

Inference at \* 2 0 1 1 1  
of proof for Lemma multiply\_nat\_wf:

1.  $i : \mathbb{N}$   
2.  $j : \mathbb{Z}$   
3.  $j < 0$   
4.  $((j+1) \geq 0) \Rightarrow (0 \leq (i * (j+1)))$   
5.  $j \geq 0$   
 $\vdash 0 \leq (i * j)$   
by Arith

1: .....wf..... NILNIL

$\vdash (i * j) \in \mathbb{Z}$

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

$\vdash 0 \in \mathbb{Z}$

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