

t49_rvsum_2

(TMNKuN8VBU5HpnYiJTitq4EB45yhDtWyTJ3)

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Let $v7_ordinal1 : \iota \Rightarrow o$ be given. Let $v1_xcmplx_0 : \iota \Rightarrow o$ be given. Let $v3_card_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $m2_finseq_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k2_numbers : \iota$ be given. Let $k20_rvsum_1 : \iota \Rightarrow \iota$ be given. Let $k10_rvsum_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ 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 $k12_rvsum_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k3_xcmplx_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $np_1 : \iota$ be given. Let $k11_rvsum_2 : \iota \Rightarrow \iota \Rightarrow \iota$ 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 $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $m1_finseq_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $k5_finseq_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k18_valued_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1_relat_1 : \iota \Rightarrow o$ be given. Let $v1_funct_1 : \iota \Rightarrow o$ be given. Let $v1_finseq_1 : \iota \Rightarrow o$ be given. Let $v1_valued_0 : \iota \Rightarrow o$ be given. Let $m1_finseq_2 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $m2_finseq_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $k2_zfmisc_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k4_finseq_2 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1_xreal_0 : \iota \Rightarrow o$ be given. Assume the following.

$$\begin{aligned} & \forall X0.(v7_ordinal1 X0) \Rightarrow (\forall X1.((v3_card_1 X1 X0) \wedge (\\ & \quad m2_finseq_1 X1 k2_numbers)) \Rightarrow (\forall X2.((v3_card_1 X2 X0) \wedge (\\ & \quad m2_finseq_1 X2 k2_numbers)) \Rightarrow (k20_rvsum_1 (k12_rvsum_2 X0 X1 X2) = \\ & \quad k5_binop_2 (k20_rvsum_1 X1) (k20_rvsum_1 X2)))) \end{aligned} \tag{1}$$

Assume the following.

$$\forall X0.(v1_xcmplx_0 X0) \Rightarrow (k3_xcmplx_0 np_1 X0 = X0) \tag{2}$$

Assume the following.

$$\begin{aligned} & \forall X0.(v7_ordinal1 X0) \Rightarrow (\forall X1.(v1_xcmplx_0 X1) \Rightarrow (\forall X2. \\ & ((v3_card_1 X2 X0) \wedge (m2_finseq_1 X2 k2_numbers)) \Rightarrow (k11_rvsum_2 \\ & \quad (k2_finseq_2 X0 X1) X2 = k10_rvsum_2 X0 X2 X1))) \end{aligned} \tag{3}$$

Assume the following.

$$\begin{aligned} & ((v2_xxreal_0 np_1) \wedge (m2_subset_1 np_1 k1_numbers k5_numbers)) \wedge \\ & ((m1_subset_1 np_1 k5_numbers) \wedge (m1_subset_1 np_1 k1_numbers)) \end{aligned} \tag{4}$$

Assume the following.

$$\forall X0.\forall X1.(m2_finseq_1 X1 X0)\Leftrightarrow(m1_finseq_1 X1 X0) \quad (5)$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.((\neg v1_xboole_0 X0)\wedge((v7_ordinal1 X1)\wedge(m1_subset_1 X2 X0)))\Rightarrow(k5_finseq_2 X0 X1 X2 = k2_finseq_2 X1 X2) \quad (6)$$

Assume the following.

$$\forall X0.\forall X1.((v1_xcmplx_0 X0)\wedge(v1_xcmplx_0 X1))\Rightarrow(k5_binop_2 X0 X1 = k3_xcmplx_0 X0 X1) \quad (7)$$

Assume the following.

$$\forall X0.(m1_finseq_1 X0 k2_numbers)\Rightarrow(k20_rvsum_1 X0 = k19_rvsum_1 X0) \quad (8)$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.((v7_ordinal1 X0)\wedge((v3_card_1 X1 X0)\wedge(m1_finseq_1 X1 k2_numbers))\wedge((v3_card_1 X2 X0)\wedge(m1_finseq_1 X2 k2_numbers)))\Rightarrow(k12_rvsum_2 X0 X1 X2 = k18_valued_1 X1 X2) \quad (9)$$

Assume the following.

$$\forall X0.\forall X1.(((v1_relat_1 X0)\wedge((v1_funct_1 X0)\wedge((v1_finseq_1 X0)\wedge(v1_valued_0 X0))))\wedge((v1_relat_1 X1)\wedge((v1_funct_1 X1)\wedge((v1_finseq_1 X1)\wedge(v1_valued_0 X1)))))\Rightarrow(k11_rvsum_2 X0 X1 = k18_valued_1 X0 X1) \quad (10)$$

Assume the following.

$$\forall X0.\forall X1.(v7_ordinal1 X0)\Rightarrow((v1_relat_1 (k2_finseq_2 X0 X1))\wedge((v1_funct_1 (k2_finseq_2 X0 X1))\wedge((v3_card_1 (k2_finseq_2 X0 X1) X0)\wedge(v1_finseq_1 (k2_finseq_2 X0 X1)))))) \quad (11)$$

Assume the following.

$$\neg v1_xboole_0 k2_numbers \quad (12)$$

Assume the following.

$$\forall X0.\forall X1.(m1_finseq_2 X1 X0)\Rightarrow(\forall X2.(m2_finseq_2 X2 X0 X1)\Rightarrow(m2_finseq_1 X2 X0)) \quad (13)$$

Assume the following.

$$\forall X0.\forall X1.(m2_finseq_1 X1 X0)\Rightarrow((v1_funct_1 X1)\wedge((v1_finseq_1 X1)\wedge(m1_subset_1 X1 (k1_zfmisc_1 (k2_zfmisc_1 k5_numbers X0)))))) \quad (14)$$

Assume the following.

$$\forall X0.\forall X1.(m1_finseq_1 X1 X0)\Rightarrow((v1_relat_1 X1)\wedge(v1_funct_1 X1)\wedge(v1_finseq_1 X1)) \quad (15)$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.((\neg v1_xboole_0 X0)\wedge((v7_ordinal1 X1)\wedge(m1_subset_1 X2 X0)))\Rightarrow(m2_finseq_2 (k5_finseq_2 X0 X1 X2) X0 (k4_finseq_2 X1 X0)) \quad (16)$$

Assume the following.

$$\forall X0.\forall X1.((v1_xcmplx_0 X0)\wedge(v1_xcmplx_0 X1))\Rightarrow(m1_subset_1 (k5_binop_2 X0 X1) k2_numbers) \quad (17)$$

Assume the following.

$$\forall X0.\forall X1.(v7_ordinal1 X0)\Rightarrow(m1_finseq_2 (k4_finseq_2 X0 X1) X1) \quad (18)$$

Assume the following.

$$\forall X0.(v1_xreal_0 X0)\Rightarrow(v1_xcmplx_0 X0) \quad (19)$$

Assume the following.

$$\forall X0.(m1_subset_1 X0 k1_numbers)\Rightarrow(v1_xreal_0 X0) \quad (20)$$

Assume the following.

$$\forall X0.(m1_finseq_1 X0 k2_numbers)\Rightarrow(v1_valued_0 X0) \quad (21)$$

Theorem 1

$$\forall X0.(v7_ordinal1 X0)\Rightarrow(\forall X1.(v1_xcmplx_0 X1)\Rightarrow(\forall X2.((v3_card_1 X2 X0)\wedge(m2_finseq_1 X2 k2_numbers))\Rightarrow(k20_rvsum_1 (k10_rvsum_2 X0 X2 X1) = k5_binop_2 (k19_rvsum_1 (k2_finseq_2 X0 X1) (k20_rvsum_1 X2))))))$$