Inference at $*$ 1 1
 of proof for Lemma mul_cancel_in_eq:

1. $a : \mathbb{Z}$
2. $b : \mathbb{Z}$
3. $\mathbb{Z}^{-\circ}$
4. $m : \mathbb{N}^+$
5. $(m * a) = (m * b)$

$\vdash a = b$

 by ((((Thin 3)
 CollapseTHEN (Assert $(a > b) \vee (a = b) \vee (a < b)$))·)
 CollapseTHENA (
  (Auto_aux (first_nat 1:n) ((first_nat 2:n),(first_nat 3:n)) (first_tok :t) inil_term)))·

  1:

   3. $m : \mathbb{N}^+$
   4. $(m * a) = (m * b)$
   5. $(a > b) \vee (a = b) \vee (a < b)$

   $\vdash a = b$

  .