

t47_rvsum_2 (TMVNVr-
wUB5GcC9DP14EUd5ezZQxNhuTpa8W)

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Let $v7_ordinal1 : \iota \Rightarrow o$ be given. Let $v1_xcmplx_0 : \iota \Rightarrow o$ be given. Let $k20_rvsum_1 : \iota \Rightarrow \iota$ be given. Let $k5_finseq_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2_numbers : \iota$ be given. Let $k5_binop_2 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k19_rvsum_1 : \iota \Rightarrow \iota$ be given. Let $k2_finseq_2 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $m2_finseq_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $m1_finseq_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0.(v7_ordinal1 X0) \Rightarrow (\forall X1.(\neg v1_xboole_0 X1) \Rightarrow (\forall X2.(m1_subset_1 X2 X1) \Rightarrow (m2_finseq_1 (k2_finseq_2 X0 X2) X1))) \quad (1)$$

Assume the following.

$$\forall X0.\forall X1.(X0 \in X1) \Rightarrow (m1_subset_1 X0 X1) \quad (2)$$

Assume the following.

$$\begin{aligned} \forall X0.(v7_ordinal1 X0) \Rightarrow (\forall X1.(m1_subset_1 X1 k2_numbers) \Rightarrow \\ (\forall X2.(m1_subset_1 X2 k2_numbers) \Rightarrow (k20_rvsum_1 (k5_finseq_2 \\ k2_numbers X0 (k5_binop_2 X1 X2)) = k5_binop_2 (k20_rvsum_1 (k5_finseq_2 \\ k2_numbers X0 X1)) (k20_rvsum_1 (k5_finseq_2 k2_numbers X0 X2)))))) \quad (3) \end{aligned}$$

Assume the following.

$$\forall X0.\forall X1.(m2_finseq_1 X1 X0) \Leftrightarrow (m1_finseq_1 X1 X0) \quad (4)$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.((\neg v1_xboole_0 X0) \wedge ((v7_ordinal1 X1) \wedge (m1_subset_1 X2 X0))) \Rightarrow (k5_finseq_2 X0 X1 X2 = k2_finseq_2 X1 X2) \quad (5)$$

Assume the following.

$$\forall X0.(m1_finseq_1 X0 k2_numbers) \Rightarrow (k20_rvsum_1 X0 = k19_rvsum_1 X0) \quad (6)$$

Assume the following.

$$\neg v1_xboole_0 \ k2_numbers \quad (7)$$

Assume the following.

$$\forall X0.(v1_xcmplx_0 \ X0) \Leftrightarrow (X0 \in k2_numbers) \quad (8)$$

Theorem 1

$$\begin{aligned} & \forall X0.(v7_ordinal1 \ X0) \Rightarrow (\forall X1.(v1_xcmplx_0 \ X1) \Rightarrow (\forall X2. \\ & (v1_xcmplx_0 \ X2) \Rightarrow (k20_rvsum_1 \ (k5_finseq_2 \ k2_numbers \ X0 \ (k5_binop_2 \\ & \ X1 \ X2)) = k5_binop_2 \ (k19_rvsum_1 \ (k2_finseq_2 \ X0 \ X1)) \ (k19_rvsum_1 \\ & \ (k2_finseq_2 \ X0 \ X2)))))) \end{aligned}$$