

t107_euclidlp

(TMKF9uzqkSAejzTUywS5Nk1N5SyEv4teCmf)

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Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k5_numbers : \iota$ 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 $k1_euclid : \iota \Rightarrow \iota$ be given. Let $k1_euclidlp : \iota \Rightarrow \iota$ be given. Let $r6_euclidlp : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $r1_xboole_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k5_euclidlp : \iota \Rightarrow \iota$ be given. Let $v1_euclidlp : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $r1_tarski : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v1_euclid_4 : \iota \Rightarrow \iota \Rightarrow o$ be given. Assume the following.

$$\begin{aligned} & \forall X0.(m1_subset_1 X0 k5_numbers) \Rightarrow (\forall X1.(m2_subset_1 \\ & X1 (k1_zfmisc_1 (k1_euclid X0)) (k1_euclidlp X0)) \Rightarrow (\forall X2. \\ & (m2_subset_1 X2 (k1_zfmisc_1 (k1_euclid X0)) (k1_euclidlp X0)) \Rightarrow \\ & (\neg(r6_euclidlp X0 X1 X2) \wedge (X1 = X2)))) \end{aligned} \quad (1)$$

Assume the following.

$$\begin{aligned} & \forall X0.(m1_subset_1 X0 k5_numbers) \Rightarrow (\forall X1.(m2_subset_1 \\ & X1 (k1_zfmisc_1 (k1_euclid X0)) (k1_euclidlp X0)) \Rightarrow (\forall X2. \\ & (m2_subset_1 X2 (k1_zfmisc_1 (k1_euclid X0)) (k1_euclidlp X0)) \Rightarrow \\ & ((r6_euclidlp X0 X1 X2) \Rightarrow ((v1_euclid_4 X1 X0) \wedge (v1_euclid_4 X2 X0)))))) \end{aligned} \quad (2)$$

Assume the following.

$$\begin{aligned} & \forall X0.(m1_subset_1 X0 k5_numbers) \Rightarrow (\forall X1.(m2_subset_1 \\ & X1 (k1_zfmisc_1 (k1_euclid X0)) (k1_euclidlp X0)) \Rightarrow (\forall X2. \\ & (m2_subset_1 X2 (k1_zfmisc_1 (k1_euclid X0)) (k1_euclidlp X0)) \Rightarrow \\ & (\neg((v1_euclid_4 X1 X0) \wedge ((v1_euclid_4 X2 X0) \wedge ((X1 \neq X2) \wedge (\neg r1_xboole_0 \\ & X1 X2) \wedge (\forall X3.(m2_subset_1 X3 (k1_zfmisc_1 (k1_euclid X0)) \\ & (k5_euclidlp X0)) \Rightarrow (\neg(r1_tarski X1 X3) \wedge (r1_tarski X2 X3) \wedge (v1_euclidlp \\ & X3 X0)))))))))) \end{aligned} \quad (3)$$

Theorem 1

$$\begin{aligned} & \forall X0.(m1_subset_1 X0 k5_numbers) \Rightarrow (\forall X1.(m2_subset_1 \\ & X1 (k1_zfmisc_1 (k1_euclid X0)) (k1_euclidlp X0)) \Rightarrow (\forall X2. \\ & (m2_subset_1 X2 (k1_zfmisc_1 (k1_euclid X0)) (k1_euclidlp X0)) \Rightarrow \\ & (\neg(r6_euclidlp X0 X1 X2) \wedge (\neg r1_xboole_0 X1 X2) \wedge (\forall X3.(m2_subset_1 \\ & X3 (k1_zfmisc_1 (k1_euclid X0)) (k5_euclidlp X0)) \Rightarrow (\neg(v1_euclidlp \\ & X3 X0) \wedge ((r1_tarski X1 X3) \wedge (r1_tarski X2 X3)))))) \end{aligned}$$