

t95\_euclid\_8  
(TMV5FvjuuE1ibEn5U7un8bXsEs6XGEBH2sC)

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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  $np\_3 : \iota$  be given. Let  $k7\_euclid\_8 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k23\_rvsum\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k5\_euclid\_8 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Assume the following.

$$\begin{aligned} & \forall X0.(m2\_finseq\_2 X0 k1\_numbers (k1\_euclid np\_3)) \Rightarrow (\forall X1. \\ & (m2\_finseq\_2 X1 k1\_numbers (k1\_euclid np\_3)) \Rightarrow (\forall X2.(m2\_finseq\_2 \\ & X2 k1\_numbers (k1\_euclid np\_3)) \Rightarrow (k7\_euclid\_8 X0 X1 X2 = k23\_rvsum\_1 \\ & (k5\_euclid\_8 X0 X1 X2)))) \end{aligned} \tag{1}$$

Assume the following.

$$\begin{aligned} & \forall X0.(m2\_finseq\_2 X0 k1\_numbers (k1\_euclid np\_3)) \Rightarrow (\forall X1. \\ & (m2\_finseq\_2 X1 k1\_numbers (k1\_euclid np\_3)) \Rightarrow (\forall X2.(m2\_finseq\_2 \\ & X2 k1\_numbers (k1\_euclid np\_3)) \Rightarrow (k7\_euclid\_8 X0 X1 X2 = k7\_euclid\_8 \\ & X1 X2 X0))) \end{aligned} \tag{2}$$

**Theorem 1**

$$\begin{aligned} & \forall X0.(m2\_finseq\_2 X0 k1\_numbers (k1\_euclid np\_3)) \Rightarrow (\forall X1. \\ & (m2\_finseq\_2 X1 k1\_numbers (k1\_euclid np\_3)) \Rightarrow (\forall X2.(m2\_finseq\_2 \\ & X2 k1\_numbers (k1\_euclid np\_3)) \Rightarrow (k7\_euclid\_8 X0 X1 X2 = k23\_rvsum\_1 \\ & (k5\_euclid\_8 X2 X0 X1)))) \end{aligned}$$