

t45_rvsum_2
(TMbw6rBUH1xucb6joFdG2ezK96sgDTei6PC)

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Let $v7_ordinal1 : \iota \Rightarrow o$ be given. Let $v1_xcmplx_0 : \iota \Rightarrow o$ be given. Let $k19_rvsum_1 : \iota \Rightarrow \iota$ be given. Let $k2_finseq_2 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k23_binop_2 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k5_binop_2 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1_relat_1 : \iota \Rightarrow o$ be given. Let $v1_funct_1 : \iota \Rightarrow o$ be given. Let $v1_valued_0 : \iota \Rightarrow o$ be given. Let $v1_finseq_1 : \iota \Rightarrow o$ be given. Let $k7_finseq_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2_xcmplx_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\begin{aligned} \forall X0.((v1_relat_1 X0) \wedge ((v1_funct_1 X0) \wedge ((v1_valued_0 \\ X0) \wedge (v1_finseq_1 X0)))) \Rightarrow (\forall X1.((v1_relat_1 X1) \wedge ((v1_funct_1 \\ X1) \wedge ((v1_valued_0 X1) \wedge (v1_finseq_1 X1)))) \Rightarrow (k19_rvsum_1 (k7_finseq_1 \\ X0 X1) = k5_binop_2 (k19_rvsum_1 X0) (k19_rvsum_1 X1))) \end{aligned} \quad (1)$$

Assume the following.

$$\begin{aligned} \forall X0.(v7_ordinal1 X0) \Rightarrow (\forall X1.(v7_ordinal1 X1) \Rightarrow (\forall X2. \\ k2_finseq_2 (k2_xcmplx_0 X0 X1) X2 = k7_finseq_1 (k2_finseq_2 X0 \\ X2) (k2_finseq_2 X1 X2))) \end{aligned} \quad (2)$$

Assume the following.

$$\forall X0.\forall X1.((v7_ordinal1 X0) \wedge (v7_ordinal1 X1)) \Rightarrow (\\ k23_binop_2 X0 X1 = k2_xcmplx_0 X0 X1) \quad (3)$$

Assume the following.

$$\begin{aligned} \forall X0.\forall X1.((v1_xcmplx_0 X0) \wedge (v7_ordinal1 X1)) \Rightarrow (\\ (v1_relat_1 (k2_finseq_2 X1 X0)) \wedge ((v1_funct_1 (k2_finseq_2 X1 \\ X0)) \wedge ((v1_finseq_1 (k2_finseq_2 X1 X0)) \wedge (v1_valued_0 (k2_finseq_2 \\ X1 X0)))))) \end{aligned} \quad (4)$$

Theorem 1

$$\begin{aligned} \forall X0.(v7_ordinal1 X0) \Rightarrow (\forall X1.(v7_ordinal1 X1) \Rightarrow (\forall X2. \\ (v1_xcmplx_0 X2) \Rightarrow (k19_rvsum_1 (k2_finseq_2 (k23_binop_2 X0 X1) \\ X2) = k5_binop_2 (k19_rvsum_1 (k2_finseq_2 X0 X2)) (k19_rvsum_1 \\ (k2_finseq_2 X1 X2)))))) \end{aligned}$$