

t10_rvsum_1

(TMX2hEm3vNirDSdjXN1BnUuTrxxKdhgjhml)

October 27, 2020

Let $r7_binop_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_numbers : \iota$ be given. Let $k31_binop_2 : \iota$ be given. Let $k33_binop_2 : \iota$ be given. Let $v1_finseqop : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $r1_finseqop : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $v1_funct_1 : \iota \Rightarrow o$ be given. Let $v1_funct_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k2_zfmisc_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $v1_setwiseo : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v2_binop_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v1_binop_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k5_finseqop : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$v1_finseqop\ k33_binop_2\ k1_numbers \tag{1}$$

Assume the following.

$$r1_finseqop\ k1_numbers\ k31_binop_2\ k33_binop_2 \tag{2}$$

Assume the following.

$$\begin{aligned} & \forall X0. (\neg v1_xboole_0\ X0) \Rightarrow (\forall X1. ((v1_funct_1\ X1) \wedge (\\ & (v1_funct_2\ X1\ (k2_zfmisc_1\ X0\ X0)\ X0) \wedge (m1_subset_1\ X1\ (k1_zfmisc_1 \\ & (k2_zfmisc_1\ (k2_zfmisc_1\ X0\ X0)\ X0)))))) \Rightarrow (((v1_setwiseo\ X1\ X0) \wedge \\ & ((v2_binop_1\ X1\ X0) \wedge ((v1_binop_1\ X1\ X0) \wedge (v1_finseqop\ X1\ X0)))) \Rightarrow \\ & (r7_binop_1\ X0\ (k5_finseqop\ X0\ X1)\ X1)) \end{aligned} \tag{3}$$

Assume the following.

$$\begin{aligned} & (v1_funct_1\ k33_binop_2) \wedge ((v1_funct_2\ k33_binop_2\ (k2_zfmisc_1 \\ & k1_numbers\ k1_numbers)\ k1_numbers) \wedge ((v1_binop_1\ k33_binop_2 \\ & k1_numbers) \wedge (v2_binop_1\ k33_binop_2\ k1_numbers))) \end{aligned} \tag{4}$$

Assume the following.

$$\neg v1_xboole_0\ k1_numbers \tag{5}$$

Assume the following.

$$\begin{aligned} & (v1_funct_1\ k33_binop_2) \wedge ((v1_funct_2\ k33_binop_2\ (k2_zfmisc_1 \\ & k1_numbers\ k1_numbers)\ k1_numbers) \wedge (v1_setwiseo\ k33_binop_2 \\ & k1_numbers)) \end{aligned} \tag{6}$$

Assume the following.

$$(v1_funct_1\ k33_binop_2) \wedge ((v1_funct_2\ k33_binop_2\ (k2_zfmisc_1\ k1_numbers\ k1_numbers)\ k1_numbers) \wedge (m1_subset_1\ k33_binop_2\ (k1_zfmisc_1\ (k2_zfmisc_1\ (k2_zfmisc_1\ k1_numbers\ k1_numbers)\ k1_numbers)))) \quad (7)$$

Assume the following.

$$(v1_funct_1\ k31_binop_2) \wedge ((v1_funct_2\ k31_binop_2\ k1_numbers\ k1_numbers) \wedge (m1_subset_1\ k31_binop_2\ (k1_zfmisc_1\ (k2_zfmisc_1\ k1_numbers\ k1_numbers)))) \quad (8)$$

Assume the following.

$$\begin{aligned} & \forall X0. (\neg v1_xboole_0\ X0) \Rightarrow (\forall X1. ((v1_funct_1\ X1) \wedge \\ & (v1_funct_2\ X1\ (k2_zfmisc_1\ X0\ X0)\ X0) \wedge (m1_subset_1\ X1\ (k1_zfmisc_1 \\ & (k2_zfmisc_1\ (k2_zfmisc_1\ X0\ X0)\ X0)))) \Rightarrow (((v1_setwiseo\ X1\ X0) \wedge \\ & ((v2_binop_1\ X1\ X0) \wedge (v1_finseqop\ X1\ X0))) \Rightarrow (\forall X2. ((v1_funct_1 \\ & X2) \wedge ((v1_funct_2\ X2\ X0\ X0) \wedge (m1_subset_1\ X2\ (k1_zfmisc_1\ (k2_zfmisc_1 \\ & X0\ X0)))) \Rightarrow ((X2 = k5_finseqop\ X0\ X1) \Leftrightarrow (r1_finseqop\ X0\ X2\ X1)))) \quad (9) \end{aligned}$$

Theorem 1 $r7_binop_1\ k1_numbers\ k31_binop_2\ k33_binop_2$.