

t73_euclidlp
(TMPsGRj8osLuahidpBgmK3AtymfxL6ADDFt)

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Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k5_numbers : \iota$ be given. Let $m2_finseq_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_numbers : \iota$ be given. Let $k1_euclid : \iota \Rightarrow \iota$ be given. Let $m2_subset_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $k1_euclidlp : \iota \Rightarrow \iota$ be given. Let $v1_euclid_4 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $r5_euclidlp : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Assume the following.

$$\begin{aligned} & \forall X0.(m1_subset_1 X0 k5_numbers) \Rightarrow (\forall X1.(m2_finseq_2 \\ & X1 k1_numbers (k1_euclid X0)) \Rightarrow (\forall X2.(m2_subset_1 X2 (k1_zfmisc_1 \\ & (k1_euclid X0)) (k1_euclidlp X0)) \Rightarrow (\neg(v1_euclid_4 X2 X0) \wedge (\forall X3. \\ & (m2_subset_1 X3 (k1_zfmisc_1 (k1_euclid X0)) (k1_euclidlp X0)) \Rightarrow \\ & (\neg(X1 \in X3) \wedge (r5_euclidlp X0 X3 X2)))))) \end{aligned} \tag{1}$$

Theorem 1

$$\begin{aligned} & \forall X0.(m1_subset_1 X0 k5_numbers) \Rightarrow (\forall X1.(m2_finseq_2 \\ & X1 k1_numbers (k1_euclid X0)) \Rightarrow (\forall X2.(m2_subset_1 X2 (k1_zfmisc_1 \\ & (k1_euclid X0)) (k1_euclidlp X0)) \Rightarrow (\neg(\neg X1 \in X2) \wedge ((v1_euclid_4 \\ & X2 X0) \wedge (\forall X3.(m2_subset_1 X3 (k1_zfmisc_1 (k1_euclid X0)) \\ & (k1_euclidlp X0)) \Rightarrow (\neg(X1 \in X3) \wedge ((r5_euclidlp X0 X3 X2) \wedge (X3 \neq X2)))))))) \end{aligned}$$