

# l11\_euclid\_8 (TMd- boLD5mxidbY4LdfGSNTAEZoCFaMwDfcW)

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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  $k7\_euclid : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k5\_numbers : \iota$  be given. Let  $v2\_xxreal\_0 : \iota \Rightarrow o$  be given. Let  $m2\_subset\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$  be given. Assume the following.

$$\begin{aligned} & \forall X0.(m1\_subset\_1 X0 k5\_numbers) \Rightarrow (\forall X1.(m2\_finseq\_2 \\ & X1 k1\_numbers (k1\_euclid X0)) \Rightarrow (\forall X2.(m2\_finseq\_2 X2 k1\_numbers \\ & (k1\_euclid X0)) \Rightarrow (\forall X3.(m2\_finseq\_2 X3 k1\_numbers (k1\_euclid \\ & X0)) \Rightarrow (\forall X4.(m2\_finseq\_2 X4 k1\_numbers (k1\_euclid X0)) \Rightarrow \\ & (k7\_euclid X0 (k7\_euclid X0 X1 X2) (k7\_euclid X0 X3 X4) = k7\_euclid \\ & X0 (k7\_euclid X0 X1 X3) (k7\_euclid X0 X2 X4)))))) \end{aligned} \quad (1)$$

Assume the following.

$$\begin{aligned} & ((v2\_xxreal\_0 np\_3) \wedge (m2\_subset\_1 np\_3 k1\_numbers k5\_numbers)) \wedge \\ & ((m1\_subset\_1 np\_3 k5\_numbers) \wedge (m1\_subset\_1 np\_3 k1\_numbers)) \end{aligned} \quad (2)$$

## Theorem 1

$$\begin{aligned} & \forall X0.(m2\_finseq\_2 X0 k1\_numbers (k1\_euclid np\_3)) \Rightarrow (\forall X1. \\ & (m2\_finseq\_2 X1 k1\_numbers (k1\_euclid np\_3)) \Rightarrow (\forall X2.(m2\_finseq\_2 \\ & X2 k1\_numbers (k1\_euclid np\_3)) \Rightarrow (\forall X3.(m2\_finseq\_2 X3 \\ & k1\_numbers (k1\_euclid np\_3)) \Rightarrow (k7\_euclid np\_3 (k7\_euclid np\_3 \\ & X0 X1) (k7\_euclid np\_3 X2 X3) = k7\_euclid np\_3 (k7\_euclid np\_3 \\ & X0 X2) (k7\_euclid np\_3 X1 X3)))))) \end{aligned}$$