

# t73\_seq\_4 (TMM- pDyszaqV4xZK8gmXWanbd8EY43x8QCsk)

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Let  $m2\_subset\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k1\_numbers : \iota$  be given. Let  $k5\_numbers : \iota$  be given. Let  $m2\_finseq\_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k2\_numbers : \iota$  be given. Let  $k14\_seq\_4 : \iota \Rightarrow \iota$  be given. Let  $k19\_seq\_4 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k17\_seq\_4 : \iota \Rightarrow \iota$  be given. Let  $k18\_seq\_4 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k15\_seq\_4 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Assume the following.

$$\begin{aligned} & \forall X0.(m2\_subset\_1 X0 k1\_numbers k5\_numbers) \Rightarrow (\forall X1. \\ & (m2\_finseq\_2 X1 k2\_numbers (k14\_seq\_4 X0)) \Rightarrow (\forall X2.(m2\_finseq\_2 \\ & X2 k2\_numbers (k14\_seq\_4 X0)) \Rightarrow (k18\_seq\_4 X0 (k19\_seq\_4 X0 X1 X2) = \\ & k15\_seq\_4 X0 (k18\_seq\_4 X0 X1) X2))) \end{aligned} \tag{1}$$

Assume the following.

$$\begin{aligned} & \forall X0.(m2\_subset\_1 X0 k1\_numbers k5\_numbers) \Rightarrow (\forall X1. \\ & (m2\_finseq\_2 X1 k2\_numbers (k14\_seq\_4 X0)) \Rightarrow (\forall X2.(m2\_finseq\_2 \\ & X2 k2\_numbers (k14\_seq\_4 X0)) \Rightarrow (k18\_seq\_4 X0 (k19\_seq\_4 X0 X1 X2) = \\ & k19\_seq\_4 X0 X2 X1))) \end{aligned} \tag{2}$$

Assume the following.

$$\begin{aligned} & \forall X0.(m2\_subset\_1 X0 k1\_numbers k5\_numbers) \Rightarrow (\forall X1. \\ & (m2\_finseq\_2 X1 k2\_numbers (k14\_seq\_4 X0)) \Rightarrow ((k15\_seq\_4 X0 X1 ( \\ & k18\_seq\_4 X0 X1) = k17\_seq\_4 X0) \wedge (k15\_seq\_4 X0 (k18\_seq\_4 X0 X1) \\ & X1 = k17\_seq\_4 X0))) \end{aligned} \tag{3}$$

## Theorem 1

$$\begin{aligned} & \forall X0.(m2\_subset\_1 X0 k1\_numbers k5\_numbers) \Rightarrow (\forall X1. \\ & (m2\_finseq\_2 X1 k2\_numbers (k14\_seq\_4 X0)) \Rightarrow (k19\_seq\_4 X0 X1 X1 = \\ & k17\_seq\_4 X0)) \end{aligned}$$