

t16_radix_1

(TMWFHLH7WzrYmA7ZrxZSPf8gqvy4C5h8EnL)

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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 $k3_radix_1 : \iota \Rightarrow \iota$ be given. Let $k2_finseq_1 : \iota \Rightarrow \iota$ be given. Let $m2_subset_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k4_radix_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k4_numbers : \iota$ be given. Let $k1_funct_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k6_numbers : \iota$ be given. Assume the following.

$$\begin{aligned} & \forall X0.(v7_ordinal1 X0) \Rightarrow (\forall X1.(v7_ordinal1 X1) \Rightarrow (\forall X2. \\ & (v7_ordinal1 X2) \Rightarrow (\forall X3.((v3_card_1 X3 X1) \wedge (m2_finseq_1 \\ & X3 (k3_radix_1 X2))) \Rightarrow ((X0 \in k2_finseq_1 X1) \Rightarrow (m2_subset_1 (k1_funct_1 \\ & X3 X0) k4_numbers (k3_radix_1 X2)))))) \end{aligned} \tag{1}$$

Assume the following.

$$\begin{aligned} & \forall X0.(v7_ordinal1 X0) \Rightarrow (\forall X1.(v7_ordinal1 X1) \Rightarrow (\forall X2. \\ & (v7_ordinal1 X2) \Rightarrow (\forall X3.((v3_card_1 X3 X2) \wedge (m2_finseq_1 \\ & X3 (k3_radix_1 X1))) \Rightarrow (((X0 \in k2_finseq_1 X2) \Rightarrow (k4_radix_1 X0 X1 \\ & X2 X3 = k1_funct_1 X3 X0)) \wedge ((X0 = k6_numbers) \Rightarrow (k4_radix_1 X0 X1 X2 \\ & X3 = k6_numbers)))))) \end{aligned} \tag{2}$$

Theorem 1

$$\begin{aligned} & \forall X0.(v7_ordinal1 X0) \Rightarrow (\forall X1.(v7_ordinal1 X1) \Rightarrow (\forall X2. \\ & (v7_ordinal1 X2) \Rightarrow (\forall X3.((v3_card_1 X3 X1) \wedge (m2_finseq_1 \\ & X3 (k3_radix_1 X2))) \Rightarrow ((X0 \in k2_finseq_1 X1) \Rightarrow (m2_subset_1 (k4_radix_1 \\ & X0 X2 X1 X3) k4_numbers (k3_radix_1 X2)))))) \end{aligned}$$