

t35_rewrite2

(TMX7EfDMW4aCodRtMu2gZu5NsMYnsDTShBX)

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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 $k2_zfmisc_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k8_afinsq_1 : \iota \Rightarrow \iota$ be given. Let $r3_rewrite2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v1_relat_1 : \iota \Rightarrow o$ be given. Let $r1_rewrite1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k7_rewrite2 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\begin{aligned} & \forall X0.(v1_relat_1 X0) \Rightarrow (\forall X1.\forall X2.\forall X3. \\ & ((r1_rewrite1 X0 X1 X2) \wedge (r1_rewrite1 X0 X2 X3)) \Rightarrow (r1_rewrite1 X0 \\ & \quad X1 X3)) \end{aligned} \tag{1}$$

Assume the following.

$$\forall X0.\forall X1.v1_relat_1 (k2_zfmisc_1 X0 X1) \tag{2}$$

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.(m1_subset_1 X1 (k1_zfmisc_1 (k2_zfmisc_1 \\ & (k8_afinsq_1 X0) (k8_afinsq_1 X0)))) \Rightarrow (m1_subset_1 (k7_rewrite2 \\ & X0 X1) (k1_zfmisc_1 (k2_zfmisc_1 (k8_afinsq_1 X0) (k8_afinsq_1 \\ & \quad X0)))) \end{aligned} \tag{3}$$

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.(m1_subset_1 X1 (k1_zfmisc_1 (k2_zfmisc_1 \\ & (k8_afinsq_1 X0) (k8_afinsq_1 X0)))) \Rightarrow (\forall X2.(m1_subset_1 \\ & X2 (k8_afinsq_1 X0)) \Rightarrow (\forall X3.(m1_subset_1 X3 (k8_afinsq_1 \\ & X0)) \Rightarrow ((r3_rewrite2 X0 X1 X2 X3) \Leftrightarrow (r1_rewrite1 (k7_rewrite2 X0 X1) \\ & \quad X2 X3)))) \end{aligned} \tag{4}$$

Assume the following.

$$\forall X0.(v1_relat_1 X0) \Rightarrow (\forall X1.(m1_subset_1 X1 (k1_zfmisc_1 X0)) \Rightarrow (v1_relat_1 X1)) \tag{5}$$

Theorem 1

$$\begin{aligned} & \forall X0. \forall X1. (m1_subset_1 X1 (k1_zfmisc_1 (k2_zfmisc_1 \\ & (k8_afinsq_1 X0) (k8_afinsq_1 X0)))) \Rightarrow (\forall X2. (m1_subset_1 \\ & X2 (k8_afinsq_1 X0)) \Rightarrow (\forall X3. (m1_subset_1 X3 (k8_afinsq_1 \\ & X0)) \Rightarrow (\forall X4. (m1_subset_1 X4 (k8_afinsq_1 X0)) \Rightarrow (((r3_rewrite2 \\ & X0 X1 X2 X3) \wedge (r3_rewrite2 X0 X1 X3 X4)) \Rightarrow (r3_rewrite2 X0 X1 X2 X4)))))) \end{aligned}$$