

l13_radix_5

(TMPTFR54dEGKkoLTsGm6QhHReTyNpwPchf3)

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Let $v7_ordinal1 : \iota \Rightarrow o$ be given. Let $r1_xxreal_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $np_2 : \iota$ be given. Let $k2_finseq_1 : \iota \Rightarrow \iota$ be given. Let $k11_radix_1 : \iota \Rightarrow \iota$ be given. Let $k4_radix_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k10_radix_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $np_1 : \iota$ be given. Let $k6_numbers : \iota$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $k1_xboole_0 : \iota$ be given. Let $v1_xxreal_0 : \iota \Rightarrow o$ be given. Let $v2_xxreal_0 : \iota \Rightarrow o$ be given. Let $m2_subset_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_numbers : \iota$ be given. Let $k5_numbers : \iota$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $np_0 : \iota$ be given. Let $k4_xcmplx_0 : \iota \Rightarrow \iota$ be given. Let $v1_int_1 : \iota \Rightarrow o$ be given. Let $v1_xreal_0 : \iota \Rightarrow o$ be given. Assume the following.

$$\begin{aligned} & \forall X0.(v7_ordinal1 X0) \Rightarrow (\forall X1.(v7_ordinal1 X1) \Rightarrow (\forall X2. \\ & (v7_ordinal1 X2) \Rightarrow (((X0 \in k2_finseq_1 X2) \wedge (r1_xxreal_0 np_2 X1)) \Rightarrow \\ & ((r1_xxreal_0 X0 np_1) \vee (k4_radix_1 X0 X1 X2 (k10_radix_1 X1 X2 \\ & np_1) = k6_numbers)))))) \end{aligned} \tag{1}$$

Assume the following.

$$\begin{aligned} & \forall X0.(v7_ordinal1 X0) \Rightarrow (\forall X1.(v7_ordinal1 X1) \Rightarrow ((\\ & (np_1 \in k2_finseq_1 X1) \wedge (r1_xxreal_0 np_2 X0)) \Rightarrow (k4_radix_1 \\ & np_1 X0 X1 (k10_radix_1 X0 X1 np_1) = np_1))) \end{aligned} \tag{2}$$

Assume the following.

$$\forall X0.(v1_xboole_0 X0) \Rightarrow (X0 = k1_xboole_0) \tag{3}$$

Assume the following.

$$\begin{aligned} & \forall X0.(v1_xxreal_0 X0) \Rightarrow (\forall X1.(v1_xxreal_0 X1) \Rightarrow ((\\ & (r1_xxreal_0 X0 X1) \wedge (r1_xxreal_0 X1 X0)) \Rightarrow (X0 = X1))) \end{aligned} \tag{4}$$

Assume the following.

$$\begin{aligned} & \forall X0.(v7_ordinal1 X0) \Rightarrow (\forall X1.(v7_ordinal1 X1) \Rightarrow ((\\ & X0 \in k2_finseq_1 X1) \Leftrightarrow ((r1_xxreal_0 np_1 X0) \wedge (r1_xxreal_0 X0 X1)))) \end{aligned} \tag{5}$$

Assume the following.

$$\begin{aligned} & ((v2_xxreal_0 \ np_1) \wedge (m2_subset_1 \ np_1 \ k1_numbers \ k5_numbers)) \wedge \\ & ((m1_subset_1 \ np_1 \ k5_numbers) \wedge (m1_subset_1 \ np_1 \ k1_numbers)) \end{aligned} \quad (6)$$

Assume the following.

$$v1_xboole_0 \ np_0 \quad (7)$$

Assume the following.

$$r1_xxreal_0 \ (k4_xcmplx_0 \ np_2) \ np_1 \quad (8)$$

Assume the following.

$$r1_xxreal_0 \ (k4_xcmplx_0 \ np_2) \ np_0 \quad (9)$$

Assume the following.

$$r1_xxreal_0 \ np_1 \ np_2 \quad (10)$$

Assume the following.

$$r1_xxreal_0 \ np_0 \ np_2 \quad (11)$$

Assume the following.

$$k6_numbers = k1_xboole_0 \quad (12)$$

Assume the following.

$$\begin{aligned} & \forall X0.(v1_int_1 \ X0) \Rightarrow (((\neg r1_xxreal_0 \ X0 \ np_2) \Rightarrow (k11_radix_1 \\ & X0 = np_1)) \wedge (((\neg r1_xxreal_0 \ (k4_xcmplx_0 \ np_2) \ X0) \Rightarrow (k11_radix_1 \\ & X0 = k4_xcmplx_0 \ np_1)) \wedge (((r1_xxreal_0 \ X0 \ np_2) \wedge (r1_xxreal_0 \\ & (k4_xcmplx_0 \ np_2) \ X0)) \Rightarrow (k11_radix_1 \ X0 = k6_numbers)))) \end{aligned} \quad (13)$$

Assume the following.

$$\forall X0.(v1_xboole_0 \ X0) \Rightarrow (v7_ordinal1 \ X0) \quad (14)$$

Assume the following.

$$\forall X0.(v1_xreal_0 \ X0) \Rightarrow (v1_xxreal_0 \ X0) \quad (15)$$

Assume the following.

$$\forall X0.(v7_ordinal1 \ X0) \Rightarrow (v1_xreal_0 \ X0) \quad (16)$$

Assume the following.

$$\forall X0.(v7_ordinal1 \ X0) \Rightarrow (v1_int_1 \ X0) \quad (17)$$

Assume the following.

$$\forall X0.(m1_subset_1 \ X0 \ k1_numbers) \Rightarrow (v1_xreal_0 \ X0) \quad (18)$$

Theorem 1

$$\begin{aligned} & \forall X0.(v7_ordinal1 \ X0) \Rightarrow (\forall X1.(v7_ordinal1 \ X1) \Rightarrow (\forall X2. \\ & (v7_ordinal1 \ X2) \Rightarrow (((r1_xxreal_0 \ np_2 \ X1) \wedge (X2 \in k2_finseq_1 \ X0)) \Rightarrow \\ & (k11_radix_1 \ (k4_radix_1 \ X2 \ X1 \ X0 \ (k10_radix_1 \ X1 \ X0 \ np_1)) = k6_numbers)))) \end{aligned}$$