\_funct_2 \ k27\_binop_2 \ (k2\_zfmisc_1 \\ k2\_numbers \ k2\_numbers) \ k2\_numbers) \wedge (v1\_setwiseo \ k27\_binop_2 \\ k2\_numbers)) \end{aligned} \quad (6)$$

Assume the following.

$$\forall X0.m2\_finseq\_1 (k6\_finseq\_1 X0) X0 \quad (7)$$

Assume the following.

$$\begin{aligned} & (v1\_funct\_1 k27\_binop\_2) \wedge ((v1\_funct\_2 k27\_binop\_2 (k2\_zfmisc\_1 \\ & k2\_numbers k2\_numbers) k2\_numbers) \wedge (m1\_subset\_1 k27\_binop\_2 \\ & (k1\_zfmisc\_1 (k2\_zfmisc\_1 (k2\_zfmisc\_1 k2\_numbers k2\_numbers) \\ & k2\_numbers)))) \quad (8) \end{aligned}$$

Assume the following.

$$\forall X0.(m2\_finseq\_1 X0 k2\_numbers) \Rightarrow (k17\_rvsum\_1 X0 = k1\_finsop\_1 k2\_numbers X0 k27\_binop\_2) \quad (9)$$

**Theorem 1**  $k17\_rvsum\_1 (k6\_finseq\_1 k2\_numbers) = k5\_complex1$ .