

Inference at *
of proof for Lemma p-mu-exists:

$\vdash \forall P : (\mathbb{N} \rightarrow \mathbb{B}). \text{Dec}(\exists n : \mathbb{N}. (\uparrow(P(n)))) \Rightarrow (\exists x : \mathbb{N} + \text{Top}. \text{p-mu}(P;x))$
by ((Auto-)
CollapseTHEN (D (-1).)).

1:

1. $P : \mathbb{N} \rightarrow \mathbb{B}$
 2. $\exists n : \mathbb{N}. (\uparrow(P(n)))$
- $\vdash \exists x : \mathbb{N} + \text{Top}. \text{p-mu}(P;x)$

2:

1. $P : \mathbb{N} \rightarrow \mathbb{B}$
 2. $\neg(\exists n : \mathbb{N}. (\uparrow(P(n))))$
- $\vdash \exists x : \mathbb{N} + \text{Top}. \text{p-mu}(P;x)$

.