

t14_rpr_1 (TMR-
BeWta5qW4u5QVkt2PX6ZGxVV11FdYwCF)

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Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $v1_finset_1 : \iota \Rightarrow o$ be given. Let $v3_card_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $np_1 : \iota$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $k1_rpr_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k10_real_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k5_card_1 : \iota \Rightarrow \iota$ 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 $k1_card_1 : \iota \Rightarrow \iota$ be given. Let $v1_xreal_0 : \iota \Rightarrow o$ be given. Let $k7_xcmplx_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1_card_1 : \iota \Rightarrow o$ be given. Let $v1_zfmisc_1 : \iota \Rightarrow o$ be given. Let $v3_ordinal1 : \iota \Rightarrow o$ be given. Let $v7_ordinal1 : \iota \Rightarrow o$ be given. Assume the following.

$$\begin{aligned} & ((v2_xxreal_0 \ np_1) \wedge (m2_subset_1 \ np_1 \ k1_numbers \ k5_numbers)) \wedge \\ & ((m1_subset_1 \ np_1 \ k5_numbers) \wedge (m1_subset_1 \ np_1 \ k1_numbers)) \end{aligned} \quad (1)$$

Assume the following.

$$\forall X0. (v1_finset_1 \ X0) \Rightarrow (k5_card_1 \ X0 = k1_card_1 \ X0) \quad (2)$$

Assume the following.

$$\forall X0. \forall X1. ((m1_subset_1 \ X0 \ k1_numbers) \wedge (v1_xreal_0 \ X1)) \Rightarrow (k10_real_1 \ X0 \ X1 = k7_xcmplx_0 \ X0 \ X1) \quad (3)$$

Assume the following.

$$\forall X0. (v1_finset_1 \ X0) \Rightarrow ((v1_finset_1 \ (k1_card_1 \ X0)) \wedge (v1_card_1 \ (k1_card_1 \ X0))) \quad (4)$$

Assume the following.

$$\forall X0. \forall X1. (v3_card_1 \ X1 \ X0) \Leftrightarrow (k1_card_1 \ X1 = X0) \quad (5)$$

Assume the following.

$$\begin{aligned} & \forall X0. (v1_finset_1 \ X0) \Rightarrow (\forall X1. (m1_subset_1 \ X1 \ (k1_zfmisc_1 \\ & X0)) \Rightarrow (k1_rpr_1 \ X0 \ X1 = k7_xcmplx_0 \ (k5_card_1 \ X1) \ (k5_card_1 \ X0))) \end{aligned} \quad (6)$$

Assume the following.

$$\forall X0.(v3_card_1 X0 \text{ np_1}) \Rightarrow ((\neg v1_xboole_0 X0) \wedge (v1_zfmisc_1 X0)) \quad (7)$$

Assume the following.

$$\forall X0.((v3_ordinal1 X0) \wedge (v1_finset_1 X0)) \Rightarrow (v7_ordinal1 X0) \quad (8)$$

Assume the following.

$$\forall X0.(v1_zfmisc_1 X0) \Rightarrow (v1_finset_1 X0) \quad (9)$$

Assume the following.

$$\forall X0.(v7_ordinal1 X0) \Rightarrow (v1_xreal_0 X0) \quad (10)$$

Assume the following.

$$\forall X0.(v1_card_1 X0) \Rightarrow (v3_ordinal1 X0) \quad (11)$$

Theorem 1

$$\begin{aligned} & \forall X0.((\neg v1_xboole_0 X0) \wedge (v1_finset_1 X0)) \Rightarrow (\forall X1. \\ & ((v3_card_1 X1 \text{ np_1}) \wedge (m1_subset_1 X1 (k1_zfmisc_1 X0))) \Rightarrow (k1_rpr_1 \\ & X0 X1 = k10_real_1 \text{ np_1} (k5_card_1 X0))) \end{aligned}$$