Inference at * 1 0 1 3
 of proof for Lemma integer sqrt:

. . . . .upcase. . . . . NILNIL

1. $n : \mathbb{Z}$
2. $0 < n$
3. $((n - 1) \geq 0) \Rightarrow (\exists r{:}\mathbb{N}.\ (((r * r) \leq (n - 1)) \ \&\ ((n - 1) < ((r{+}1) * (r{+}1)))))$

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

by D 0

1:

4. $n \geq 0$

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

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

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

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http://www.nuprl.org/FDLcontent/p0_963683_/p28_1027382_{integer!sqrt}1_0_1_3.html