

t19_rvsum_1 (TMVbbpFQrQuvmXNAyod- DPy3yvsAqFcN6ksm)

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Let $k6_rvsum_1 : \iota \Rightarrow \iota$ be given. Let $k6_finseq_1 : \iota \Rightarrow \iota$ be given. Let $k1_numbers : \iota$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $v1_xxreal_0 : \iota \Rightarrow o$ be given. Let $v1_xcmplx_0 : \iota \Rightarrow o$ be given. Let $v1_xreal_0 : \iota \Rightarrow o$ be given. Let $v1_relat_1 : \iota \Rightarrow o$ be given. Let $k2_zfmisc_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_xboole_0 : \iota$ be given. Let $k3_relat_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1_funct_1 : \iota \Rightarrow o$ be given. Let $k31_binop_2 : \iota$ be given. Let $v1_funct_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $v3_valued_0 : \iota \Rightarrow o$ be given. Let $v1_finseq_1 : \iota \Rightarrow o$ be given. Let $v4_valued_0 : \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0. \forall X1. \neg (v1_xboole_0 X0) \wedge ((X0 \neq X1) \wedge (v1_xboole_0 X1)) \quad (1)$$

Assume the following.

$$\exists X0. (v1_xboole_0 X0) \wedge (v1_xxreal_0 X0) \quad (2)$$

Assume the following.

$$\exists X0. (v1_xboole_0 X0) \wedge ((v1_xcmplx_0 X0) \wedge ((v1_xreal_0 X0) \wedge (v1_xreal_0 X0))) \quad (3)$$

Assume the following.

$$\forall X0. \forall X1. v1_relat_1 (k2_zfmisc_1 X0 X1) \quad (4)$$

Assume the following.

$$v1_xboole_0 k1_xboole_0 \quad (5)$$

Assume the following.

$$\forall X0. \forall X1. ((v1_xboole_0 X0) \wedge (v1_relat_1 X1)) \Rightarrow ((v1_xboole_0 (k3_relat_1 X0 X1)) \wedge (v1_relat_1 (k3_relat_1 X0 X1))) \quad (6)$$

Assume the following.

$$(v1_funct_1 k31_binop_2) \wedge ((v1_funct_2 k31_binop_2 k1_numbers k1_numbers) \wedge (m1_subset_1 k31_binop_2 (k1_zfmisc_1 (k2_zfmisc_1 k1_numbers k1_numbers)))) \quad (7)$$

Assume the following.

$$\forall X0. k6_finseq_1 X0 = k1_xboole_0 \quad (8)$$

Assume the following.

$$\forall X0. ((v1_relat_1 X0) \wedge ((v1_funct_1 X0) \wedge ((v3_valued_0 X0) \wedge (v1_finseq_1 X0)))) \Rightarrow (k6_rvsum_1 X0 = k3_relat_1 X0 k31_binop_2) \quad (9)$$

Assume the following.

$$\forall X0. ((v1_xboole_0 X0) \wedge (v1_relat_1 X0)) \Rightarrow ((v1_relat_1 X0) \wedge (v4_valued_0 X0)) \quad (10)$$

Assume the following.

$$\forall X0. ((v1_relat_1 X0) \wedge (v4_valued_0 X0)) \Rightarrow ((v1_relat_1 X0) \wedge (v3_valued_0 X0)) \quad (11)$$

Assume the following.

$$\forall X0. (v1_relat_1 X0) \Rightarrow (\forall X1. (m1_subset_1 X1 (k1_zfmisc_1 X0)) \Rightarrow (v1_relat_1 X1)) \quad (12)$$

Assume the following.

$$\forall X0. (v1_xboole_0 X0) \Rightarrow (v1_relat_1 X0) \quad (13)$$

Assume the following.

$$\forall X0. (v1_xboole_0 X0) \Rightarrow (v1_funct_1 X0) \quad (14)$$

Assume the following.

$$\forall X0. ((v1_relat_1 X0) \wedge (v1_xboole_0 X0)) \Rightarrow ((v1_relat_1 X0) \wedge (v1_finseq_1 X0)) \quad (15)$$

Theorem 1 $k6_rvsum_1 (k6_finseq_1 k1_numbers) = k6_finseq_1 k1_numbers.$