

Inference at \* 1 0 1 2  
of proof for Lemma integer sqrt:

....basecase.... NILNIL

$\vdash (0 \geq 0) \Rightarrow (\exists r:\mathbb{N}. (((r * r) \leq 0) \& (0 < ((r+1) * (r+1))))$   
by D 0

1:

1.  $0 \geq 0$

$\vdash \exists r:\mathbb{N}. (((r * r) \leq 0) \& (0 < ((r+1) * (r+1))))$

2: ....wf.... NILNIL

$\vdash (0 \geq 0) \in \mathbb{P}_1$

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