

t24_rcomp_3

(TMXRyT8EUaA1A7TXQmGrJgNYQTfoARAtUqN)

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Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $k1_numbers : \iota$ be given. Let $v3_xxreal_2 : \iota \Rightarrow o$ be given. Let $r1_tarski : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k2_limfunc1 : \iota \Rightarrow \iota$ be given. Let $k5_seq_4 : \iota \Rightarrow \iota$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $v1_xxreal_0 : \iota \Rightarrow o$ be given. Let $v1_xreal_0 : \iota \Rightarrow o$ be given. Let $k2_xxreal_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_xxreal_0 : \iota$ be given. Let $r1_xxreal_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k3_seq_4 : \iota \Rightarrow \iota$ be given. Let $v3_membered : \iota \Rightarrow o$ be given. Let $k2_xxreal_2 : \iota \Rightarrow \iota$ be given. Let $k6_numbers : \iota$ be given. Let $k9_binop_2 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0. \forall X1. \neg(X0 \in X1) \wedge (v1_xboole_0 X1) \quad (1)$$

Assume the following.

$$\forall X0. \forall X1. \forall X2. ((X0 \in X1) \wedge (m1_subset_1 X1 (k1_zfmisc_1 X2))) \Rightarrow (m1_subset_1 X0 X2) \quad (2)$$

Assume the following.

$$\forall X0. (v1_xxreal_0 X0) \Rightarrow (\forall X1. (v1_xreal_0 X1) \Rightarrow ((X1 \in k2_xxreal_1 X0 k1_xxreal_0) \Leftrightarrow (r1_xxreal_0 X0 X1))) \quad (3)$$

Assume the following.

$$\forall X0. (m1_subset_1 X0 (k1_zfmisc_1 k1_numbers)) \Rightarrow (k5_seq_4 X0 = k3_seq_4 X0) \quad (4)$$

Assume the following.

$$\forall X0. ((\neg v1_xboole_0 X0) \wedge ((v3_membered X0) \wedge (v3_xxreal_2 X0))) \Rightarrow (k3_seq_4 X0 = k2_xxreal_2 X0) \quad (5)$$

Assume the following.

$$\forall X0. ((v3_membered X0) \wedge ((\neg v1_xboole_0 X0) \wedge (v3_xxreal_2 X0))) \Rightarrow ((v1_xxreal_0 (k2_xxreal_2 X0)) \wedge (v1_xreal_0 (k2_xxreal_2 X0))) \quad (6)$$

Assume the following.

$$\forall X0.(v3_membered\ X0)\Rightarrow(v1_xreal_0\ (k3_seq_4\ X0)) \quad (7)$$

Assume the following.

$$\forall X0.\forall X1.(r1_tarski\ X0\ X1)\Leftrightarrow(\forall X2.(X2 \in X0)\Rightarrow (X2 \in X1)) \quad (8)$$

Assume the following.

$$\begin{aligned} \forall X0.(v3_membered\ X0)\Rightarrow & ((v3_xxreal_2\ X0)\Rightarrow((v1_xboole_0 \\ & X0)\vee(\forall X1.(v1_xreal_0\ X1)\Rightarrow((X1 = k3_seq_4\ X0)\Leftrightarrow((\forall X2. \\ & (v1_xreal_0\ X2)\Rightarrow((X2 \in X0)\Rightarrow(r1_xxreal_0\ X1\ X2))))\wedge(\forall X2. \\ & (v1_xreal_0\ X2)\Rightarrow(\neg(\neg r1_xxreal_0\ X2\ k6_numbers)\wedge(\forall X3. \\ & (v1_xreal_0\ X3)\Rightarrow(\neg(X3 \in X0)\wedge(\neg r1_xxreal_0\ (k9_binop_2\ X1\ X2\ X3)))))))))) \end{aligned} \quad (9)$$

Assume the following.

$$\forall X0.(v1_xreal_0\ X0)\Rightarrow(k2_limfunc1\ X0 = k2_xxreal_1\ X0\ k1_xxreal_0) \quad (10)$$

Assume the following.

$$\forall X0.(m1_subset_1\ X0\ (k1_zfmisc_1\ k1_numbers))\Rightarrow(v3_membered\ X0) \quad (11)$$

Assume the following.

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

Theorem 1

$$\forall X0.(m1_subset_1\ X0\ (k1_zfmisc_1\ k1_numbers))\Rightarrow((v3_xxreal_2\ X0)\Rightarrow(r1_tarski\ X0\ (k2_limfunc1\ (k5_seq_4\ X0))))$$