

Inference at \* 1 1 0  
of proof for Lemma add\_cancel\_in\_lt:

.....assertion..... NILNIL

1.  $a : \mathbb{Z}$   
2.  $b : \mathbb{Z}$   
3.  $n : \mathbb{Z}$   
4.  $(a+n) < (b+n)$   
 $\vdash (a+n+(-n)) < (b+n+(-n))$   
by PERMUTE{1:n, 2:n, 3:n, 2:n, 4:n, 5:n}

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

$\vdash a+n \in \mathbb{Z}$   
2: .....wf..... NILNIL

$\vdash (-n) \in \mathbb{Z}$   
3: .....wf..... NILNIL

$\vdash b+n \in \mathbb{Z}$   
4:

$\vdash (a+n) < (b+n)$   
5:

$\vdash (-n) \leq (-n)$   
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