

Inference at \* 1  
of proof for Lemma int\_entire\_a:

1.  $a : \mathbb{Z}$   
2.  $b : \mathbb{Z}$   
3.  $a \neq 0$   
4.  $b \neq 0$   
 $\vdash a * b \neq 0$   
by ((Decide  $(a * b) = 0$ )  
CollapseTHENA ((Auto\_aux (first\_nat 1:n) ((first\_nat 1:n  
) , (first\_nat 3:n)) (first\_tok :t) inil\_term))))).

1:

5.  $(a * b) = 0$   
 $\vdash a * b \neq 0$

2:

5.  $\neg((a * b) = 0)$   
 $\vdash a * b \neq 0$

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