

t38_rpr_1
(TMLd9q56RwAMdfkLnG73e6VwtnTCj3tun8T)

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Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $v1_finset_1 : \iota \Rightarrow o$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $r1_xboole_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k2_rpr_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k6_numbers : \iota$ be given. Let $v1_xcmplx_0 : \iota \Rightarrow o$ be given. Let $k7_xcmplx_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_rpr_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k9_subset_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k5_numbers : \iota$ be given. Let $k4_ordinal1 : \iota$ be given. Let $k1_numbers : \iota$ be given. Let $v1_xreal_0 : \iota \Rightarrow o$ be given. Let $k10_real_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $m2_subset_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0.(v1_xcmplx_0 X0) \Rightarrow (k7_xcmplx_0 k6_numbers X0 = k6_numbers) \quad (1)$$

Assume the following.

$$\begin{aligned} & \forall X0.((\neg v1_xboole_0 X0) \wedge (v1_finset_1 X0)) \Rightarrow (\forall X1. \\ & (m1_subset_1 X1 (k1_zfmisc_1 X0)) \Rightarrow (\forall X2.(m1_subset_1 X2 \\ & (k1_zfmisc_1 X0)) \Rightarrow ((r1_xboole_0 X1 X2) \Rightarrow (k1_rpr_1 X0 (k9_subset_1 \\ & X0 X1 X2) = k6_numbers)))) \end{aligned} \quad (2)$$

Assume the following.

$$k5_numbers = k4_ordinal1 \quad (3)$$

Assume the following.

$$\forall X0.\forall X1.((m1_subset_1 X0 k1_numbers) \wedge (v1_xreal_0 X1)) \Rightarrow (k10_real_1 X0 X1 = k7_xcmplx_0 X0 X1) \quad (4)$$

Assume the following.

$$\neg v1_finset_1 k4_ordinal1 \quad (5)$$

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.((\neg v1_xboole_0 X0) \wedge ((\neg v1_xboole_0 X1) \wedge \\ & (m1_subset_1 X1 (k1_zfmisc_1 X0)))) \Rightarrow (\forall X2.(m2_subset_1 \\ & X2 X0 X1) \Rightarrow (m1_subset_1 X2 X0)) \end{aligned} \quad (6)$$

Assume the following.

$$m2_subset_1 \ k6_numbers \ k1_numbers \ k5_numbers \quad (7)$$

Assume the following.

$$m1_subset_1 \ k5_numbers \ (k1_zfmisc_1 \ k1_numbers) \quad (8)$$

Assume the following.

$$\forall X0.\forall X1.((v1_finset_1 \ X0)\wedge(m1_subset_1 \ X1 \ (k1_zfmisc_1 \ X0)))\Rightarrow(m1_subset_1 \ (k1_rpr_1 \ X0 \ X1) \ k1_numbers) \quad (9)$$

Assume the following.

$$\begin{aligned} \forall X0.(v1_finset_1 \ X0)\Rightarrow(\forall X1.(m1_subset_1 \ X1 \ (k1_zfmisc_1 \ X0))\Rightarrow(\forall X2.(m1_subset_1 \ X2 \ (k1_zfmisc_1 \ X0))\Rightarrow(k2_rpr_1 \\ X0 \ X1 \ X2 = k10_real_1 \ (k1_rpr_1 \ X0 \ (k9_subset_1 \ X0 \ X2 \ X1)) \ (k1_rpr_1 \\ X0 \ X1)))) \end{aligned} \quad (10)$$

Assume the following.

$$\forall X0.(v1_xreal_0 \ X0)\Rightarrow(v1_xcmplx_0 \ X0) \quad (11)$$

Assume the following.

$$\forall X0.(m1_subset_1 \ X0 \ k1_numbers)\Rightarrow(v1_xreal_0 \ X0) \quad (12)$$

Assume the following.

$$\forall X0.(v1_xboole_0 \ X0)\Rightarrow(\forall X1.(m1_subset_1 \ X1 \ (k1_zfmisc_1 \ X0))\Rightarrow(v1_xboole_0 \ X1)) \quad (13)$$

Assume the following.

$$\forall X0.(v1_xboole_0 \ X0)\Rightarrow(v1_finset_1 \ X0) \quad (14)$$

Theorem 1

$$\begin{aligned} \forall X0.((\neg v1_xboole_0 \ X0)\wedge(v1_finset_1 \ X0))\Rightarrow(\forall X1. \\ (m1_subset_1 \ X1 \ (k1_zfmisc_1 \ X0))\Rightarrow(\forall X2.(m1_subset_1 \ X2 \\ (k1_zfmisc_1 \ X0))\Rightarrow((r1_xboole_0 \ X1 \ X2)\Rightarrow(k2_rpr_1 \ X0 \ X2 \ X1 = k6_numbers)))) \end{aligned}$$