

t86_rvsum_1

(TMNP3yAKidWQ2KwKrinwoyhMx2B4GpL38bF)

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Let $v1_relat_1 : \iota \Rightarrow o$ be given. Let $v1_funct_1 : \iota \Rightarrow o$ be given. Let $v3_valued_0 : \iota \Rightarrow o$ be given. Let $v1_finseq_1 : \iota \Rightarrow o$ be given. Let $r1_xxreal_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k6_numbers : \iota$ be given. Let $k18_rvsum_1 : \iota \Rightarrow \iota$ be given. Let $k12_rvsum_1 : \iota \Rightarrow \iota$ be given. Let $v7_ordinal1 : \iota \Rightarrow o$ be given. Let $k4_finseq_1 : \iota \Rightarrow \iota$ be given. Let $k1_seq_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k16_rvsum_1 : \iota \Rightarrow \iota$ be given. Let $v1_xreal_0 : \iota \Rightarrow o$ be given. Let $k3_xcmplx_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1_valued_0 : \iota \Rightarrow o$ be given. Let $k9_xtuple_0 : \iota \Rightarrow \iota$ be given. Let $k39_valued_1 : \iota \Rightarrow \iota$ be given. Let $k1_funct_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k3_square_1 : \iota \Rightarrow \iota$ 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 $k1_numbers : \iota$ be given. Let $v1_xcmplx_0 : \iota \Rightarrow o$ be given. Assume the following.

$$\begin{aligned} \forall X0.((v1_relat_1 X0) \wedge ((v1_funct_1 X0) \wedge ((v3_valued_0 \\ X0) \wedge (v1_finseq_1 X0)))) \Rightarrow ((\forall X1.(v7_ordinal1 X1) \Rightarrow ((X1 \in \\ k4_finseq_1 X0) \Rightarrow (r1_xxreal_0 k6_numbers (k1_seq_1 X0 X1)))) \Rightarrow \\ (r1_xxreal_0 k6_numbers (k16_rvsum_1 X0))) \end{aligned} \quad (1)$$

Assume the following.

$$\forall X0.(v1_xreal_0 X0) \Rightarrow (r1_xxreal_0 k6_numbers (k3_xcmplx_0 X0 X0)) \quad (2)$$

Assume the following.

$$\begin{aligned} \forall X0.((v1_relat_1 X0) \wedge ((v1_funct_1 X0) \wedge (v1_valued_0 X0))) \Rightarrow \\ ((k9_xtuple_0 (k39_valued_1 X0) = k9_xtuple_0 X0) \wedge (\forall X1. \\ k1_funct_1 (k39_valued_1 X0) X1 = k3_square_1 (k1_funct_1 X0 X1))) \end{aligned} \quad (3)$$

Assume the following.

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

Assume the following.

$$\forall X0. \forall X1.((v1_relat_1 X0) \wedge ((v1_funct_1 X0) \wedge (v3_valued_0 X0))) \Rightarrow (k1_seq_1 X0 X1 = k1_funct_1 X0 X1) \quad (5)$$

Assume the following.

$$\forall X0.(m1_finseq_1 X0 k1_numbers) \Rightarrow (k18_rvsum_1 X0 = k16_rvsum_1 X0) \quad (6)$$

Assume the following.

$$\forall X0.((v1_relat_1 X0) \wedge ((v1_funct_1 X0) \wedge ((v3_valued_0 X0) \wedge (v1_finseq_1 X0)))) \Rightarrow (k12_rvsum_1 X0 = k39_valued_1 X0) \quad (7)$$

Assume the following.

$$\forall X0.((v1_relat_1 X0) \wedge ((v1_funct_1 X0) \wedge (v3_valued_0 X0))) \Rightarrow ((v1_relat_1 (k39_valued_1 X0)) \wedge ((v1_funct_1 (k39_valued_1 X0)) \wedge (v3_valued_0 (k39_valued_1 X0)))) \quad (8)$$

Assume the following.

$$\forall X0.\forall X1.((v1_relat_1 X0) \wedge ((v1_funct_1 X0) \wedge (v3_valued_0 X0))) \Rightarrow (v1_xreal_0 (k1_funct_1 X0 X1)) \quad (9)$$

Assume the following.

$$\forall X0.\forall X1.(m1_finseq_1 X1 X0) \Rightarrow ((v1_relat_1 X1) \wedge ((v1_funct_1 X1) \wedge (v1_finseq_1 X1))) \quad (10)$$

Assume the following.

$$\forall X0.((v1_relat_1 X0) \wedge ((v1_funct_1 X0) \wedge ((v3_valued_0 X0) \wedge (v1_finseq_1 X0)))) \Rightarrow (m2_finseq_1 (k12_rvsum_1 X0) k1_numbers) \quad (11)$$

Assume the following.

$$\forall X0.(v1_xcmplx_0 X0) \Rightarrow (k3_square_1 X0 = k3_xcmplx_0 X0 X0) \quad (12)$$

Assume the following.

$$\forall X0.((v1_relat_1 X0) \wedge (v3_valued_0 X0)) \Rightarrow ((v1_relat_1 X0) \wedge (v1_valued_0 X0)) \quad (13)$$

Assume the following.

$$\forall X0.(v1_xreal_0 X0) \Rightarrow (v1_xcmplx_0 X0) \quad (14)$$

Theorem 1

$$\forall X0.((v1_relat_1 X0) \wedge ((v1_funct_1 X0) \wedge ((v3_valued_0 X0) \wedge (v1_finseq_1 X0)))) \Rightarrow (r1_xreal_0 k6_numbers (k18_rvsum_1 (k12_rvsum_1 X0)))$$