

t13_radix_2

(TMYRU4Rk38heXqw7GgSevJiZsUntYoJWtXy)

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Let $v7_ordinal1 : \iota \Rightarrow o$ 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 $k5_numbers : \iota$ be given. Let $k3_radix_1 : \iota \Rightarrow \iota$ be given. Let $k3_radix_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k8_radix_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2_radix_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k7_radix_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $m1_finseq_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k2_wsierp_1 : \iota \Rightarrow \iota$ be given. Let $k16_rvsum_1 : \iota \Rightarrow \iota$ be given. Let $k4_numbers : \iota$ be given. Let $k1_gr_cy_1 : \iota \Rightarrow \iota$ be given. Assume the following.

$$\begin{aligned} & \forall X0.(v7_ordinal1 X0) \Rightarrow (\forall X1.(v7_ordinal1 X1) \Rightarrow (\forall X2. \\ & ((v3_card_1 X2 X0) \wedge (m2_finseq_1 X2 k5_numbers)) \Rightarrow (\forall X3. \\ & ((v3_card_1 X3 X0) \wedge (m2_finseq_1 X3 (k3_radix_1 X1)))) \Rightarrow ((X2 = X3) \Rightarrow \\ & (k2_radix_2 X0 X1 X2 = k7_radix_1 X0 X1 X3)))) \end{aligned} \quad (1)$$

Assume the following.

$$\forall X0.\forall X1.(m2_finseq_1 X1 X0) \Leftrightarrow (m1_finseq_1 X1 X0) \quad (2)$$

Assume the following.

$$\forall X0.(m1_finseq_1 X0 k5_numbers) \Rightarrow (k2_wsierp_1 X0 = k16_rvsum_1 X0) \quad (3)$$

Assume the following.

$$\forall X0.(m1_finseq_1 X0 k4_numbers) \Rightarrow (k1_gr_cy_1 X0 = k16_rvsum_1 X0) \quad (4)$$

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.\forall X2.((v7_ordinal1 X0) \wedge ((v7_ordinal1 \\ & X1) \wedge ((v3_card_1 X2 X0) \wedge (m1_finseq_1 X2 (k3_radix_1 X1)))) \Rightarrow (\\ & (v3_card_1 (k7_radix_1 X0 X1 X2) X0) \wedge (m2_finseq_1 (k7_radix_1 \\ & X0 X1 X2) k4_numbers)) \end{aligned} \quad (5)$$

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.\forall X2.((v7_ordinal1\ X0)\wedge((v7_ordinal1 \\ & X1)\wedge((v3_card_1\ X2\ X0)\wedge(m1_finseq_1\ X2\ k5_numbers))))\Rightarrow((v3_card_1 \\ & (k2_radix_2\ X0\ X1\ X2)\ X0)\wedge(m2_finseq_1\ (k2_radix_2\ X0\ X1\ X2)\ k5_numbers)) \end{aligned} \quad (6)$$

Assume the following.

$$\begin{aligned} & \forall X0.(v7_ordinal1\ X0)\Rightarrow(\forall X1.(v7_ordinal1\ X1)\Rightarrow(\forall X2. \\ & ((v3_card_1\ X2\ X0)\wedge(m2_finseq_1\ X2\ (k3_radix_1\ X1)))\Rightarrow(k8_radix_1 \\ & X0\ X1\ X2 = k1_gr_cy_1\ (k7_radix_1\ X0\ X1\ X2)))) \end{aligned} \quad (7)$$

Assume the following.

$$\begin{aligned} & \forall X0.(v7_ordinal1\ X0)\Rightarrow(\forall X1.(v7_ordinal1\ X1)\Rightarrow(\forall X2. \\ & ((v3_card_1\ X2\ X0)\wedge(m2_finseq_1\ X2\ k5_numbers))\Rightarrow(k3_radix_2 \\ & X0\ X1\ X2 = k2_wsierp_1\ (k2_radix_2\ X0\ X1\ X2)))) \end{aligned} \quad (8)$$

Theorem 1

$$\begin{aligned} & \forall X0.(v7_ordinal1\ X0)\Rightarrow(\forall X1.(v7_ordinal1\ X1)\Rightarrow(\forall X2. \\ & ((v3_card_1\ X2\ X0)\wedge(m2_finseq_1\ X2\ k5_numbers))\Rightarrow(\forall X3. \\ & ((v3_card_1\ X3\ X0)\wedge(m2_finseq_1\ X3\ (k3_radix_1\ X1)))\Rightarrow((X2 = X3)\Rightarrow \\ & (k3_radix_2\ X0\ X1\ X2 = k8_radix_1\ X0\ X1\ X3)))) \end{aligned}$$