

t10_rewrite1

(TMU6S79hXukoR6zphSgbCWQM8XF5T4YmMTB)

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Let $v1_relat_1 : \iota \Rightarrow o$ be given. Let $r1_tarski : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $m1_rewrite1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v1_funct_1 : \iota \Rightarrow o$ be given. Let $v1_finseq_1 : \iota \Rightarrow o$ be given. Let $r1_xxreal_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k3_finseq_1 : \iota \Rightarrow \iota$ be given. Let $k6_numbers : \iota$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k5_numbers : \iota$ be given. Let $k4_finseq_1 : \iota \Rightarrow \iota$ be given. Let $k2_nat_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $np_1 : \iota$ be given. Let $k4_tarski : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_funct_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0.(v1_relat_1 X0) \Rightarrow (\forall X1.(m1_rewrite1 X1 X0) \Rightarrow (v1_relat_1 X1) \wedge ((v1_funct_1 X1) \wedge (v1_finseq_1 X1))) \quad (1)$$

Assume the following.

$$\forall X0.\forall X1.(r1_tarski X0 X1) \Leftrightarrow (\forall X2.(X2 \in X0) \Rightarrow (X2 \in X1)) \quad (2)$$

Assume the following.

$$\begin{aligned} \forall X0.(v1_relat_1 X0) \Rightarrow (\forall X1.((v1_relat_1 X1) \wedge ((v1_funct_1 \\ X1) \wedge (v1_finseq_1 X1))) \Rightarrow ((m1_rewrite1 X1 X0) \Leftrightarrow ((\neg r1_xxreal_0 \\ (k3_finseq_1 X1) k6_numbers) \wedge (\forall X2.(m1_subset_1 X2 k5_numbers) \Rightarrow \\ (((X2 \in k4_finseq_1 X1) \wedge (k2_nat_1 X2 np_1 \in k4_finseq_1 X1)) \Rightarrow (\\ k4_tarski (k1_funct_1 X1 X2) (k1_funct_1 X1 (k2_nat_1 X2 np_1)) \in \\ X0)))))) \quad (3) \end{aligned}$$

Theorem 1

$$\forall X0.(v1_relat_1 X0) \Rightarrow (\forall X1.(v1_relat_1 X1) \Rightarrow ((r1_tarski X0 X1) \Rightarrow (\forall X2.(m1_rewrite1 X2 X0) \Rightarrow (m1_rewrite1 X2 X1))))$$