

l12_radix_5 (TMc-
QZSWzpUg9NyER9mxScmjy4HKF58QEV5n)

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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 $k11_radix_1 : \iota \Rightarrow \iota$ be given. Let $k6_xcmplx_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_radix_1 : \iota \Rightarrow \iota$ be given. Let $np_1 : \iota$ be given. Let $v1_xreal_0 : \iota \Rightarrow o$ be given. Let $np_4 : \iota$ 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 $np_3 : \iota$ be given. Let $k4_ordinal1 : \iota$ be given. Let $v1_int_1 : \iota \Rightarrow o$ be given. Let $k4_xcmplx_0 : \iota \Rightarrow \iota$ be given. Let $k6_numbers : \iota$ be given. Assume the following.

$$\begin{aligned} & \forall X0.(v1_xreal_0 X0) \Rightarrow (\forall X1.(v1_xreal_0 X1) \Rightarrow (\forall X2. \\ & (v1_xreal_0 X2) \Rightarrow ((r1_xxreal_0 X0 X1) \Leftrightarrow (r1_xxreal_0 (k6_xcmplx_0 \\ & X0 X2) (k6_xcmplx_0 X1 X2)))))) \end{aligned} \quad (1)$$

Assume the following.

$$\forall X0.(v7_ordinal1 X0) \Rightarrow ((r1_xxreal_0 np_2 X0) \Rightarrow (r1_xxreal_0 np_4 (k1_radix_1 X0))) \quad (2)$$

Assume the following.

$$\begin{aligned} & \forall X0.(v1_xxreal_0 X0) \Rightarrow (\forall X1.(v1_xxreal_0 X1) \Rightarrow (\forall X2. \\ & (v1_xxreal_0 X2) \Rightarrow (((r1_xxreal_0 X0 X1) \wedge (r1_xxreal_0 X1 X2)) \Rightarrow \\ & (r1_xxreal_0 X0 X2)))))) \end{aligned} \quad (3)$$

Assume the following.

$$\begin{aligned} & ((v2_xxreal_0 np_4) \wedge (m2_subset_1 np_4 k1_numbers k5_numbers)) \wedge \\ & ((m1_subset_1 np_4 k5_numbers) \wedge (m1_subset_1 np_4 k1_numbers)) \end{aligned} \quad (4)$$

Assume the following.

$$\begin{aligned} & ((v2_xxreal_0 np_3) \wedge (m2_subset_1 np_3 k1_numbers k5_numbers)) \wedge \\ & ((m1_subset_1 np_3 k5_numbers) \wedge (m1_subset_1 np_3 k1_numbers)) \end{aligned} \quad (5)$$

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.

$$k6_xcmplx_0 \ np_3 \ np_1 = np_2 \quad (7)$$

Assume the following.

$$\neg r1_xxreal_0 \ np_4 \ np_3 \quad (8)$$

Assume the following.

$$k5_numbers = k4_ordinal1 \quad (9)$$

Assume the following.

$$\begin{aligned} \forall X0. \forall X1. ((v1_int_1 \ X0) \wedge (v1_int_1 \ X1)) \Rightarrow (v1_int_1 \\ (k6_xcmplx_0 \ X0 \ X1)) \end{aligned} \quad (10)$$

Assume the following.

$$\forall X0. (v7_ordinal1 \ X0) \Rightarrow (m1_subset_1 \ (k1_radix_1 \ X0) \ k5_numbers) \quad (11)$$

Assume the following.

$$\begin{aligned} \forall X0. (v1_int_1 \ X0) \Rightarrow (((\neg r1_xxreal_0 \ X0 \ np_2) \Rightarrow (k11_radix_1 \\ X0 = np_1)) \wedge (((\neg r1_xxreal_0 \ (k4_xcmplx_0 \ np_2) \ X0) \Rightarrow (k11_radix_1 \\ X0 = k4_xcmplx_0 \ np_1)) \wedge (((r1_xxreal_0 \ X0 \ np_2) \wedge (r1_xxreal_0 \\ (k4_xcmplx_0 \ np_2) \ X0)) \Rightarrow (k11_radix_1 \ X0 = k6_numbers)))) \end{aligned} \quad (12)$$

Assume the following.

$$\forall X0. (m1_subset_1 \ X0 \ k4_ordinal1) \Rightarrow (v7_ordinal1 \ X0) \quad (13)$$

Assume the following.

$$\forall X0. (v1_xreal_0 \ X0) \Rightarrow (v1_xxreal_0 \ X0) \quad (14)$$

Assume the following.

$$\forall X0. (v1_int_1 \ X0) \Rightarrow (v1_xreal_0 \ X0) \quad (15)$$

Assume the following.

$$\forall X0. (v7_ordinal1 \ X0) \Rightarrow (v1_int_1 \ X0) \quad (16)$$

Assume the following.

$$\forall X0. (m1_subset_1 \ X0 \ k1_numbers) \Rightarrow (v1_xreal_0 \ X0) \quad (17)$$

Theorem 1

$$\begin{aligned} \forall X0. (v7_ordinal1 \ X0) \Rightarrow ((r1_xxreal_0 \ np_2 \ X0) \Rightarrow (k11_radix_1 \\ (k6_xcmplx_0 \ (k1_radix_1 \ X0) \ np_1) = np_1)) \end{aligned}$$