

t28_rcomp_3 (TMd-
skQmYYJwcvEhS2UURCB4E9FgTS22UUV3)

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Let $v6_xxreal_2 : \iota \Rightarrow o$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $k1_numbers : \iota$ be given. Let $v4_xxreal_2 : \iota \Rightarrow o$ be given. Let $v3_xxreal_2 : \iota \Rightarrow o$ be given. Let $v2_membered : \iota \Rightarrow o$ be given. Let $v1_xxreal_0 : \iota \Rightarrow o$ be given. Let $r1_xxreal_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $r1_tarski : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v1_xxreal_0 : \iota \Rightarrow o$ be given. Let $m2_xxreal_2 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $m1_xxreal_2 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v3_membered : \iota \Rightarrow o$ be given. Assume the following.

$$\begin{aligned} \forall X0.(v2_membered X0) \Rightarrow ((v6_xxreal_2 X0) \Rightarrow (\forall X1.(\\ v1_xxreal_0 X1) \Rightarrow (\forall X2.(v1_xxreal_0 X2) \Rightarrow (\forall X3.(v1_xxreal_0 \\ X3) \Rightarrow (((X1 \in X0) \wedge ((X2 \in X0) \wedge ((r1_xxreal_0 X1 X3) \wedge (r1_xxreal_0 X3 \\ X2)))) \Rightarrow (X3 \in X0)))))) \end{aligned} \tag{1}$$

Assume the following.

$$\forall X0.\forall X1.(m1_subset_1 X0 (k1_zfmisc_1 X1)) \Leftrightarrow (r1_tarski X0 X1) \tag{2}$$

Assume the following.

$$\forall X0.\forall X1.(X0 \in X1) \Rightarrow (m1_subset_1 X0 X1) \tag{3}$$

Assume the following.

$$\forall X0.(v2_membered X0) \Rightarrow ((v3_xxreal_2 X0) \Leftrightarrow (\exists X1.(\\ v1_xxreal_0 X1) \wedge (m2_xxreal_2 X1 X0))) \tag{4}$$

Assume the following.

$$\forall X0.\forall X1.(r1_tarski X0 X1) \Leftrightarrow (\forall X2.(X2 \in X0) \Rightarrow \\ (X2 \in X1)) \tag{5}$$

Assume the following.

$$\forall X0.(v2_membered X0) \Rightarrow (\forall X1.(v1_xxreal_0 X1) \Rightarrow ((\\ m2_xxreal_2 X1 X0) \Leftrightarrow (\forall X2.(v1_xxreal_0 X2) \Rightarrow ((X2 \in X0) \Rightarrow (r1_xxreal_0 \\ X1 X2)))))) \tag{6}$$

Assume the following.

$$\forall X0.(v2_membered\ X0)\Rightarrow(\forall X1.(v1_xxreal_0\ X1)\Rightarrow((m1_xxreal_2\ X1\ X0)\Leftrightarrow(\forall X2.(v1_xxreal_0\ X2)\Rightarrow((X2\in X0)\Rightarrow(r1_xxreal_0\ X2\ X1)))))) \quad (7)$$

Assume the following.

$$\forall X0.(v2_membered\ X0)\Rightarrow((v4_xxreal_2\ X0)\Leftrightarrow(\exists X1.(v1_xxreal_0\ X1)\wedge(m1_xxreal_2\ X1\ X0))) \quad (8)$$

Assume the following.

$$\forall X0.\forall X1.(X0 = X1)\Leftrightarrow((r1_tarski\ X0\ X1)\wedge(r1_tarski\ X1\ X0)) \quad (9)$$

Assume the following.

$$\forall X0.\forall X1.((v1_xxreal_0\ X0)\wedge(v1_xxreal_0\ X1))\Rightarrow((r1_xxreal_0\ X0\ X1)\vee(r1_xxreal_0\ X1\ X0)) \quad (10)$$

Assume the following.

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

Assume the following.

$$\forall X0.(v1_xxreal_0\ X0)\Rightarrow(v1_xxreal_0\ X0) \quad (12)$$

Assume the following.

$$\forall X0.(v3_membered\ X0)\Rightarrow(v2_membered\ X0) \quad (13)$$

Assume the following.

$$\forall X0.(m1_subset_1\ X0\ k1_numbers)\Rightarrow(v1_xxreal_0\ X0) \quad (14)$$

Theorem 1

$$\forall X0.((v6_xxreal_2\ X0)\wedge(m1_subset_1\ X0\ (k1_zfmisc_1\ k1_numbers)))\Rightarrow(\neg(\neg v4_xxreal_2\ X0)\wedge(\neg v3_xxreal_2\ X0)\wedge(X0\neq k1_numbers))$$