t43_euclidlp (TMZ9kkpSAzPRw4fEAXnVgSLyaKCsduNTMex)

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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 $k2\_euclid\_4 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $r1\_rvsum\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k8\_euclid : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k4\_ordinal1 : \iota$ be given. Let $v7\_ordinal1 : \iota \Rightarrow o$ be given. Let $r1\_xxreal\_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k12\_euclid : \iota \Rightarrow \iota$ be given. Assume the following.

$$k5\_numbers = k4\_ordinal1 \tag{1}$$

Assume the following.

$$\forall X0.(v7\_ordinal1\ X0) \Rightarrow (\forall X1.(m2\_finseq\_2\ X1\ k1\_numbers\ (k1\_euclid\ X0)) \Rightarrow (\forall X2.(m2\_finseq\_2\ X2\ k1\_numbers\ (k1\_euclid\ X0)) \Rightarrow (\forall X3.(m2\_finseq\_2\ X3\ k1\_numbers\ (k1\_euclid\ X0)) \Rightarrow (\exists X4.(m2\_finseq\_2\ X4\ k1\_numbers\ (k1\_euclid\ X0)) \wedge ((X4 \in k2\_euclid\_4\ X0\ X1\ X2) \wedge ((r1\_rvsum\_1\ (k8\_euclid\ X0\ X1\ X2)\ (k8\_euclid\ X0\ X3\ X4)) \wedge (\forall X5.(m2\_finseq\_2\ X5\ k1\_numbers\ (k1\_euclid\ X0)) \Rightarrow ((X5 \in k2\_euclid\_4\ X0\ X1\ X2) \Rightarrow (r1\_xxreal\_0\ (k12\_euclid\ (k8\_euclid\ X0\ X3\ X4))\ (k12\_euclid\ (k8\_euclid\ X0\ X3\ X5)))))))))))) \tag{2}$$

Assume the following.

$$\forall X0.(m1\_subset\_1\ X0\ k4\_ordinal1) \Rightarrow (v7\_ordinal1\ X0) \tag{3}$$

Theorem 1

$$\forall X0.(m1\_subset\_1\ X0\ k5\_numbers) \Rightarrow (\forall X1.(m2\_finseq\_2\ X1\ k1\_numbers\ (k1\_euclid\ X0)) \Rightarrow (\forall X2.(m2\_finseq\_2\ X2\ k1\_numbers\ (k1\_euclid\ X0)) \Rightarrow (\forall X3.(m2\_finseq\_2\ X3\ k1\_numbers\ (k1\_euclid\ X0)) \Rightarrow (\exists X4.(m2\_finseq\_2\ X4\ k1\_numbers\ (k1\_euclid\ X0)) \wedge ((X4 \in k2\_euclid\_4\ X0\ X1\ X2) \wedge (r1\_rvsum\_1\ (k8\_euclid\ X0\ X1\ X2)\ (k8\_euclid\ X0\ X3\ X4)))))))$$