

Inference at * 2 1 1
of proof for Lemma fast-fib:

1. $f :$
 $\forall n, a, b : \mathbb{N}.$
 $\{m : \mathbb{N} \mid$
 $\forall k : \mathbb{N}.$
 $(a = \text{fib}(k))$
 $\Rightarrow ((k \leq 0) \Rightarrow (b = 0))$
 $\Rightarrow ((0 < k) \Rightarrow (b = \text{fib}(k - 1)))$
 $\Rightarrow (m = \text{fib}(n+k))\}$
 $\vdash (\lambda n. f(n, 1, 0)) \in (\forall n : \mathbb{N}. \{m : \mathbb{N} \mid m = \text{fib}(n)\})$
by (RepeatFor (first_nat 1:n) ((MemCD)
CollapseTHENA (Auto·.)).

1:subterm..... T:t1:n

2. $n : \mathbb{N}$
 $\vdash f(n, 1, 0) \in \{m : \mathbb{N} \mid m = \text{fib}(n)\}$

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